DEVELOPMENT OF A MANAGEMENT MODEL FOR WORK INTEGRATED LEARNING FOR THE INTERIOR DESIGN QUALIFICATION

by

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DECLARATION BY CANDIDATE

"I hereby declare that this Doctoral thesis submitted for the DOCTORAL TECHNOLOGIAE: INTERIOR DESIGN at Tshwane University of Technology is my own work and has not previously been submitted to any other Institution of Higher Education. I further declare that all sources cited or quoted are indicated and acknowledged by means of a comprehensive list of references".

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Rita Cilliers

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DEDICATION

Love is to give.....

This study is dedicated to my husband Cilky Cilliers and my son Braam Cilliers for their unselfish and unconditional love and support during the time it took to complete this research.
ACKNOWLEDGEMENTS

I would like to express my sincere gratitude and appreciation to:

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- My supervisors, Dr P.E.J. Smit and Dr M.L. Wessels, for their positive attitude and guidance. Without your support and dedication I would not have completed this big task

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ABSTRACT

DEVELOPMENT OF A MANAGEMENT MODEL FOR WORK INTEGRATED LEARNING FOR THE INTERIOR DESIGN QUALIFICATION

Work integrated learning (WIL) at the TUT is an integrated approach to teaching and learning for the attainment of qualifications. It specifically encourages and enhances learning partnerships between all role players, which include students, university staff and employers. The university perceives itself to be in partnership with commerce and industry in the development and delivery of high-level human resources who will uniquely contribute to the South African economy.

Through the use of a quantitative research methodology, the distribution of questionnaires to the Interior Design industry, the Interior Design students who have completed their WIL and the analysis of the opinions of the Interior Design WIL staff at different HEIs, the new management model for the Interior Design qualification has been developed. It is important to acknowledge that the Interior Design management model for work integrated learning will in future form a division of the management practice at the TUT.

The regular communication, exchange of information and asking for support in connection with a design problem or knowledge about a finishing material, between the Interior Design departments and the industry is of vital importance to support and distribute new design drawing techniques, new innovative design ideas and sharing knowledge with students and staff alike. The needs and different contracts the industry receives from national and international departments are shared with the Interior Design department. It is with these friendships and brotherhood that the Interior department, stay in touch with the Interior alumni students so that, after 30 years, they are still in regular communication with the head of Interior Design and its staff.

The specific demands in the industry determined the management model for WIL for the Interior Design qualification. Work integrated learning lies between the curriculum of Interior Design and the workplace. It is, therefore, important to develop
a thoughtful management model to develop the area in-between the curriculum and the knowledge the students absorb during studying the Interior Design qualification and the real-life, work-based placement in the industry. Different aspects in the first, second and third year of the qualification each has its own technologically advanced WIL programme. This programme includes the integration of the academic theoretical learning with the Interior Design industry and enhances the student’s understanding of the course content. The management model for Interior Design WIL, will contribute to opportunities and options for the placement of students within the industry as well as in the incubator on campus. The WIL programme is re-designed annually in order to remain heading in the right direction with new technical Interior Design styles, work ethics, and personal and social development skills. The feedback from students and employers has to feed back into the curriculum and enrich the content of the programme to reach the outcomes of each level of training. This will ensure a well-developed, self-confident and self-assured Interior Designer who can become an excellent employee or start his/her own Interior Design Company.

The implementation of the BTech: Interior Design Research Programme as part of the WIL management model of the incubator for the Interior Design qualification and the Faculty’s needs was to be researched nationally and internationally so that it links up with the TUT WIL information centre and WIL Directorate.

The new management model for Interior Design contributes to the establishment of an Interior Design incubator and a vibrant interactive relationship among government, higher education, universities, students and the Interior Design industry. The interior incubator also adds to students' learning and development that will be able to simultaneously study and engage in the Interior Design community.
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<td>Computer aided design</td>
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<tr>
<td>CE</td>
<td>WIL Co-operative Education</td>
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<tr>
<td>CECC</td>
<td>Co-operative Education Central Committee</td>
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<tr>
<td>CHE</td>
<td>Council for Higher Education</td>
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<tr>
<td>CL</td>
<td>WIL Co-operative Lecturer</td>
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<tr>
<td>COT</td>
<td>City of Tshwane</td>
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<tr>
<td>CPUT</td>
<td>Cape Peninsula University of Technology Western Cape</td>
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<tr>
<td>DCE</td>
<td>Directorate Co-operative Education</td>
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<tr>
<td>DFS</td>
<td>Directed field studies</td>
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<tr>
<td>DOE</td>
<td>Department of Education</td>
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<tr>
<td>DUT</td>
<td>Durban University of Technology KwaZulu-Natal</td>
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<tr>
<td>DVC</td>
<td>Deputy Vice Chancellor</td>
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<tr>
<td>ECSA</td>
<td>Engineering Council of South Africa</td>
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<td>EL</td>
<td>Experiential Learning</td>
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<td>FC</td>
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<td>FiDER</td>
<td>Interior Design Educators Council New York</td>
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<td>Higher Education Development and Support</td>
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<td>Higher Education Qualification Framework</td>
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<td>Higher Education Qualification Sub-Framework</td>
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<td>HoD</td>
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<td>IBL</td>
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<td>IFI</td>
<td>International Federation of Interior Designers/Architects</td>
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<td>IID</td>
<td>South African Institute of the Interior Design Professionals</td>
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<td>IL</td>
<td>Integrated Learning</td>
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<td>ILO</td>
<td>International Labour Organization</td>
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<td>KSA</td>
<td>Knowledge Skills Attitude</td>
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<td>MIS</td>
<td>Management Information System</td>
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<td>Acronym</td>
<td>Description</td>
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<td>MOU</td>
<td>Memorandum of understanding</td>
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<td>NQF</td>
<td>National Qualifications Framework</td>
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<td>ODL</td>
<td>Open Distance Learning</td>
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<td>PBL</td>
<td>Problem Based Learning</td>
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<td>Project Based Learning</td>
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<td>RPL</td>
<td>Recognition of Prior Learning</td>
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<td>South African Qualification Authority</td>
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<td>SETA</td>
<td>Sectorial Education &amp; Training Authority</td>
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<tr>
<td>SL</td>
<td>Service Learning</td>
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<td>TAFCLD</td>
<td>Team Approach Framework to Curriculum and Learning Development</td>
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<tr>
<td>TLT</td>
<td>Teaching Learning and Technology</td>
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<td>Tshwane University of Technology</td>
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<td>University of Johannesburg</td>
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<td>University of Technology</td>
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<td>World Association for Co-operative Education</td>
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<td>WIL co-ordinator</td>
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<td>Work integrated learning</td>
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1 DEVELOPMENT OF A MANAGEMENT MODEL FOR WORK INTEGRATED LEARNING FOR THE INTERIOR DESIGN QUALIFICATION

1.1 WORK INTEGRATED LEARNING (WIL)

WIL is a structured form of experiential learning in a learning programme that focuses on the application of theory in an authentic (work-based learning) or non-work-based workplace context. WIL addresses the specific competences identified for the acquisition of a qualification. It is therefore linked to the acquisition of credits and supports the development of a range of skills that will render the qualifying student employable. The non-work-based workplace approach is particularly applicable to programmes such as arts and economic sciences programmes where workplace environments and applications are simulated successfully (Policy on co-operative education, TUT, 2005).

The South African Institute of the Interior Design Professions (IID) is the only professional body representing the interior design industry in South Africa. Although this body directs its monitoring and setting guidelines to the Interior Design profession, it does not include education in its observation (http://iidprofessions.com). Interior design, unlike ECSA (Engineering Council of South Africa) and medical professional bodies that provide input in experiential learning, now known as work integrated learning (WIL), for example how it takes place and for how long, has no such monitoring body. The IID provides no guidelines or prerequisites for this type of training. This leaves the understanding of the concept and the interpretation of WIL via the curriculum to develop a new management model for WIL for the Interior Design qualification at the Tshwane University of Technology.

Although the Higher Education Qualification Framework (HEQF) (refer to chapter 1, pages 18; chapter 5, page 217) and the South African Qualification Authority (SAQA) (refer to chapter 2, page 48, 58; chapter 5, page 218) provide guidelines regarding
the outcomes and aims of the WIL process, these are open to individual interpretation of each education provider. This then results in WIL not being critically evaluated at an educational level to determine the success of the process.

The merger process at the Tshwane University of Technology (TUT) has paved the way for a new era in the management of the Directorate: Co-operative Education, faculties and departments. Faculties were reduced, which had a huge impact on the number of students in each faculty. The former three Technikons had different approaches and management structures for WIL. At two of the institutions, Technikon Northern Transvaal and Technikon North West, it was managed centrally, while at the third, Pretoria Technikon, WIL was managed decentralised in the various faculties.

Currently, WIL is managed through a centralised/decentralised (hybrid) management model. This model was decided on, taking into consideration the merger process, the current size of the university as well as the different management models that have existed prior to the merger (Tshwane University of Technology, Management, 2005:92). Co-operative education still plays a major role in the awarding of qualifications to students, as work integrated learning (WIL) forms part of the curriculum of the prescribed Interior Design programme.

The incorporation of WIL as part of an Interior Design qualification would improve the chances of employment for young people (Guile & Griffiths, 2001:115). However, Guile and Griffiths argue that “the knowledge embedded in work roles is unevenly distributed in workplaces” (2001:114). They go on to explain that there is a “change and development that occurs within an individual as he/she moves from one context (e.g. school) to another (e.g. workplace)” (2001:114).

The above implies that this type of learning exposure to industry (WIL) is of value to a student’s preparedness for industry and needs to be structured in a formal manner or addressed critically. (Refer to the new management model for WIL for the Interior Design qualification, Diagram 5.5, page 247). A new management model for WIL for the Interior Design qualification was developed to enhance the employment chances for students.
Co-operative education at TUT is an integrated approach to teaching and learning for the attainment of qualifications. It specifically encourages and enhances learning partnerships between all role players, which include students, university staff and employers (refer to Diagrams 1.1 and 1.2, pages 4 and 8). The university perceives itself to be in partnership with commerce and industry in the development and delivery of high level human resources, which ultimately and uniquely contribute to the South African economy (Tshwane University of Technology, Management, 2005:92).

The Deputy Vice Chancellor (DVC): Teaching, Learning and Technology (TLT) oversee policy and strategy development, and monitoring of co-operative education. While the policy and strategy implementation is monitored and reported on by a central unit and the Co-operative Education Central Committee (CECC), the actual WIL takes place in the faculties. Full-time co-operative education co-ordinators in the faculties are responsible for the management, co-ordination and communication of co-operative education in collaboration with the WIL co-ordinators (lecturers) in faculties (Tshwane University of Technology, Management, 2005:92).

The specific demands in the interior design industry should determine the development of a new management model for WIL in the Interior Design qualification. Work integrated learning falls between the curriculum (student) and the industry (applied skills). It is, therefore, important to look at the area between (refer to Diagram 1.2, page 8: WIL programme for Interior Design) these two factors that should be developed with feedback to the curriculum and the industry. This development and training area should support the Interior Design student in developing the necessary skills and demands from the industry.
For the past 15 years, the Interior Design programme has been offered on a workable system for WIL. In 1994, this department embarked on an in-depth collaboration with the industry. The needs and training of students, the content of the curriculum and the need to succeed in the industry are discussed during advisory committee visits and meetings between all role players. The industry plays a vital role in the curriculum design process and simulated projects occur during each year. The industry for interior design, including office design, retail and WIL design, forms a crucial part of the advisory committee and renders immense support for WIL. The specific demands of the industry contribute to the development of a new management model for WIL for the Interior Design qualification.

When designing this programme management model for WIL for the Interior Design qualification, the following elements were taken into consideration:

- Student **preparation** and training for the industry – to prepare the students for their WIL period and to render support and assistance to the design team, where necessary.
• Student **placement** and monitoring in the workplace – assist the students to find appropriate placements in the design field to further their experience and training in interior design. Monitoring progress and assessing the workplace during the training period are essential.

• Students are **assessed** during the workplace visits – one-on-one assessments, feedback from the workplace – through assessment documentation. The last assessment method, the debriefing, starts when the students return to the university after the WIL training period.

• **Development of the supervisors** and mentors of the interior design industry to assist the students, and to coach and mentor them during their WIL training. This can only occur through research in the different interior design industries and design fields to identify and select supervisors to undergo educational development and training for WIL.

• **Management and administration** of placement and progress of students in the industry

• **Infrastructure** and **budget** for visits and assessment

• **Quality management** and assessment

• **WIL co-ordinator (lecturer)** and other staff development to ensure the success of the WIL management model

• The **re-design** of the WIL curriculum for the Interior Design programme.

Different elements of the management model for the Interior Design qualification are based on preparation, training and evaluation, followed by placement (in collaboration with the industry), evaluation visits, monitoring by supervisors and institutions, and finally, assessment and debriefing. To enable students to prepare for WIL, the WIL preparation module has to form part of the management model to ensure the student understand the content of the WIL module. (Refer to Diagram 5.4, no 9, page 243: The management model for WIL for the Interior Design qualification.) A sound management model for WIL for the Interior Design qualification, information system, efficient staffing and resources as well as efficient financial management has to form an integral part of this WIL management model. Overall, management and administration are of utmost importance to ensure the success of a management model for WIL.
The Faculty of Arts also includes WIL in the curriculum of different design qualifications; for example, the Interior Design qualification. A management model and workable WIL module form part of an on-going planning process, and involve the collaboration and support of the staff as well as the industry. When establishing a new management model for WIL for the Interior Design qualification, one needs to start with a thorough investigation into the design nature and teaching process that feeds back into the interior design industry.

The WIL management model cannot be developed in isolation, and should include the university, the faculty and the department. Above all, management and administration should be included in this model. (Refer to the development of the new management model for WIL, Diagram 5.4, page 243). The character of the model for WIL should be shaped from needs and work norms of the interior design industry, including the goals of the university.

Wilson (1997:4) stated in his publication, Creating and initiating a managerial model for a WIL program, each of the following norms has to form part of the programme management model:

- Firstly, notions in criteria for a successful model have to function taking the vision, mission and goals of the institution into consideration.
- Secondly, a successful model must have clear, broadly accepted and attainable education enhancing objectives, learning goals and outcomes.
- Thirdly, the model must be adaptable to the character of the institution, department and programme (Wilson, 1997:4).

The abovementioned norms are part of the structuring process of the new management model for WIL for the Interior Design qualification.

The insistence for WIL (Kolb, 1984) and skills development is evident throughout human development. Since the existence of cavemen, through many empires, for example the Roman Empire, it was necessary for man to acquire skills to hunt, plant
and survive. The only way to overcome the challenges was through practical experience. “Practice makes perfect” and that was even evident through the development of older and younger civilizations. During the construction of the pyramids, stones too big to carry by human hands and without the technical facilities of a crane, were stacked one upon another (Pile, 2005).

Higher and tertiary education in South Africa is the preparation phases for life and work in an advanced economy. The modern economy requires skilled interior designers who are well-equipped for the work environment.

We need to understand how Interior Design students learn. Student motivation must be enhanced by WIL for future employability. The skills below form part of the curriculum (module) of the WIL management model for the Interior Design qualification (refer to research done, TABLE 4.4, C14, page 163-182): According to the research carried out in the questionnaire the needed skills are mentioned below: (Refer to Appendix A: Section C, Question 26 on page 402)

- Design skills
- Writing skills
- Oral skills
- Presentation skills
- Model building skills
- Photography skills
- Technical skills
- Computer skills
- Personal and social skills.

Looking at the diagram for the development of the management model for WIL for the Interior Design qualification, the following is evident and will be discussed later:
There are three role players involved:

- **The industry** that requires specific skills for employment
- The university (TUT) that provides learning and skills
- The **student** who gains the knowledge and skills from the interior design curriculum that empowers him/her to work in the industry.

**The industry that demands**

There would not be an Interior Design qualification if there were no demands from industry. The industry sets the demands in the form of applied design skills that are needed to complete interior design projects. These demands are covered in the
curriculum of the qualification. The industry will be part of the investigation of the structuring of the management model for WIL for the Interior Design qualification.

The university (TUT) that provides the knowledge and skills
There would not be a demand for a qualification for interior designers if there had not been a need for skills from the industry. These needs position the universities and other tertiary institutions that teach interior design. The teaching and learning of these applied needs are met by different training colleges, private institutions and universities that teach students cognitive skills (refer to chapter 5, no. 4, page 252; no. 18 on-campus, page 273; and no. 4, off-campus, page 252). The curriculum covers all the necessary cognitive skills and demands from the industry, and leaves it to the last role player – the student. The university will be part of the investigation into the structuring of the management model for WIL for the Interior Design qualification.

The third role player is the student
The student is the link between the institution, the qualification (curriculum) and the industry. Through teaching and learning the student gains knowledge, understands the concept of interior design and applies cognitive skills. This knowledge is then transferred to the industry by the knowledgeable student by means of the very important link of work integrated learning (WIL). The student will be part of the investigation into the structuring of the new management model for WIL for the Interior Design qualification.

Through WIL, the student with the acquired knowledge, his application of cognitive skills and practical experience enters the industry for a few weeks to make sure that the application of cognitive skills, confidence and practical experience that he/she was trained can now be put to practical use through design application. Interior Design students need cognitive skills to work in the industry; the industry needs skilled interior design workers and TUT will supply these interior design skilled workers (students). (Refer to Chapter 4 no. 4.5 onwards, TABLE 4.3 C28i, page 150), showing the feedback from industry students and staff. The three domains include the cognitive skills, the synthesis of analytical knowledge and psychomotor skills.
To know more about the interior design WIL outcomes, it is imperative to study different learning theories. When structuring the new management model for WIL for the Interior Design qualification, the key behaviours in learning, as described in theories that will help students to learn, must be borne in mind. Likewise, it is important to keep the role of the employer in mind to ultimately maximise student learning. Herman Schneider developed co-operative education curriculums and during his teaching career he realised that the theoretical curriculum would be absorbed much more readily by the students if it were backed by practical exercises and practical experience (Schneider, as quoted by Cates & Jones, 1999).

The fundamental concept of **how a person learns** must be intrinsic to the Interior Design management model for WIL. WIL objectives and the method, matter and mechanisms used to achieve the objectives should form part of the Interior Design curriculum. The interior design WIL co-ordinators, instruction and the WIL experience remain inseparable. Fundamental to the basic principles of interior design is the teaching method through practical interior design projects carried out in the classroom and through computer laboratory work.

A gradual advancement in practical work is achieved through the application of the principles, and training of the theory and practice of design. As highlighted by Weisz and Smith, work integrated learning programmes or similar programmes are often underpinned pedagogically by the work of educationalists, such as Dewey. He has expressed the belief that through experience the education behind it all becomes much clearer (Dewey, 1938:25 in Weisz & Smith, 2005:606).

The expectancy value methodology evolved from Atkinson’s thoughts on achievement motivation. In this methodology, expectancy together with task value, the student was deemed to proceed to project commitment and consequentially to the resulting achievement (Cates & Jones, 1999). In the design of the management model for WIL for the Interior Design qualification, student motivation will form part of the model to motivate the students to learn, to proceed with projects, self-commitment and to achieve positive results.
Of the learning theories, Kolb’s (1984) may be the most relevant to WIL, as he describes the four stages that students undergo continuously in the learning process:

- Creative experience
- Observation and reflection
- Formation of abstract concept
- Hypothesis to be tested in the future.

With a better understanding of how Interior Design students learn and the important role that WIL plays in interior design students’ learning, the focus in the new management model for WIL for the Interior Design qualification must also be linked to an academic methodology to put these theories into practice.

1.1.1 Definitions
The following are the most important definitions for the purpose of this study:

Programme management model
According to Engelbrecht (2003:2), a programme can be defined as the set qualification or specialised learning field that will be managed through set regulations.

Management
Management is the art of getting things done through people. In a broader sense it is the process of planning, organising, leading and controlling the efforts of organisation members and of using all other organisational resources to achieve stated organisational goals (http://hupages.com-definition) [online].

Leadership
Leadership is the process of social influence in which one person can enlist the aid and support of others in the accomplishment of a common task (http://en.wikipedia.org/wiki/leadership) [online].
Simulated learning
Simulation is the imitation of a real-world process or system, using key characteristics of the selected workplace. HEQC 2011.

Administration
It is the management of a business. These are persons or committees or departments etc. who make up a governing body and who administer something (http://Word-web/thesaurus/dictionary/3/2011) [online].

Education
Education is defined by Horner (1987) and quoted by Engelbrecht (2003:1) and others as the inculcation of knowledge and skills, and the development of understanding, insight and independent thoughts in a variety of fields of study and at various levels (Horner, 1987:67; Engelbrecht, 2003:1). Education is the broader general term where as career-orientated education focuses on a more specific type of education. Education is the preparation stage before the learner enters the market but does not stop there; it is an on-going process through life.

Co-operative education
According to Engelbrecht (2003:2), the co-operative education principle is well-established and may have different focal points for different co-operative education practitioners. According to Baumgart et al. (1994:107), as quoted by Wessels (2007:28,) the Canadian association of co-operative education defines co-operative education as a process, which formally integrates the student’s academic study with work experience in a co-operative employer organisation. The use of co-operative learning in higher education as a means of development is to provide skills information, practical learning and execution of acquired knowledge and the strengthening of self-confidence.

Career-focused education
According to Engelbrecht (2003:2), the focus in career-focused education inspires specific attitudes of a functional nature particular to specific careers. Careers are referred to in a more general perspective and in reality aimed at preparing learners for the productive pursuit of a possible profession in interior design.
Paradigm shift
Encarta Dictionary 2007 defines paradigm shift as “a radical change in somebody’s basic assumptions about or approach to something”. According to Wikipedia, the free encyclopaedia 2007:3, the term paradigm shift has found uses in other contexts, representing the notion of a major change in a certain thought pattern, a radical change in personal beliefs, complex systems or organisations, replacing the former way of thinking, or organising with a radical way of thinking or organising.

Interior design
Interior design is the practical manipulation of three dimensional spaces by utilising different design principles; for example, line, form, colour and texture to create a well-designed living space with an aesthetical appeal. Different designs are manipulated for different interiors. According to Ching (1987), interior design is the planning, layout and design of the interior spaces within buildings. These physical settings satisfy the basic needs for shelter and protection. The purposes of interior design, therefore, are the functional improvement, aesthetic enrichment and psychological enhancement of interior spaces.

WIL Model
According to Engelbrecht (2003:3), a model for WIL is the umbrella term for specific planning issues and a workable structure that include the institution, department, administration, infrastructure, staff, students and industry.

1.2 LITERATURE REVIEW
In 2006, the International Federation of Interior Designers/Architects (IFI) commented on a “misalignment between graduate outcomes and the expectations of industry”. The federation stated that higher education would have to “start producing graduates with employable skills, graduates who can easily fit into the organizations/companies so that such interior designers can benefit companies by being creative and productive” (Franz, 2007:2), implying that internationally, the current pedagogical platform in the interior design WIL co-ordinator classroom does not support graduate integration into the workplace. In order to bring the classroom
and the workplace closer together, the design of a management model for WIL for the interior design qualification is required.

To understand and enjoy our surroundings, visual knowledge of an interior or the subject under discussion, we need to make use of all our senses. During these experiences there are a few situations where senses like hearing, touch or smell play a bigger role than vision; they lend the experiences remarkable power (Von Meiss, 1990:1). It is apparent that experience does not stop with WIL. Using all senses to gain experience and understand the environment we are living in, can help develop the trade and industry with reference to furniture design, space planning and adding to the contents of curriculum development in tertiary institutions.

In a South African Society for Cooperative Education (SASCE) workshop focusing on a business model for WIL in 2007, Dr Groenewald stated, “A co-operative education programme is believed to produce graduates that ‘hit the road running’, rendered competent individuals and is not only a differentiating dimension of vocationally-aimed higher education programmes, but also of many traditional university programmes aimed at professions” (SASCE, 2007:5 – A business plan proposal).

Bound and Solomon, as quoted by Barry Bell (2005:2), also identified a reconfiguring of higher education to include new ways of sharing the latest industrial practices and necessary theory of work-based learning as a crucial part of the core curriculum in universities. To ensure education stays at the cutting edge where practicums are involved, it is essential for curricula to be updated and in line with current industry needs. According to Miller & Seller (1990:30), to facilitate an integrated knowledge and a skills base specifically linked with work integrated learning, does not indicate creating work. To create workplace learning for Interior Design students and ensure that work integrated learning for these students remained cutting edge, practicums and praxis at the university are included in the interior design WIL curriculum.

WIL must be managed in such a way that the needs of the industry form part of the management model for WIL for the Interior Design qualification. If there is no placement for students in industry, a solution to the problem for the management
model for WIL for the Interior Design qualification has to provide an incubator system for the interior students to work on site.

According to De Lange and Gilbert (1994:1) and Jacobsz (2002:2), as quoted by Wessels and Jacobsz (1999), most higher education institutions (HEIs) worldwide make use of a central office to manage co-operative education. This office may be involved with national and international networking as well as liaison with industry. Other administrative assignments will include communication with graduated students working in the industry, development and education of staff, financial planning, direct and indirect participation in curriculum progress, further expansion on co-operative education research, and the encouragement of WIL. According to De Lange (2004), it is important to focus on the Interior Design management structure to ensure a proper management structure for WIL, especially for the Interior Design programme.

Although not every Higher Education management Information System (HEMIS) per institute that is available works accordingly, the needs for recording data of student placement, monitoring and assessment of WIL are critical. An industry data system will help that the model functions efficiently, especially in the absence of sufficient staff. TUT’s interior design industry data system in this management model for WIL for the Interior Design qualification should be available to the students during workplace recruitment.

According to Coll and Eames (2000:1), offices and management models for WIL should provide leading edge service to the WIL co-ordinators in order for them to provide the counselling service to clients who need guidance and assistance, and employers who are looking for these skills. According to the feedback from alumni students graduates who have completed WIL are equipped to enter the industry and are competent well-rounded individuals, and an asset to the industry. This clearly highlights the difference between the many higher educational training institutions and their different programmes.
The proposed development of the management model for WIL for the Interior Design qualification should include a workable calendar for WIL lecturers to assist with the budget received from the university. In the management model for WIL for the Interior Design qualification it is vital to look at WIL methods. If any problems are encountered, these methods should be applied by looking to turn understanding of a problem into attainable rectification actions. This method is known as “collective knowledge”. Collective knowledge is known from John Dewey’s philosophy of practicality – to do things through theoretical knowledge. **Dewey clarifies that knowledge comes from interaction between do and preparation and then back to do.** It can form part of the management model for WIL for the Interior Design qualification as well.

WIL must be developed as a teaching methodology to educate the Interior Design students. It is therefore important to understand and examine a few learning theories so that interior design professionals (lecturers) can start to realise why this form of instruction WIL is so powerful (Cates & Jones, 1999).

The theories mentioned below form part of this research study to develop a new management model for WIL for the Interior Design qualification:

### 1.2.1 Robert Gagne’s condition of learning
Students tend to assess which aspects will be of the most benefit to them and then concentrate their focus on these aspects. Three critical components of this model are:

1. Internal conditions – learner perspective (beliefs, values and ethics)
2. External conditions – stimuli from the environment (location, events and activities)
3. Knowledge results – oral, intellectual and motor skills as well as cognitive strategies.

The above three mechanisms continuously interact and guide each other. As educators learn more about how students learn, they can be more effective at altering the external conditions to create situations to maximize student learning (Cates & Jones, 1999:14).
1.2.2 Bloom’s taxonomy of education objectives

During WIL, students are exposed to situations where they have to make use of higher order thinking skills. Benjamin Bloom looked at learning from the standpoint of domains of educational objectives and a hierarchy of cognitive processes (Bloom, 1956, as quoted by Cates & Jones, 1999). The following three educational objectives of Benjamin Bloom will form part of this research during the design of the new management model for WIL for the Interior Design qualification. The three domains in his theory are classified as educational objectives.

1. The cognitive objective – recall or recognition of knowledge or the development of knowledge and intellect
2. The affective objective – objectives describing changes in interest, attitudes and values
3. The psychomotor objective – the development of manipulative or motor skills.

1.2.3 Atkinson’s model of achievement motivation

WIL increases student motivation, but what motivates students to learn? In the model of achievement motivation mentioned above, task values combined with project expectancy are the criteria that are considered the motivators to lead the task in enthusiasm and the consequential achievement (Cates & Jones, 1999:17).

Students in control of their performance can influence their situation and they have a tendency to accomplish an assignment at a higher level. Certain tasks will have higher values to students. The aims of students can range from a domestic level, i.e. a career, to a more precise level attached to a particular duty.

Student enthusiasm is individual and driven by two factors:

1. The expectation of success
2. The importance of the practical task (Atkinson, 1964, as quoted by Cates & Jones, 1999).

The design and structure of the new management model for WIL include motivation and student enthusiasm as part of the WIL qualification. The research methodology
information that has formed part of this study refers to the research problem and sub-problems, the research aim and sub-aims, research methods, population and sampling, data collection and data analysis.

1.3 RESEARCH PROBLEM AND SUB-PROBLEMS

1.3.1 Research problem
The following information indicates a research problem and sub-problems.

Taking in consideration the new development structure of co-operative education at the TUT an insufficient management model for WIL for the interior design qualification exists in the Faculty of the Arts at TUT (refer to chapter 5, no. 5.6 on page 220). A management model for WIL for the Interior Design qualification in line with the HEQSF has been designed. It is clear that the mere placement of a student in a job setting in industry does not assure employability. According to Smith (2009), it is assumed that every single student who has taken part in WIL must be employed (refer to chapter 3, no. 3.2.1, page 81).

The industry demands certain skills, behaviour and knowledge. These demands have to form part of the curriculum and management model as of yet. In the new management WIL model, consideration was given to guidelines that have been developed. The latter was the main aim of this study.

1.3.2 Sub-problems
- Design lecturers are not acquainted with what the interior design students are learning in the industry during the WIL period.
- Student progress during the WIL period is not officially documented.
- The WIL teaching methodologies of interior design within the current academia are not assessed.
- Training, development and personal interaction between interior design students and industries are not yet determined.
- Students who are not placed at a workstation will have to do simulation of interior design projects on campus using the industry to participate.
1.4 RESEARCH AIM AND SUB-AIMS

1.4.1 Research aim

- With this research, it was intended to develop and implement an alternative WIL management model for the Interior Design qualification. With the use of the alternative WIL management model, WIL in the Department of Visual Communication in the Faculty of the Arts at TUT, might be improved.

1.4.2 Sub-aims

- To develop and implement a WIL management model for the Interior Design qualification to help support and bridge the gap between the university classroom/studio and the workplace in industry by means of including theory and practice together (Refer to Chapter 5, diagram 5.4 page 243)
- To support and train the industry supervisors how to observe and understand the necessary design skills and design knowledge the student bring to the industry* (refer to Chapter 6 page 318)
- To support the pedagogical integration of the WIL management model for the Interior Design qualification (Refer to Chapter 5)
- To compare national and international Interior Design WIL management models for WIL in interior design (Refer to Chapter 2)
- To improve the internal and external interaction between interior design role players (students, employers and academic staff) of WIL (Chapters 6 and 7)
- To set quality assurance guidelines and principles for WIL in interior design, to strengthen the content the student need to learn to make a success in the industry (Chapter 5, 6 and 7)
* Industry: Refers to the private, public and community sectors

1.5 METHODS, METHODOLOGY AND THEORY

1.5.1 Research methods

1.5.1.1 Quantitative approach

Systematic and objective research need a quantitative approach that deals with findings that could be analysed by using numerical data from only a small portion of the greater population to simplify the results in respect of the population that is being studied (Maree & Pietersen, 2010).

Different scales of measurements are used to capture data derived from a variety of sources. The nominal scale and ordinal scale will be used in the questionnaire. Numerical data in quantitative research is used by an investigator to test the relationship between the variables (Charles & Mertler [2002], as quoted by Maree & Pietersen, 2010). Charles and Mertler stated that quantitative research tests reality theories, looks for reasons and results, and gathers data using quantitative procedures to test the assumptions. Quantitative studies are either expressive or tentative. In this study, an explanatory or descriptive study will establish relations between variables.
Data collection involves dynamic involvement by participants and concern towards the participants in the study. According to Creswell (2003), data collection is based on closed-ended observation and documentation. An interpretation of the data will form part of the management strategy, conclusions drawn and lessons learnt which may give rise to additional questions (Creswell, 2003:182).

In the interior design field of study, a questionnaire, as an instrument for the research, will be used in a non-experimental investigation (Huysamen [1976:69], as quoted by Wessels (2007:6). By using a quantitative study with closed-ended questions in a structured form, data will be collected from the interior design industry, companies, students and staff from higher education institutions from different provinces in South Africa.

Biographical, demographical and general questions on WIL, training and preparation for WIL as well as problem areas were researched. A pilot study using the set questionnaire was handed out to students to complete, to rectify misunderstanding of questions asked before the final questionnaires were handed over to respondents by hand. The collected data was presented to the Statistical Consultation Services of TUT for processing.

1.5.2 Population and sampling

1.5.2.1 Population
To ensure a proper research environment it is evident that a population has to be established, consisting of a group of people, objects or events, reasons or effects that will be innovative and truthful to a detailed criterion (McMillan & Schumacher, 2001:169). The population of this study consists of national tertiary institution students from one conventional university and three universities of technology that offer Interior Design as a qualification as well as the interior industries in Gauteng, KwaZulu-Natal and the Western Cape (refer to chapter 3, no. 3.12, page 102 onwards).

Tertiary institutions
WIL co-ordinators included in the population and the reasons for that are:
The University of Johannesburg (UJ), Gauteng, is a comprehensive university. UJ was for many years a university of technology before the merger in 2004 with the Randse Afrikaanse Universiteit (RAU) and thereafter known as the University of Johannesburg (UJ).

The Tshwane University of Technology (TUT), Gauteng, is one of the biggest government subsidised higher education institutions.

The Durban University of Technology (DUT), KwaZulu-Natal a government subsidised higher education institutions.

The Cape Peninsula University of Technology (CPUT), Western Cape, a government subsidised higher education institutions.

The abovementioned institutions prepare and train students who feed the national industry and private companies with employees. Most companies that participate in WIL are located in Gauteng, KwaZulu-Natal and the Western Cape.

1.5.2.2 Sampling

According to De Vos (1998:191), the sample selected from the larger population consisting of subjects or individuals, acts as the elements of the population. A sample is an area that can be viewed as a representative sample and acts as the measurement taken from the population. Sample sizes will be determined according to the availability of persons in the respective target populations (refer to chapter 3, no. 3.12.3, page 105 onwards).

The following target populations will be selected for the purpose of this study:

- **Academic heads of departments and other staff members** of Interior Design departments at TUT, DUT, CPUT and UJ that are involved with WIL
- **Interior Design students** who have completed their work integrated learning and are still studying in the same Interior Design discipline at TUT, DUT, CPUT and UJ
- **Supervisors, other human resources and officials** from selected companies in Gauteng, KwaZulu-Natal and the Western Cape who have participated in WIL over the last three years.
1.5.3 Data collection

According to Cohen and Manion (1980:208), the benefits of using a multi-method approach are outlined in the following paragraph. The use of different data collection methods to collect research data aids in the elimination of one-sidedness or distortion of the investigator’s view of the specific piece of information that is being investigated.

The following data collection methods will be used in this study:

- Literature study – different literature studies to explain the content of WIL
- Questionnaires – quantitative method to gather information from the sample in the population
- Descriptive method of the proposed WIL management model – make use of a descriptive method for the proposed WIL management model.

1.5.3.1 Literature study

Regarding aspects related to the management of WIL in national and international in Interior Design, information and literature revision will be conducted. Literature papers and information notes will provide themes and topics concerning this research (McMillan & Schumacher, 2001:42). Data sources will include Internet searches and real-life feedback from the interior design industry. The information taken from the literature sources will be interpreted to supply explanations for previous experience. It will also explain co-operative instructive significance that may be in use in present practices and versions (McMillan & Schumacher, 1997:47).

1.5.3.2 Questionnaires

This form of data collection for this research will include self-administered questionnaires. The questionnaire is compiled according to a quantitative data collection method. The use of a questionnaire is quite inexpensive, as it asks all subjects the identical questions and guarantees anonymity (McMillan & Schumacher, 2001:257). The benefit of using a questionnaire, according to Mason and Bramble (1997:316), is that a bigger base coverage will be achieved. (The Questionnaires in Addendum: Appendix A pages 402; Appendix B pages 410 and Appendix C pages 418). The purpose of the survey (questionnaires) is to collect data on co-operative
education business models, as implemented in different tertiary institutions, namely TUT, CPUT, DUT and UJ. It utilises academic staff, supervisors of the industry and student groups to implement the data analysis as a test on a new student group.

The advantages of collecting data by means of questionnaires completed by a small group of individuals amongst a large group of people are that the financial aspect is minimal, and the required data can be completed and received relatively fast {Babbie [1990]; Fowler [1988], as quoted by Creswell (2003:154)}. The negative aspect of using questionnaires is that after distribution, no alterations to the items in the questionnaire are possible, even though they may be vague to some respondents (Gall, Borg & Gall, 1996:289). The insights gained from the literature study regarding the topic implementation of a programme management model for WIL at TUT will be used to develop and design a questionnaire. The questionnaire will be divided into three sections. Section A will be devoted to the biographical data, Section B will focus on demographical data, and section C on the practical aspect where the respondents’ experiences of the presentation and content of the subject will be investigated.

The questionnaire will be distributed to the respective senior managers, middle managers and students with a covering letter explaining the purpose of the study, its significance and instructions for completing the questionnaire. The researcher will also assure the anonymity and confidentiality of responses.

To ensure a thorough data collection, questionnaires will also be distributed to the industry; specifically to the supervisors who form an integral part of student training during WIL. Conducting a pilot study with a small section of the proposed study with a controlled model of subjects (Mason & Bramble, 1997:84), the researcher will send out questionnaires to different industry sectors, selected senior managers, middle managers and students who do not form part of the sample group, as well as to supervisors in the industry. Feedback from the pilot study will be used to change unclear reports.
1.5.3.3 Measuring instrument
The Likert scale was used. This scale provides a unique amount of feeling from a participant’s stance. The general use of the Likert scale asks participants to reveal their inner feelings and to state whether they agree or disagree with a statement.

Five response categories will be used (refer to chapter 4, no. 4.3.1, page 114):
1. Strongly agree
2. Agree
3. Not sure
4. Disagree
5. Strongly disagree.

To measure a construct, a series of Likert scale questions was compiled and a total score calculated for each respondent. They had to assign values 1 to 5 to the categories. Finally, each respondent's values based on his or her responses were added together (Maree & Pietersen, 2010).

1.5.3.4 Descriptive method
To understand the WIL programme and the research behind the process, it was easier to use a descriptive research method. To test the hypothesis or respond to questions relating to the subject of the study, the descriptive method was the best way to do the research. Van der Merwe (1996:287) points out that the purpose of descriptive research is to describe what exists as clearly as possible.

1.5.4 Data analysis
Data analysis involved the categorising of information and data, arrangement and connotation to the accumulated, original processes (Marshall & Rossman, 1995:111).

1.5.4.1 Analysis of quantitative data
Data collected through the quantitative method was analysed according to descriptive analytical statistics in collaboration with the Statistical Consultation Services of TUT, Pretoria Campus. A frequency analysis of biographical and
demographical data was conducted. The abovementioned outcomes were used to structure a management model for WIL for the Interior Design qualification.

1.6 OUTLINE OF CHAPTERS

CHAPTER 1
An introduction to the study will be provided. Attention is given to the formulation of the research problem and the research questions. An indication is given of the research design to be followed.

CHAPTER 2
The outcome and the comparison between the management models for WIL for the Interior Design qualification in international universities and universities in South Africa is described in this chapter.

CHAPTER 3
The research methodology which includes the research design, population, sampling, data collection, analysis and interpretation of data are dealt with in this chapter.

CHAPTER 4
This chapter focuses on the findings of the research and the proposed management model with respect to the management of WIL for the Interior Design qualification at TUT.

CHAPTER 5
The development of the new management model for work integrated learning for the Interior Design qualification is discussed in this chapter.

CHAPTER 6
Recommendations to manage a management model for work integrated learning for the Interior Design qualification form the focus of this chapter.
CHAPTER 7
Conclusions are drawn and recommendations made in Chapter 7.

1.7 ETHICS

All data, once analysed, will be kept for five years. Subsequently, all information will be destroyed to prevent misappropriation. No data was shared with other individuals who were not involved in this project. During the interpretation of the data, an accurate account of the information was provided and validation strategies were implemented to ascertain the accuracy of the data with participants across different data courses.

The research does not contain words or language that express bias in terms of gender, sexual orientation, racial or ethnic groups, disability or age. No ethical issues were foreseen with regard to this research study, but the content of the proposal was declared with the Ethical Committee of Tshwane University of Technology.

1.8 CONCLUSION

As educators reflect back on the content of Chapter 1 and stare at the reasons for the development of a management model for WIL for the Interior Design qualification, it is without a doubt a model that is long overdue. Chapter 1 focuses on the reasons and gives an explanation for how important WIL is for any higher education qualification, especially interior design.

The whole of Chapter 2 is dedicated to national and international research carried out in universities that make use of WIL in their Interior Design qualification. TUT has to learn from the international and national universities, industries and alumni students and exchange interesting ideas and processes that have already been tested. This information has been researched during the structuring and description of the development of the management model for WIL for the Interior Design qualification.
2

COMPARISON BETWEEN THE MANAGEMENT MODELS FOR WIL FOR THE INTERIOR DESIGN QUALIFICATION IN INTERNATIONAL UNIVERSITIES AND UNIVERSITIES IN SOUTH AFRICA

2.1 INTRODUCTION

According to Higgs (2010:141), Work Integrated Learning (WIL) has a relatively long history across a range of disciplines. The World Association for Co-operative Education (WACE, 2010) defines WIL as combining “professional work experience with classroom studies in many forms, including: Research, Internships, Study Abroad, Services, Attachments, Co-operative or professional experience”. Importantly, it acknowledges the desirability on combining, or in more formal terms, integrating classroom studies with professional work experience. Other pedagogical approaches such as experiential learning, service-based learning, situated learning, and, of course, work-based learning, a long-recognised feature of vocational training, also contribute to different extents to aligning learning with practice (Higgs, 2010:141). To understand the different ways of learning through WIL and to construct a management model for WIL for the Interior Design qualification at TUT, a number of institutions, working sites, universities and higher educational learning sites have been investigated / explored. The aim was to determine how their Interior Design programme management model functions for WIL. This information will contribute to developing a management model for WIL for the Interior Design qualification at TUT.

According to CHE (2011:65), lecturers who implement WIL in their programmes, are responsible for preparation issues, and have to determine the intensity and nature of commitment. The implementation issues of WIL and the monitoring of progress, assessment of work and the evaluation of the programme are all part of the management of WIL in South African universities. In each diverse curricular modality, the management roles and implementation of the WIL programme are different, but these are extremely significant for student employability, helpful for them to gain access to decent work and let them understand they need not be poor.
To be doing well in the curricular modalities for the Interior Design programme at TUT, such a management model will contribute to the success of students gaining access to decent work in the interior design industry.

The previous “Strategy at TUT for Co-operative Education”, dated 23 March 2006 (hereinafter referred to the “post-merger strategy”), was formulated after the TUT merger. Since the co-operative education outlook and perspective of each of the merging institutions were incongruent, the post-merger strategy attempted to take their diverse viewpoints into account, compromise where necessary, and reach consensus on an acceptable way forward.

Unfortunately, practical implementation of the post-merger strategy over the past few years has unequivocally proven that it fails to meet TUT’s needs. New principles are borne in mind and Interior Design students who are employable gain access to decent work, since they have the necessary interior design skills. This underlines the importance of such a management model to be aligned with the new WIL strategy of TUT (Strategy for Co-operative Education. Higher Education Development and Support, October 2013).

According to the post-merger strategy (and more especially, WIL), the one factor that makes UoTs unique, that differentiates them from other tertiary institutions that are recognised by the Department of Higher Education, is the practical experience that the students receive by attending WIL. Therefore, rather than relegating WIL to obscurity, it should be elevated to its rightful position in the institutions and granted the attention it deserves. (Refer to Chapter 1, no 1.4.2, page 19)

According to the International Labour Organisation (ILO) in the Employability Improvement Training Course at TUT, the position of students have changed in the workplace as from 2012. There is little work available, and import and export costs are extremely high at present. The major requirement for a workable and capable labour force in all the sectors of the industry emphasises the call for on-going teaching, learning and training for personnel to stay ready for action in a global economy. Employers request that the labour force for the 21st century have the
information, technological skills and “soft-skills” to function successfully so that they may “be ready for action” in the workplace.

To maintain this intensity of competitiveness, employees must be live long learners who will strive to enhance their comprehension and bring their skills up to date. Skills are necessary to be employable and to have access to a pleasant job with decent remuneration. A management model will contribute towards making Interior Design students employable, gain access to decent work and remain employed.

To realise this contribution, an international and national literature study on the basic principles and nature of different work integrated business models is to be carried out. This study will include concepts, benefits, the aim and purpose of these WIL models as well as the role that WIL plays, especially for designing such a management model.

According to the CHE (2011:59), lecturers who make use of WIL in their programmes are liable for the implementation of WIL, the value accredited to WIL and the number of credits it is worth as well as monitoring the progress, assessing the work and evaluating the WIL programme. All of these aspects form part of the management of WIL in South Africa universities. The management roles in the curricular modalities are different. With such a management model, the WIL programme will address these matters according to the new post-merger strategy at TUT.

In this chapter, a comparative literature study which was done between South Africa universities and universities in Europe, America, Australia and Canada concerning the management model is described. The aim was to better understand the management model for the WIL programme, the process of WIL and how the latter fits into this design programme. The comparative literature study will contribute to the management model.

The following information in this chapter has been communicated directly with TUT via the Internet, telephonically, via Skype or through personal contact between the staff of the universities or from the Head of Department: Interior Design.
participants from the International and National Universities were asked the same questions. Nevertheless, answers differed from university to university.

2.2 UNIVERSITIES AND LEARNING SITES IN EUROPE, AUSTRALASIA, AMERICA AND CANADA

The information of the following universities was collated and researched:

- Lessius University College, Mechelen, Belgium, Europe
- Royal Melbourne Institute of Technology (RMIT University), Australia
- Columbus College of Art and Design (CCAD), Ohio, America
- Ryerson University: Ryerson School of Interior Design (RSID), Canada
- Mount Royal University, Canada

To understand the questions being asked to the above mentioned universities abroad, the following areas of interest were selected to gather information from the different universities. Information such as the content of the interior design WIL module, the duration of the WIL period, the teaching level for WIL implementation, knowledge and skills students needed and how or if students were prepared for the WIL period prior to departing for the industry and lastly information on the management of the WIL in the interior design qualification, were sought.

- The curriculum for the WIL module in the Interior Design programme
- The duration of the WIL period
- The qualification level for WIL in the programme
- Knowledge and skills students need prior to doing WIL
- The procedure of students being prepared, placed, monitored, assessed and debriefed for WIL
- Management of WIL in the programme.

2.2.1 Lessius University College, Mechelen, Belgium
Contact person: Nansi Van Geetsom, international co-ordinator: interior and design courses as well as educational co-ordinator: design and technology department.
Lessius Mechelen has been offering a professional bachelor’s degree course in Interior Design since 1994. The professional bachelor’s degree in Interior Design differs from an academic bachelor’s programme in that the aim is to train and prepare students to be professional designers upon graduation. The goal is accomplished by creating a work-based learning environment (Van Geetsom, 2011).

2.2.1.1 The curriculum for WIL in the Interior Design programme

Information received from Van Geetsom (2012) indicates that there are two study options in Interior Design, namely:

- Interior and Furniture Design (1st option)
- Interior and Building Techniques (2nd option).

Both study options lead to the same diploma but have different emphasis in the curriculum. The Interior and Furniture Design option emphasises concept development while the Interior and Building Techniques option places the emphasis on techniques.

Both options have contact with the world of work through seminars held by companies in the industry and real-life briefs (real clients for interior design problem-solving projects, and real buildings from clients to be redesigned, revamped, and to work out finishes and building techniques) (Van Geetsom, 2012).

2.2.1.2 The duration of the WIL period

The period for students differs between the two options:

**Option 1**

Majoring in Interior and Furniture Design, the student will shadow an interior designer when he/she goes to the building site. The outcome will be a comprehensive report, discussing the procedure and the design concept through to the completion of the interior.
During this period one prototype of furniture has to be built to full scale, and show complete specification documentation and working drawings to manufacture the furniture piece.

The period lasts for approximately six to eight weeks in total.

**Option 2**

This is an internship (WIL) at a design office in the industry for a period of 12 weeks (Van Geetsom, 2012).

2.2.1.3 The level of WIL in the programme

The internship (WIL) is based in the third year of the programme (Van Geetsom, 2012).

2.2.1.4 Skills students need prior to doing WIL

According to Van Geetsom (2012), skills taught during the first and second year of study cover the design skills that students need for WIL. Design skills, office practice skills (answering a telephone, working with the relevant technology), drawing skills (computer-aided design), oral and written skills, and personal development skills (punctuality, neatness, loyalty, good manners) form the basis for WIL.

2.2.1.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL

According to Van Geetsom (2012), students do not have a preparation period. Throughout the course, the industry is in close collaboration with the department and programme. Real-life projects for execution and implementation are fed into the programme from real clients. Preparation is, therefore, unnecessary, as students know the rules and regulations that exist in the industry.

Students are selected for placement by the relevant industry (guest lecturers) for shadowing an interior designer or working in an office environment. Documentation of interior design projects carried out in office, comprehensive reports during the shadowing process as well as the prototype furniture piece are assessed like any other project that forms part of the programme. Industry assessment is not done as
a rule. Debriefing and assessment are done on campus and are available for all fellow students to observe (Van Geetsom, 2012).

2.2.1.6 Managing WIL in the programme
Since 2011, the Interior Design programme on the Lessius campus follows the practice enterprises model. This WIL process consists of an incubator idea where students are divided into four members working in a “small design office”. Real clients and private members from the community are invited to bring projects for these different “small design office” members to design while under teaching and learning guidance from lecturers.

This type of WIL can also benefit the Interior Design programme financially by asking a design fee. The designed project is assessed before handing it over to the client. With this model, students are not bound by a WIL period and are permanently busy with practice enterprises during their third year of study. All work done through the “small design office” counts as WIL.

All lecturers assigned to the third-year group of students are available daily and constantly involved in these real design projects. They have to see to it that the work presented to the private clients is of a high standard and technically correct (Van Geetsom, 2011:2-6).

2.2.1.7 General information
According to Van Geetsom (2011:2), when they created a work-based environment in their Interior Design programmes, they had to create a competence-based curriculum with an evaluation method. They had contact with the industry and work field that were willing to open up their workplaces for students to visit, for the industry to become one with the university. Different programmes in the UoT’s use the following learning methodologies as learning tools, namely by means of presenting workshops, project education in the form of real-life projects and practical experience.

Within this sphere, they also allowed for international design competitions and exhibitions. One of the most important means to accomplish the work-based
learning environment is organising the course around a professional qualified team of lecturers with links to the industry and design practice.

They also strive for diversity in designing contents for the different diplomas by making provision for differences in qualifications, gender, employed or unemployed persons in the design business as well as different age groups and countries of origin (Van Geetsom, 2011).

**Task team**

In 2010, a total of 65 members were working on the study and represented a multidisciplinary team. The team consisted of 9.2% interior designers, 41.5% interior architects, 23% architects, 3% engineers, 3% fine artists, 7.7% product designers and 16.9% were from a combination of different professions, e.g. metalworkers, textile designers, carpenters, art historians, MBA graduates and lecturers of law.

A large number of lecturers acted as guest moderators for design briefs in other higher education institutions. 18% of the staff acted as guest lecturers in design schools all over Europe under the structure of Erasmus LLP Projects (Van Geetsom, 2011).

- In the work-based model at Lessius, the lecturers are the most important people in the students’ learning period. Lecturers with one foot in the professional domain have a big advantage: their knowledge, attitude and skills are permanently tested to reality. Leading one’s own practice as a furniture designer, exhibition stand designer or as a computer aided design (CAD) expert always looks for evolutions happening on the floor or design path. To help the students in their work-based learning, the lecturer has to be on a refresher course on a daily basis (without the financial effort from the university). With these skills and refreshed knowledge of most aspects of the design domain, the student receives up-to-date information and practises to become a well-equipped professional designer (Van Geetsom, 2011).
During the design process (WIL) of between four and twelve weeks, the student is in lecture by the lecturer who also acts as the professional consultant as well as the client.

**Project-based learning (PJBL)**

Project-based learning (PJBL) combines problem-based learning (PBL) and workplace learning in that it brings together intellectual inquiry, real-world problems and student engagement in relevant meaningful work.

PJBL requires students to develop and demonstrate essential skills and knowledge, to draw on multiple disciplines to solve problems and deepen the conceptual understanding (CHE, 2011:75). Project-based learning integrates theory and practice while the lecturer fills the gap between the theory and the practice, between higher education and the workplace (Van Geetsom, 2011).

### 2.2.2 Royal Melbourne Institute of Technology (RMIT University) Australia

Contact person: Associate Professor Suzie Attiwill, Program Director/Interior Design, School of Architecture + Design.

RMIT University offers Interior Design in the School of Architecture and Design. The qualification for interior design is a registered Bachelor of Design (Interior Design), Code 00122A. The main aim of this course is to teach the designer how people live and how they inhabit the world. The Interior Design programme is part of an idea-led profession concerned with the relationships between people and the surrounding environment (http://www.rmit.edu.au/brouse;ID – industry.)

#### 2.2.2.1 The curriculum for WIL in the Interior Design programme

The programme is delivered through design. Design projects are presented by the industry, called “Sessional Lecturers”. The WIL programme is a combination of current projects and potential projects that form the project-based teaching and learning activity.

The WIL programme is managed through a design studio practice-like environment. All studios at the university are run as design studios.
Students work in groups or as single entities.

The groups develop the brief with a problem-solving setup.

The groups then test and experiment with ideas until they formulate a solving concept to the problem.

Lecturers then critique the concept and the design.

Peer review is then used to discuss the design process and changes that may enhance the concept solution to the problem. The peer review is formulated from other interior design and architecture design groups from on-campus or off-campus.

WIL is implemented as a credit-bearing part of the curriculum. Placement has a credit-bearing value as part of the curriculum. WIL also forms a professional accreditation in the field of study (Attiwill, 2012).

2.2.2.2 The duration of the WIL period

According to Attiwill (2012), there is a different WIL model at RMIT University that is implemented with its own syllabus and timeframe allocated to the model. To make a selection of the different models depends on how much time is available for design, and on what the project-based design entails. Herewith a few examples of these design aspects:

2.2.2.2(a) Paid co-operative education, also called “internship”

- This course covers a few months up to one year.
- Placement can be in Australia or any other country – it is the student’s choice.
- The aim is to prepare students for integration into a future workforce.

2.2.2.2(b) Voluntary placement

- This course covers a shorter period than one year.
- Placement can be in Australia or any other country – it is the student’s choice.
- The aim is to give students valuable experience in the field of design. It is also a non-profit sector.
2.2.2.2(c) Industry-based projects
- The course covers any given time or timeframe.
- Placement can be in the form of a research project.
- The aim is to solve a design problem through in-depth research. The student and the industry work together to find a solution to the design problem.

2.2.2.2(d) Community service
- The course covers any given time or timeframe.
- Placement implies working as a consultant for the community.
- The aim is for most students to participate in combinations of community project.

2.2.2.3 The level of WIL in the programme
WIL is implemented in different formats in the second and third year of study. Students have the opportunity to develop their design skills and awareness through overseas travel studios and in their third year they study at a design institution abroad (Attiwill, 2012).

2.2.2.4 Skills students need prior to doing WIL
Attiwill (2012) further explains that the Interior Design profession forms a relationship between people and the surrounding environment. The design does not only include the inside of buildings, but also addresses the spatial needs ranging from the intimacy of an object to the urban feel of a building in a city.

To apply resolving design solutions to urban and living problems, the student must be capable of solving design problems and show the following competent skills: high-level visual and oral communication and presentation techniques, model making, technical design documentation and the ability to work with colour, light, sound and video as well as computer-based programs.

2.2.2.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL
RMIT University does not require student preparation for WIL. Most students participate in some sort of WIL during their study in Interior Design. Students are motivated to do WIL. They are prepared and monitored for WIL to enhance their work skills and employability. Placement and approval of companies are controlled by the Interior Design staff. All companies must be approved as qualified workstations for WIL. The students are responsible for looking for placement and in most cases, already work part-time for a company. They can use this opportunity to continue their WIL period with the same company (Attiwill, 2012).

2.2.2.6 Managing WIL in the programme
According to Attiwill (2012), the curriculum for Interior Design includes a work experience section that is formulated by collaborative studios with visiting lecturers who bring in practical design projects. Professional, practicing interior designers from the industry present studios or specialisation areas which engage directly with contemporary design projects and design issues.

Clients come in with actual projects and questions that need to be solved. Students then develop a design proposal following the client’s brief. The scenario-based, simulated design practice environment is followed while work ethics and managerial skills are implemented.

Strong community and industry relationships have developed through the programme which allows students and lecturers to be exposed to these real-life projects. These projects include domestic interiors, events planning, retail, film and set design, entertainment, theatre set design, hospitality design, furniture design, corporate office and public building design as well as exhibition design.

2.2.2.7 General information
WIL has definite benefits for the industry, namely:

- It offers a potential recruit a trial period without obligation.
- It injects new ideas, new blood into the company during WIL.
- A pool of potential recruits is created from which companies can select employees.
• It develops collaboration with the RMIT University.
• Staff development opportunities that come from employees and their mentoring students offer good opportunities for staff members (Attiwill, 2012).

2.2.3 Columbus College of Art and Design (CCAD) Ohio, USA
Contact person: Martha Allison IDEC, Chair, Interior Design

According to the Chairperson of Interior Design, CCAD’s Interior Design is accredited by the Council for Interior Design Accreditation’s programme (CIDA). The Interior Design qualification is registered as a bachelor’s degree in Interior Design over three years. The main aim of this course is to teach students to create environments where we interact with the world in which we live. CCAD offers the opportunity to design spaces, interiors, exteriors and accessories for human use with emphasis on functionality, practicality, sustainability, health and safety.

2.2.3.1 The curriculum for WIL in the Interior Design programme
The WIL programme at CCAD is called an “internship”. Students work off-campus in the industry during the WIL period. The curriculum for WIL includes training that focuses on real-world design issues. The potential client’s brief, needs and objectives have to be met. The industry, supervisors, lecturers and peers all work together through research, planning, design and problem-solving techniques to refine the final concept and design. During this period the student experiences office practice and what managing a design studio entails (Allison, 2012).

According to the information received from the website http://www.ccad.edu in Ohio, the faculty and the industry are closely linked. The faculty also has strong links with the design community. This creates opportunities for the students to interact with professionals and design firms.

2.2.3.2 The duration of the WIL period
Students are required to work 120 hours, but can work more hours than are specified if they anticipate taking up more than one internship during their time of study. The summer months between their junior and senior year is the best time for undertaking
WIL. The 120 hours implies 15 days in the industry. It can also be taken at different times of the year or in different countries around the world. The internship (WIL) is credit-bearing, and forms part of the original second- and third-year curriculum (Allison, 2012).

2.2.3.3 The level of WIL in the programme
The WIL curriculum is designed for the second- and third-year level. There is no set time in the course for WIL and the WIL period can be determined by the collaboration between the university and the industry (Allison, 2012).

2.2.3.4 Skills students need prior to doing WIL
The Interior Design programme at CCAD focuses on industry-specific knowledge. The most important skills include hand drafting, computer-aided design, materials and techniques, Sketch Up modelling, 3D hand modelling, colour theory, hand sketching and the use of lighting design (Allison, 2012).

2.2.3.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL
According to Allison (2012), the students have to finish their internships (WIL) during their third year of study. For WIL, the students meet with Career Services who oversees internships and employment for the students. Students are taught to craft a resumé and post an electronic portfolio onto the Web. It is from here that the industry makes their selection. Students have weekly assignments and journal writing during the WIL period. The internship (WIL) must relate to their major. Thereafter, the sponsoring company and mentor write a review of the student’s work, attitude and capacity which is kept on file at the department. The student then receives a grade for his or her WIL period.

2.2.3.6 Managing WIL in the programme
The WIL programme is managed through the department of Career Services and the department chairperson. Outcomes and reviews are kept on file in the department. Credits for WIL are worked into the curriculum and form part of the final bachelor’s degree for Interior Design (Allison, 2012).
2.2.3.7 General information

WIL benefits the industry because real-life projects are simulated, and real-life problem-solving thinking and reacting are taught. The students interact with professionals and the understanding the community needs better.

2.2.4 Ryerson University – Ryerson School of Interior Design (RSID), Canada

Contact person: Associate Professor Jana Macalik, Lower School Co-ordinator

The mission of Ryerson University’s School of Interior Design is to educate students for the dynamic, complex and demanding practice of interior design in a learning environment that balances the theoretical and the practical, the experiential and the conceptual.

Drawing on the resources of a vibrant city and a university dedicated to the advancement of applied knowledge, the School prepares graduates for leadership in the Interior Design profession through understanding and consideration of the technological, aesthetic, ideological, environmental, cultural and social dimensions of the built environment (http://www.ryerson.ca).

The School of Interior Design is housed within the Faculty of Communication and Design. It integrates theory and practice design to develop qualified interior designers who graduate from the School with both professional skills as well as the critical and intellectual capacity to assume positions of leadership.

An all-inclusive environment introduces Interior Design students to the terminology, market place and professional issues of practice, while an experiential curriculum emphasises both studio and workshop work to stimulate creativity, experimentation, problem-solving and innovation.

Important values for the School are creativity, passion, diversity, commitment, collaboration, excellence and vision (http://www.ryerson.ca).

2.2.4.1 The curriculum for WIL in the Interior Design programme
There is a centre where furniture like tables and chairs as well as materials are designed for use by people with the emphasis on designing meaningful spaces that fully support human activities. All projects set during the academic year engage students’ careful understanding of the context, cultural practices and research into human values and needs (http://www.ryerson.ca).

According to a staff member (June, 2012), an internship programme is a requirement for the qualification. The curriculum of the internship programme (WIL) is split between two courses. The first is the preparatory portion in the fall term (summer recess) of the third year where the students are introduced to résumés as well as assembling their portfolios and learning communication skills. The second is the actual internship at an accredited company.

2.2.4.2 The duration of the WIL period
The requirement is for the students to work 400 hours that is calculated as 50 days of eight (8) hours per day. The norm is to work six weeks at an approved industry-related company. According to the Lower School Co-ordinator for Ryerson’s Interior Design department (Macalik, 2012), most students complete the internship in the months between their third and fourth year of study. Provision is also made for students to log some hours prior to this set time as well.

2.2.4.3 The level of WIL in the programme
The co-ordinator has mentioned that students are introduced to the professional practice as part of the curriculum in the programme. During the third year of study it is compulsory for them to do their internship at an approved company. This internship commences in the latter part of their third year.

2.2.4.4 Skills students need prior to doing WIL
The students should be proficient in all the modules that they study. They are able to work in the resource libraries, and work on design and working drawings. The proficiency includes presentation drawings, hand drawings, work in AutoCAD, and most students also know Rhino and Revit software. They are also involved in graphics, marketing and 3D computer renderings (Macalik, 2012).
2.2.4.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL
The co-ordinator states that there is a preparatory portion for students of the WIL curriculum at RSID that takes place in the fall term (summer recess) of the third year before the students depart to start their internship (WIL) at a company at the end of their third year. During the summer recess the students are introduced to writing a résumé and cover letter to the respective companies. A portfolio of design work has to be assembled that forms part of communication skills preparation and which students have to take with them during the interview sessions. Different communication skills form part of their training. Attention is given to technology and the use thereof. Briefings on work ethics and professional standards form part of the preparation prior to the internship (Macalik, 2012). The procedures for assessment, evaluation and debriefing are communicated to all students so they know what to submit on their return to the university.

2.2.4.6 Managing WIL in the programme
At RSID, the Interior Design School has a WIL co-ordinator who manages the whole process. The students register for the module as part of the programme. The WIL co-ordinator works directly and in close partnership with the students and the companies. The person is responsible for the preparation, placement and evaluation of the WIL programme (Macalik, 2012).

2.2.4.7 General information
At RSID, the School takes a humanistic view of design to place the user at the centre of interest; and design spaces, utensils and consumable material that is used by people on a daily basis. The use of ecological sustainability forms a huge part of interior design, and can also be seen in their global relevance, and emerging technologies. The meaning of design context and understanding of culture practices and research on human behaviourism with emphasis on value and needs of the human, is clearly seen in the type of interior design projects that is executed by their students (http://www.ryerson.ca).
2.2.5 Mount Royal University, Canada, Department of Interior Design and Art History

Contact person: IDRC Associate Professor Helen Evans-Warren. Departmental Chair

The Mount Royal University has been offering university level courses in the Arts since 1931. Teaching art programmes is one of MRU’s hallmarks and ensures opportunities for on-the-job-learning through co-operative education in the form of WIL.

The Interior Design programme is one of five undergraduate level programmes in Western Canada accredited by the Council for Interior Design Accreditation (CIDA). It combines theory and practice, preparing students to succeed in the growing interior design industry. (http://www.mtroyal.ca/programs/courses/academic

2.2.5.1 The curriculum for WIL in the Interior Design programme

The Interior Design programme is an applied degree with two “work term” (WIL) semesters. In each “work term” or WIL period also called Directed Field Studies (DFS) the students work at various companies, including interior design, architecture, facility management, furniture and materials providers, millwork companies and CAD users. The departmental chairperson at MRU has also explained that students are required to do online academic work during the work term (Evans-Warren, 2012). The students have to give feedback to the department on their training and academic progress.

2.2.5.2 The duration of the WIL period

The chairperson has stated that the Interior Design programme has eight academic semesters but students complete these over a three–year period (Evans-Warren, 2012). Students work for a minimum of 450 hours each semester. This means up to 11.25 weeks per semester. The first DFS (WIL) takes place in Semester 5 (spring/summer after second year). The second DFS (WIL) takes place in Semester 7 (winter of the third/fourth year). The DFS (WIL) period runs for seven weeks. The WIL period is completed by the end of September at the beginning of the fourth year.
2.2.5.3 The level of WIL in the programme

The WIL model of the Mount Royal University uses directed field studies (DFS) for all their work-integrated studies in different programmes. According to the chairperson (Evans-Warren, 2012), WIL preparation starts with interviews with proposed companies at the beginning of the semester. The students have to source their own placement with help from the university. The Department has its own Interior Design Work Team Co-ordinator and works through the Career Service department at MRU.

Employer agreements are co-ordinated by the departmental co-ordinator. All documentation, WIL guides and communication between stakeholders are monitored by this person.

2.2.5.4 Skills students need prior to doing WIL

Students from the Interior Design programme need skills to assist them when working on projects individually. Through course work and intense design problem-solving they have developed skills in design (residential and office), construction (detailing and working drawings), AutoCAD (computer drafting), materials, lighting and universal design (Evans-Warren, 2012).

2.2.5.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL

The chairperson explains the process the department puts in place for preparing the students for WIL (Evans-Warren, 2012). The Design II course instructor and the Career Services co-ordinator prepare students for their first WIL training period through a series of lectures, workshops and mock interviews.

2.2.5.6 Managing WIL in the programme

The WIL periods are managed by the Career Services co-ordinator. All paperwork, employer agreements and checklists as well as mid-term and final evaluations are submitted to the Co-ordinator with work term positions being approved by the programme chairperson before the student can start work. The academic work required during the work term is done online and managed by an Interior Design instructor.
2.2.5.7 General information

Mount Royal University helps students, employers and employees to find employment, post-employment or learn the best ways to advertise a vacancy. Mount Royal University’s Career Services also help students build job hunting skills through résumé assistance, interview practice and office services training.

Mount Royal University’s students and graduates make outstanding employees. If a company wants to hire an MRU student, they offer a free online posting service. There are also opportunities to participate in career and volunteer fairs on campus. Skills gained from an arts education will serve students for a lifetime. The education will teach them to think critically and creatively, exploring issues that require an open mind.

Art and design qualifications give students the foundation to succeed in a variety of fields, including research, cognitive approaches for problem-solving, personnel development and understanding human behaviour (http://www.mtroyal.ca/employment/careers/index.htm)

2.3 ONE COMPREHENSIVE UNIVERSITY AND THREE UNIVERSITIES OF TECHNOLOGY IN SOUTH AFRICA

Information from the following universities was collated and researched:

- Tshwane University of Technology (TUT)
- Durban University of Technology (DUT)
- Cape Peninsula University of Technology (CPUT)
- University of Johannesburg (UJ) (Refer to Chapter 1, no 1.5.2 on page 21).

To understand the Interior Design programme management model for WIL the following areas of interest are discussed:

- The curriculum for WIL in the Interior Design programme
- The duration of the WIL period
- The level for WIL in the programme
- Skills students need prior to doing WIL
• The process: students being prepared, placed, monitored, assessed and debriefed for WIL
• Managing WIL in the programme

2.3.1 Tshwane University of Technology (TUT)
Contact Person: Rita Cilliers. Senior Lecturer: Interior Design
The National Diploma: Interior Design has been offered since 1972. It is a three-year academic diploma with a large vocational and practical component, and feeds into the Bachelors Technologiae Degree: Interior Design (BTech) as a fourth-year qualification. The aim of the programme is to train and prepare students to be professional designers upon graduation. The goal is accomplished by creating a work integrated learning (WIL) environment using work- and project-based learning (Cilliers, 2012). (Refer to chapter 5, no. 25, page 288.)

2.3.1.1 The curriculum for WIL in the Interior Design programme
The Interior Design programme entails six semesters of training: six semesters of full-time study at the University and six weeks of WIL with an approved employer. The main principle of Interior Design Practice, which incorporates both an academic and a professional phase, is that upon completion of the work integrated learning (WIL) model, the student should be adequately equipped to take on a first appointment. During his/her work integrated learning the student should have attained a foundation of both theory and practical experience in the workplace that will equip him/her in his/her development (Cilliers, 2012).

Field work
The following practical experience will form part of the WIL process and the student will have the opportunity to undergo practical interaction in these areas:
Site visits
Site surveying and measuring
Client interaction
Purchasing of materials
Approval of plans
Installation and presentation
Office duties

The practical experience in the company (office duties) will include some of the following experiences and will also cover design processes:

Design concepts - pre-design process and analysis of the problem
Project planning – plan the design process – who is responsible for what and when
Drawing production – includes all working drawings, detail drawings and construction explanation
Presentations – 3D drawings to explain the design to a client
Computer generated drawings – CAD drawings to show the design
Meetings – to discuss the design process and progress made with the project
Costing and specification documentation that presents the explanation of the design and assist during the installation process.

2.3.1.2 The duration of the WIL period

Work integrated learning consists of six weeks during the third-year level. Therefore, six weeks cover 30 working days with eight hours per day of actual productive learning content of which the total comes to 240 working hours per period. Taking into consideration ten notional hours equals one credit, the number of credits amounts to 24. This corresponds with the South African Qualification Authority (SAQA) requirement (Cilliers, 2012).

2.3.1.3 The level of WIL in the programme

According to Cilliers (2012), the Interior Design Practice (WIL subject) is a component of the third-year Interior Design programme and stretches over a period of six weeks.

2.3.1.4 Skills students need prior to doing WIL

Skills taught during the first and second year of study cover the design skills that students need for WIL. Design skills, office practice skills (answering a telephone, working technology), drawing skills (computer-aided design), oral and written skills as well as personal development skills (punctuality, neatness, loyalty, good manners) form the basis for WIL.
Relevant work in which the student has received practical training on first- and second-year level is the following:

- Interior design practical
- Presentation drawing
- Model building
- Photography
- Typography
- General drawing
- Computer training.

2.3.1.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL (Refer to chapter 6, no. 9, page 331.)

It is compulsory for all third-year students in Interior Design who intend on doing work integrated learning at a workplace to be registered at the Tshwane University of Technology (TUT). Before placement takes place, the curriculum for Interior Design Practice follows the schedule below:

(a) Preparation

During the 12 weeks before the student departs for the workplace, a preparation schedule is followed where each student is trained, prepared and tutored in behavioural skills, office and technical skills, conducting themselves, labour law, conflict management and sexual harassment. During these 12 weeks both the Tshwane University of Technology and the student send the CVs to different companies, alumni students and partners of the TUT.

The student has to draft a profile of the proposed company and through this profile the company is approved or denied (Cilliers, 2012). The student then makes an appointment for an interview, show the company his/her portfolio of work, and if approved as a WIL candidate, a letter of acceptance is issued by the company and submitted to the department. With the issuing of an acceptance letter the placement of the student is finalised. The student then signs a WIL contract with TUT, stating that TUT does not take any responsibility for injuries, losses or damages that may occur during the work integrated learning period. A WIL guide is issued for the
guidance of both student and mentor at a particular workplace. Thereafter the student leaves the department and attends the WIL period.

(b) Monitoring
The WIL guide, together with the weekly data, is monitored by the supervisor at the workplace. Telephone calls, e-mails and SMS are used to correspond with the student and vice versa. In some cases, if funds are available, the WIL co-ordinator (lecturer) also visits the workplace with prior arrangement with the management of the workplace where he/she monitors the work done by the student.

(c) Assessment
In order to maintain a high standard of training each student has to compile a technical report and portfolio of his/her work integrated learning period. This will include descriptions of all work done during the WIL period; they must include pictures, where necessary.

Included in the WIL guide is an industry evaluation sheet that has to be completed and signed by the mentor during WIL training. This document needs to be returned as part of the technical report. From the company a similar report will be e-mailed to the department after the training session.

Once the student has proven that the above requirements have been met and all documentation has been submitted to the department, the WIL guides together with all documentation are evaluated, and the final result is published by the examination department (refer to chapter 5, no. 29, page 296.)

(d) Debriefing
All WIL guides, reports/portfolios and any other relevant information regarding work integrated learning should be submitted to the Department of Interior Design in person no later than one week after returning to the TUT. Debriefing is in the form of a oral and practical presentations to the department. Should the work integrated learning be unsatisfactory, the student is notified by the departmental secretary in order to rectify any mistakes (Cilliers, 2012). (Refer to chapter 5, no. 31, page 297.)
2.3.1.6 Managing WIL in the programme (Refer to chapter 6, no. 6.2, page 319.)
The Interior Design programme has had a work integrated learning component since 2001. Although it is nearly 12 years old, different ways and means have been attempted and improved upon for the last decade. In the Faculty of the Arts, the Department of Visual Communication: Interior Design forms one of the four disciplines in the department, each having its own WIL co-ordinator. All the WIL co-ordinators in the department are monitored by the Faculty WIL co-ordinator (FC).

This is a decentralised model. WIL is offered in the Interior Design programme by a WIL co-ordinator (lecturer) for the programme. The WIL co-ordinator prepares, trains and places all students, and ensures the approval of all the companies. All five procedures (refer to chapter 2, no. 2.3.1.5, page 50) are carried out by the WIL co-ordinator.

The student reports to the company and is away from campus for six weeks. During this time the student is introduced to the real world of practical application. The real world opens up for him/her. He/She can now work with real clients, real projects and have real problems to solve. The curriculum of the three years in training now becomes a reality and the student can become involved in all the facets of interior design: from the concept stage to the completion stage, all form part of the learning process of WIL.

Monitoring and assessment are carried out by the company supervisor (marksheet) and the student returns to the TUT. TUT takes over and assesses the student’s practical evidence of work as well as scrutinising the feedback from the industry. All feedback from industry, students and the WIL co-ordinator are filed, and the necessary changes and needs are to be addressed in the following semester. The co-operation between the stakeholders is immeasurable. It provides the programme new insight into the current trends and updates staff with the necessary information, design trends, materials and finishes as well as training possibilities to better the education and the qualification for our students and programme.

All lecturers assigned to the third-year group of students contribute to the WIL success, are constantly involved in real design projects themselves and oversee
work done by students for marks. Although no work for a real client is done, all interior design-based projects are real problem-solving projects, of a high standard and technically correct (Cilliers, 2012).

2.3.1.7 General information
To create a work integrated learning environment in the Interior Design programme, a competence-based curriculum must be created with an evaluation model that works together between the different stakeholders in the interior design industry. To help create this WIL environment, the professionals present workshops, manage project education and gain practical experience as a learning tool. Within the design sphere the students currently participate in national design competitions and exhibitions.

One of the most important means to accomplish the work integrated learning environment is a well-organised course with a professionally qualified team of lecturers and part-time lecturers who spend between 12 and 15 hours per week teaching and mentoring students. Links with the interior design industry and design practices have been established and these partners assist with placement during the WIL period.

Task team
There is a total of ten lecturers teaching 110 students, ranging between first to fourth years. Four (4) full-time lecturers and six (6) part-time lecturers work with the students. The student distribution is as follows:
95% - interior designers
1% - architects
1% - fine artists
1% - photographers
1% - educators and supervisors.

A few lecturers act as moderators for the assessment of practical and theoretical examinations in other higher education institutions and 1% of the staff acts as guest lecturers in design schools in and around Pretoria (Cilliers, 2012).
In the current WIL model at TUT the important persons in a student’s learning career are the lecturers, peers and the visible, acting industry that assists the programme with lectures, demonstrations, workshops, factory tours, issuing of samples of materials, and information. With this partnership the student receives the up-to-date information and practises to become a well-equipped, professional designer.

During the WIL period that stretches up to six weeks when the student is coached by the professional interior designer, model builder, exhibition designer and furniture designer, carpenter and CAD expert. WIL integrates theory and practice while the lecturer fills the gap between theory and practice, between higher education and the workplace (Cilliers, 2012).

2.3.2 Durban University of Technology (DUT)
Contact Person: Sue Barrett. CL: Interior Design
The Department has a proud tradition of educating students for the industry. The high standard the students maintain has been recognised both nationally and internationally.
An interior designer is responsible for the structural planning and aesthetic imaging of corporate, retail, commercial and domestic interiors, such as restaurants, shops, exhibition stands, bars, hairdressing salons, offices, hotels, function rooms, private homes, etc. The professional interior designer is involved in the total design of these areas and this requires a considerable knowledge of all technical aspects, such as lighting, air-conditioning, plumbing, construction methods as well as internal finishes and furniture selection.

As interior design is closely related to the world of changing trends, the designer must also have knowledge of past, current and future fashions and styles. The designer may also be involved in the design of domestic architecture for which he/she would require knowledge of planning and building construction methods. The designer is responsible for producing the design concept and then following through with the working drawings, contract administration and supervision of the installation (DUT policy and procedures for work integrated learning, 2006).
The National Diploma in Interior Design is a three-year academic diploma with a practical component and feeds into the Bachelors Technologiae Degree: Interior Design as a fourth-year qualification. The purpose of this programme is to achieve consistently high-standard practices and procedures for work integrated learning (WIL) for DUT students in Interior Design.

The specific objectives for WIL are:
- Formal credit-bearing WIL in the Interior Design programme in DUT
- Responsiveness to national imperatives, industry and community needs
- To develop the competencies of students through the integration and application of knowledge, skills and values in an authentic context (DUT policy and procedures for work integrated learning, 2006).

2.3.2.1 The curriculum for WIL in the Interior Design programme
Subject: Interior Design Practice III
The principle of work integrated learning (WIL) is to integrate a method of instruction with the development of the student by having academic tuition followed by practical experience within the industry of the chosen field of study.

Work integrated learning (WIL) comprises two components:
(i) Community engagement WIL (community-based) (second-year level)
(ii) Work integrated learning WIL (industry-driven within the workplace) (third-year level).

WIL is an extension of the curriculum of the Interior Design programme. It is a process where the student applies theoretical knowledge and practical skills together to complete a real-life project.

2.3.2.2 The duration of the WIL period
The requirements of the National Diploma: Interior Design of applicable work integrated learning consists of 160 hours (four weeks) when students complete the requirements of WIL through the Interior Design programme. Community Engagement is taught at second-year level and students undergo work integrated
learning (WIL) through placement in an industry environment at third-year level (Work integrated learning study guide, DUT, 2012).

Community Engagement and WIL comprises the following divisions:

- Second-year students do WIL for 80 hours (two weeks), working on a community project, as prescribed by the Department. This forms part of the Interior Design programme. The students have to produce a WIL guide (record of hours, reflective report or a photo essay) of the time spent on the community project.

- During the third year the students complete the rest of the 80 hours (two weeks) in the interior design industry. All work has to be done on a professional basis and is supervised by a professional designer. Students earn 12 SAQA credits for this course (DUT policy and procedures for work integrated learning, 2006).

2.3.2.3 The level of WIL in the programme
Interior Design Practice III (WIL subject) is a component of the third-year Interior Design programme. It runs for a period of two weeks (DUT policy and procedures for work integrated learning, 2006).

2.3.2.4 Skills students need prior to doing WIL
The programme curriculum provides the skills required for the workplace; e.g.:

- AutoCAD and various other computer programs
- Industry involvement in interior design projects
- Field trips such as site and factory visits
- Entrepreneurial studies
- Community engagement.

Skills taught during the second year Community Engagement covers the design skills that students need for WIL. These include practical skills, theoretical design skills as well as technical skills regarding computers; office skills such as answering a telephone correctly, using the Internet and scan facilities. Oral and written skills, as well as personal development skills, for example punctuality, neatness, loyalty,
good manners etc. form the foundation of a professional career after a successful WIL period (DUT policy and procedures for work integrated learning, 2006).

**Personal Qualities Required**

The interior designer must have drawing and draughting ability, an awareness of current trends and an eye for detail, but more importantly, he/she must have a strong creative imagination and an ability to communicate his/her ideas visually and orally. All these aspects are covered in subjects throughout the course, using the latest technologies, including CAD.

Interior design is related to the building industry and the designer would benefit by having an aptitude for the technical aspects of the building industry ([http://www.dut.ac.za/faculty/artsanddesign](http://www.dut.ac.za/faculty/artsanddesign)).

**2.3.2.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL**

Although the students are prepared before they enter the workplace, no formal time set aside is spent on preparation. Writing the CV, contacting the company and the invitation for an interview are all done under supervision of the WIL co-ordinator. Placement is done in collaboration with the DUT Interior Design Department, the company and the student.

Monitoring, assessing and debriefing the work, student assessment etc. are communicated to the student via a written document. The students are knowledgeable on handing back evidence of work done during WIL. They also have to do a PowerPoint presentation as part of debriefing and a last assessment mark for this period.

Monitoring the students occurs at the workplace. The appointed supervisor for the WIL period has to complete a marksheet for the student and return it to the sending institution. This mark and the debriefing mark as well as the WIL guide mark form the final average for WIL (Barrett, 2012).
2.3.2.6 Managing WIL in the programme

The Interior Design programme has a work integrated learning component called Interior Design Practice III which forms part of the Interior Design curriculum. In the Department of Visual Communication: Interior Design there is one WIL co-ordinator who manages the preparation of students, and helps with their placement and approval of all the companies.

All preparation, including explain rules and regulations before the students leave for WIL, forms part of the WIL co-ordinator's responsibilities. The students are away from campus for two weeks. No classes are scheduled for this period and students are seconded to companies as full-time employees. Monitoring and assessment are done by the company's supervisor by means of a marksheet. After returning from WIL, DUT takes over and assesses the students' practical evidence of work and the feedback from the industry.

The collaboration between the stakeholders is very important. The feedback from the industry as well as from the students provides new insights into the current trends, materials and types of practical projects to better the education for all interior designers. Although the students do not work for a real client, all interior design-based projects are real problem-solving projects, done correctly according to building construction laws and by-laws (Barrett, 2012).

2.3.2.7 General information

To create a work integrated learning environment, all programme material, projects, information, and teaching and learning strategies must be approved by the industry. To help with creating a WIL environment, professional interior designers present workshops, manage projects and form a partnership with the programme. To strengthen the design sphere, the students participate in national and international design competitions and exhibitions.

A professionally qualified team of lecturers and part-time lecturers spend between five and 20 hours per week teaching Interior Design. The participation of the industry as advisors to the programme is very important and is helpful during placement of students for WIL (http://www.dut.ac.za/faculty/artsanddesign).
2.3.3 Cape Peninsula University of Technology (CPUT)

Contact person: Ms Colleen Cocotos. Course leader/Interior Design.

The Cape Peninsula University of Technology offers career-orientated education which consists of an academic component that plays out in the classroom as well as a practical (experiential) component in a studio or workplace. The National Diploma: Interior Design has existed since 1975 at the previous Cape Technikon in Cape Town. The programme currently exists in the Faculty of Informatics and Design in the Department of Architectural Technology and Interior Design.

The WIL component of the National Diploma in Interior Design starts in the second year of study where the student is introduced to practically solving problems through design as well as visits to and from the industry and creating designs. The WIL component is designed according to the Interior Design qualification, as per the SAQA documents (Cocotos, 2012).

2.3.3.1 The curriculum for WIL in the Interior Design programme

Work integrated learning (WIL) at the Cape Peninsula Interior Design programme extends far beyond WIL and placement. The WIL process forms part of the design process and work integration forms a major part of each project. The WIL programme is a combination of practical and theoretical information put together to teach the student the interaction between certain aspects of interior design. The aim is to expose the students to the diversity of interior design in practice (Cocotos, 2012).

The WIL programme is monitored and addressed in more than one way, namely industry participation as well as classroom education and practicums. Students have the opportunity to be placed in the industry for the WIL period. For extra practise and training they add WIL time to their projects in interior design and solve intricate problems through design (Cocotos, 2012).

WIL is a credit-bearing subject (third year) in the curriculum of the Interior Design programme. Placement, work evaluation and feedback from the industry form the professional accreditation for the subject Interior Design Practice III (IDP300).
2.3.3.2 The duration of the WIL period
The duration of the WIL training period is six weeks during June and July of the academic year. The period for the third year of study has lately been extended to a longer period where the student is introduced to the hectic real-world experience in a company. The student is employed on a full-time basis and during the WIL period there is no formal class or contact time required back at university. After the six weeks, the student returns to the university and feedback is provided by means of practical evidence, monitoring and assessing mark sheets filled out by the industrial supervisor (Cocotos, 2012).

2.3.3.3 The level of WIL in the programme
The major WIL period has been designed for the third year of study. The students in the second year of study also undergo an introductory course through practical projects which are monitored by the staff. Thereafter, all students receive annual practical and theoretical information by means of visits from and to the factories and interior design companies (Cocotos, 2012).

2.3.3.4 Skills students need prior to doing WIL
The competencies a student should have include applying creativity, solving problems, being computer literate in many software programs and applying management principles to the practical implementation of interior design.

The following exit level outcomes add to the skills needed for WIL:

- Consultation skills to set briefs for the design
- Effective communication with clients, authorities, contractors and other professionals, using appropriate media
- Managing practices under supervision.

Under specified outcomes the following skills are necessary:

- Analysing the structures of a design problem
- Designing and developing concepts for the problem
• Communicating the solution through various forms of media; e.g., visual, oral and written
• Applying construction knowledge and structural principles to the design
• Knowledge of materials
• Writing specifications
• Submitting 3D drawings
• Applying national building regulations
• Interpreting contracts.

Other skills students need for WIL include:
• Creative thinking
• Team work
• Responsibility
• Evaluating incoming information
• Personal and social development.

2.3.3.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL

(a) Prepare
The student has responsibilities to which he or she must adhere before the start of WIL. The preparation of the student starts with the interview with the WIL co-ordinator for this subject. The student compiles a CV as well as a portfolio of work. It is also necessary to research companies suitable for an internship. The student presents this documentation to the WIL co-ordinator.

(b) Placement
An appointment with the company follows and a letter of acceptance is submitted as evidence of placement. After a positive interview at the company, the student receives his/her WIL guide and the required explanatory documentation for the WIL period from the WIL co-ordinator.
(c) Assessment
After the six weeks period, the student submits his/her documentation, evidence of practical work, technical written report and a supervisor’s evaluation sheet to the Department for further evaluation and assessment by the WIL co-ordinator.

(d) Debriefing
Once the WIL period is over and the student is back on campus, he/she compiles a PowerPoint presentation to give feedback to peers and staff in the Interior Design department. The assessment marks from the university as well as the company form the final assessment mark for this practical subject. The outcome is indicated as a percentage and published at the end of the year.

2.3.3.6 Managing WIL in the programme
The student registers for this subject at the beginning of the academic year. In the time before departing for the WIL period, the following preparation falls into place:

(a) The CV
The student compiles a CV for the potential employer to evaluate whether he/she is suitable for the company and to give the employer an outline of the type of person he will employ. Relevant information has been included: biographic, tertiary and higher education, work experience and contact persons/referees.

(b) The cover letter
The cover letter is an introduction to the WIL co-ordinator which markets the student and explains his/her qualities to the potential employer. Special interests that will appeal to the type of work the company does, must be mentioned; i.e., retail, exhibition design or corporate. The cover letter is a motivational letter as to why the student is interested in working for the specific company.

(c) Contacting the company
A phone call secures the student an invitation to an interview. Other means of communication include sending faxes and emails. It is of the utmost importance to address the communication to the right person in the prospective company. The Department participates and assists the student by sending the company an outline
of the WIL expected to be completed. It is, however, the student’s responsibility to meet with the respective co-ordinator.

(d) The interview
When a company invites the student for an interview it is important to:

- Have a portfolio (the best work of the student in a neat portfolio bag)
- Be dressed in a smart casual dress code
- Know something about the company and why you want to work there
- Be on time or early rather than be late
- Turn your cell phone off during the interview.

(e) Confirm placement
After the decision made by the student on the placement company and approval by the Department, the final placement and written communication between the institution and the receiving company is the priority of the Department of Interior Design’s staff. All communications with the company should be confirmed in writing.

(f) WIL guide
Students have to keep a WIL guide of everything they do every day. This WIL guide is given to them before they leave for WIL. Students have to keep copies of all the documents and drawings to help them compile a report of the work they have done at the company. Students must hand the evaluation form, in a sealed envelope marked “By Hand”, to the person who will be his/her supervisor during the WIL period.

Information that students have to know and understand before they enter the WIL period is communicated to them via a written document. This information includes:

- **Work ethics**: Any misconduct can lead to a disciplinary hearing and the termination of the student’s studies.
- **Remuneration**: It is at the discretion of the company whether to pay the student and how much they are willing to pay.
• **Evaluation and assessment of Interior Design Practice III:** Upon completion of the internship period, the student must provide the following as evidence for assessment purposes:
  - A oral presentation of work done
  - A company profile
  - A WIL guide containing weekly reports
  - An employer evaluation which is a confidential evaluation report
  - A WIL report which is a collection of everything.

(g) **Career opportunities**
The following employment opportunities are available:

- Interior design firms that offer a professional consultancy service to clients offer the opportunity to work towards a partnership, or with experience to establish one’s own practice.
- Shopfitting firms provide a design and supply service for the installation of shop and office interiors.
- Retail groups plan their own interiors and employ shopfitters on a contract basis for installation.
- Furniture manufacturers offer a contract or design and supply service.
- Interior design shops and suppliers of office furniture offer a design service.
- Architectural practices also employ interior specialists in their design teams (http://www.cput.ac.za/faculties/index.php).

2.3.3.7 **General information**
The Centre for Community Engagement and Work Integrated Learning was established as an institutional response to the 1991 Education White Paper on the transformation of higher education which called for all South African higher education institutions to demonstrate greater responsibility and commitment to the socio-economic development of communities.

The centre seeks to “strengthen CPUT’s partnerships with industry, private organisations and the community in order to create an environment for the application of knowledge and production of well-grounded and socially responsive graduates”, (http://www.cput.ac.za/faculties/index.php).
In an attempt to implement the above definition, the Centre integrates the following three units:

- Co-operative Education which is responsible for nurturing industry partnerships that result in student workplace learning
- Service Learning that drives the integration of community engagement with teaching, learning and research

The vision of the Centre is to establish an empowering environment that supports the development of socially responsive and accomplished students through work-integrated learning based on mutually beneficial partnerships with industry and the community.

Its mission is to develop and nurture partnerships between the university, the community and the industry that create opportunities for students to apply knowledge in real-life situations, contribute to socio-economic development, and facilitate the integration of community engagement activities with teaching, learning and research in collaboration with relevant stakeholders (http://www.cput.ac.za/faculties/index.php).

### 2.3.4 University of Johannesburg (UJ)

Contact person: Me Ilse Prinsloo. Course leader/Interior Design

The Faculty of Art, Design and Architecture (FADA) is committed to fostering creative and professional excellence in art and design education. This faculty has a colourful 80-year-old history during which it has been associated with numerous highly successful individuals in the world of art, design and architecture.

The Faculty works closely with the industry to ensure that its programmes remain relevant and secondly, to keep students constantly exposed to changes occurring in the practicing world of art and design.

The study of Interior Design involves a sound knowledge of architectural structure, space planning, building materials and finishes, surfaces, lighting, soft furnishings,
furniture and the decorative aspects of interior accessories. Interior designers work on the interiors of offices, hotels, homes, boutiques, banks, restaurants and more. At the University of Johannesburg Interior Design students develop the ability to solve design-related problems in divergent and creative ways. The scope of training opens doors to many career opportunities in the world of interior design and architecture where graduates will work with both the structural and cosmetic aspects of interiors (www.UJ.ac.za/fada).

2.3.4.1 The curriculum for WIL in the Interior Design programme
Interior design at UJ used to have a module called Professional Practice III that was an assessed work integrated learning (WIL) module. However, it was found that assessing a WIL module was very subjective. Most employers seemed to assess the learners’ personalities and attitudes rather than their skills. It was with this theory in mind that the Department decided to cancel the module. Although it is not a subject any more, students still do vocational training with professional practices and it forms part of the Interior Design programme (Prinsloo, 2012).

2.3.4.2 The duration of the WIL period
Above and beyond practical interior design training and implementing professional practices, the students still have to work at a company that performs interior design work for at least three weeks (15 working days) during their third year of study. They usually do this during the June/July holiday period (Prinsloo, 2012).

2.3.4.3 The level of WIL in the programme
Students are introduced to professional practices as part of the curriculum from their first to their third year. During their third year of study it is compulsory for the students to undertake a WIL internship period at a company to gain experience. Currently the students do not have to be assessed for work integrated learning. However, they do have to present proof of the non-assessed work integrated learning they have completed during the winter holidays to the Faculty. This is usually done in the form of a letter from the employer (Prinsloo, 2012).
2.3.4.4 Skills students need prior to doing WIL
The students should be proficient in all the subjects that the lecturer presents. That is why the lecturer encourages them to do the WIL towards the end of their third year. The proficiency includes an ability to complete a full design project, execute construction drawings, draw presentation drawings, apply graphic details, and write reports and schedules that show their capabilities and understanding of design theory (Prinsloo, 2012).

2.3.4.5 The process: students being prepared, placed, monitored, assessed and debriefed for WIL
At UJ’s Interior Design department there is no academic procedure and preparation before the students depart for their WIL period. However, the lecturers take the time to explain to the students what the value of the training is, how to go about finding an employer and how to negotiate the terms of this training. The faculty is available if students need help with finding placement (Prinsloo, 2012).

2.3.4.6 Managing WIL in the programme
The students do not have to register for the WIL subject in the beginning of the study year. There is no WIL module designed for the Interior Design programme and students do not have a defined WIL programme. During their third year, the students are encouraged to do work integrated learning to give them a brief overview of the real world after graduation. The students find employers in and around Gauteng, and work for two weeks at a company to receive in-house training. With a letter from the employer to state that they have completed the two weeks’ training and observation, they return to university. Once they return after the June/July holidays, the students are encouraged to share their experiences during a feedback session. No evaluation or assessment takes place during this presentation (Prinsloo, 2012).

2.3.4.7 General information
The Faculty is home to approximately 1 200 students who study and work in the custom-built FADA building on the Bunting Road Campus. In the FADA building are a number of specialised workshops, studios, computer laboratories, common lecture venues, an auditorium, gallery and library. The graduates from FADA are employed internationally or is working somewhere in South Africa. The fact that all the students
from UJ are employed, indicate that they have been properly prepared as professional interior designers through creative development, key factors in the programme offered (www.DisWILco-ordinatoraimer@uj.ac.za).

2.4 COMPARISON OF UNIVERSITIES IN SOUTH AFRICA AND UNIVERSITIES ABROAD RESPECTIVELY

To compare the Interior Design programme management model firstly among universities in South Africa and secondly among universities abroad, the following aspects of the respective models will be illustrated in table format:

- The curriculum for WIL in the Interior Design programme
- The duration of the WIL period
- The level for WIL in the programme
- Skills students need prior to doing WIL
- The process: students being prepared, placed, monitored, assessed and debriefed for WIL
- Managing WIL in the programme.

The aim is to better understand the Interior Design programme management model for WIL as well as the WIL programme, the process of WIL and how this process fits into the Interior Design programme.

2.4.1 Comparison: universities in South Africa

The comparison in the following table is a summary of the questions in the questionnaires.
<table>
<thead>
<tr>
<th>FIELD OF COMPARISON</th>
<th>TSHWANE UNIVERSITY OF TECHNOLOGY (TUT)</th>
<th>DURBAN UNIVERSITY OF TECHNOLOGY (DUT)</th>
<th>CAPE PENINSULA UNIVERSITY OF TECHNOLOGY (CPUT)</th>
<th>UNIVERSITY OF JOHANNESBURG (UJ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University has a compulsory WIL programme</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Student must register for the WIL programme</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>The level for WIL in the programme – third year</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>The level for WIL in the programme – second year</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>The level for WIL in the programme – first year</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Participating company must be approved by WIL coordinator</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Students are responsible for their placement</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WIL duration at company – two weeks = 80 hours</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>WIL duration at company – six weeks = 240 hours</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Students undergo a preparation period prior to WIL</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>WIL in-house training</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>WIL industry training</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WIL simulation training</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>WIL guide on projects to be updated and signed</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Supervisor assessment in WIL guide</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Supervisor assessment confidential to WIL coordinator</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>University assessment of students/projects after WIL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Debriefing done by students after WIL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Submit evidence of practical work done during WIL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>WIL model is credit-bearing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Results published as percentage</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Results published as pass/fail</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Special skills other than design skills needed</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

To understand the comparison of the table above, the following areas of interest will be compared and discussed:

2.4.1.1 The curriculum for WIL in the Interior Design programme.

It is evident that the only comprehensive university (UJ) that has been researched and places more emphasis on academic teaching, makes use of the work integrated learning which is not compulsory. UJ students are encouraged to work part-time and, when possible, to expand their knowledge and enhance their work-based skills
at different industries and companies. The rest of the universities all have a compulsory WIL component in their curriculum.

2.4.1.2 The duration of the WIL period
Although all the tertiary institutions in South Africa have a WIL component as part of their programme, not all of them take it seriously. The time duration of the WIL period differs from institution to institution. It also seems that assessment of the practical evidence that the student has to submit for the WIL co-ordinator to determine what really has been achieved during the WIL period is not important.

At 50% of the universities, the duration of the WIL period is between six and seven weeks. This shows how important the workplace experience weighs towards the practical implementation of the classroom practice. Although the other 50% have a short period of exposure to the workplace, the amount could be more intense or more focused on one or two major aspects of interior design. In all WIL cases, the stimulation and design practice the students experience cannot be rejected and will always form an integral part of the students' development.

2.4.1.3 The level of WIL in the programme
The type of WIL is still the industry/company's problem. Although the institutions teach real-life problem-solving projects, it is still a priority for the industry to refine the talent, provide extra finishing and emphasise details that go hand in hand with a real project. It is for these reasons that students insist on doing WIL outside the boundaries of the university. Although all the institutions implement WIL during the third year of study, the preparation and implementation of WIL also happen during earlier periods (second year) in some of the programmes.

2.4.1.4 Skills students need prior to doing WIL
As seen in Table 2.1 the comparison of the UoTs in South Africa is very much on par and the need for interior design skills development is a high priority (include cognitive, affective and psychomotor skills). These universities collaborate with the industry to make sure that the WIL programmes are in place, and that teaching and learning in the Interior Design programme is industry-compliant with related information and cutting edge technology.
2.4.1.5 Managing WIL in the programme
Although all the institutions have a WIL component, each institution manages the WIL component in the programme in a different manner. In most cases, the WIL co-ordinator assigned to the WIL programme assists with the administration of the WIL component. The WIL co-ordinators are responsible for training, monitoring and assessing the students. After completing the documentation and placement, the students leave the institution for a period of between two and seven weeks. Different stages of WIL take place in these time periods. Level 2 students leave for shorter periods and the more senior students are placed for six to seven weeks at a time.

Three years of training now become a reality and the students become involved in the different facets of interior design. Even the students of the institution that does not have a compulsory WIL placement section in the programme, insist on working for the industry on an ad hoc basis to hone their skills and gain first-hand experience.

2.4.1.6 The process: students being prepared, placed, monitored, assessed and debriefed for WIL
Through this research study it has become evident that some of the universities do not have a specific preparation period that is set aside for training and preparing students for the workplace. How and when the students are updated on CV-writing, trained to communicate with the public and peers in the workplace, be punctual and believe in themselves is up to each institution. However, these are very important aspects students should be able to do and therefore, it should form part of the WIL curriculum.

In some institutions the process of preparation forms part of the professional design practice curriculum, as the programme does not want to duplicate information sessions. The placement in all universities is controlled by the WIL co-ordinator in the Department. The process of looking for placement still lies with the students while the WIL co-ordinator is available to assist with the necessary documentation, information and final correspondence between the stakeholders. The placement process seems to be a dual process between the three role players, namely the student, the university and the industry. All the universities researched, make use of a WIL guide, a supervisor who manages the WIL period in the workplace,
assessment and feedback to the WIL co-ordinator from the supervisor. Thereafter a debriefing and evaluation session with the WIL co-ordinators takes place when the students return to their allocated institutions.

2.4.2 Comparison - universities abroad

The interior design sphere of comparison in the following table is also compiled from the questions in the questionnaires.

**TABLE 2.2
WIL model comparison - universities abroad**

<table>
<thead>
<tr>
<th>FIELD OF COMPARISON</th>
<th>LESSIUS UNIVERSITY COLLEGE, BELGIUM</th>
<th>ROYAL MELBOURNE INSTITUTE OF TECHNOLOGY</th>
<th>COLUMBUS COLLEGE OF ART AND DESIGN</th>
<th>RYERSON SCHOOL OF INTERIOR DESIGN</th>
<th>MOUNT ROYAL UNIVERSITY, DEPARTMENT OF INTERIOR DESIGN AND ART HISTORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>University has a compulsory WIL programme</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Students must register for the WIL programme</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>The level for WIL in the programme – third year</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>The level for WIL in the programme – second year</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>The level for WIL in the programme – first year</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Participating company must be approved by WIL co-ordinator</td>
<td>X</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Students are responsible for their placement</td>
<td>X</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL duration at company – two weeks = 80 hours</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL duration at company – six weeks = 240 hours</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL duration at company – 12 weeks = 480 hours</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>WIL duration – months up to a year</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Student undergo a preparation period prior to WIL</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL in-house training</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL industry training</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL simulation training</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL guide on projects to be updated and signed</td>
<td>X</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Supervisor assessment in WIL guide</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>Supervisor assessment confidential to WIL co-ordinator</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>University assessment of students/projects after WIL</td>
<td>Yes</td>
<td>Yes</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
</tr>
<tr>
<td>Debriefing done by students after WIL</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Submit evidence of practical work done during WIL</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>WIL model is credit-bearing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Results published as percentage</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Results published as pass/fail</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Special skills other than design skills needed</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
To understand the comparison of the table above, the following areas of interest will be compared and discussed:

2.4.2.1 The curriculum for WIL in the Interior Design programme
Lessius University College started WIL a few years ago and asked companies to select a student to shadow the interior designers for a period of six weeks or even longer. They also kept the students updated on design trends and technology by implementing real-life projects as part of the practical syllabus.

All universities in Australasia, the USA and Canada have their WIL programme as a credit-bearing module but most European institutions include WIL as part of an already existing module in the curriculum.

2.4.2.2 The duration of the WIL period
The use of a WIL guide is not a compulsory monitoring method. All the universities make use of an evaluation method and an assessment method. They offer students an opportunity to present their findings to and share their experience with their peers. The debriefing process is very important to most of the universities. However, Columbus College does not ask for evidence and also does not assess work done during a two-week period of internship (WIL). Although all the universities collaborate with the industry, they are still in the early stages of developing a working model and system for WIL.

2.4.2.3 The level of WIL in the programme
Table 2.2 shows the comparison of the WIL model and the implementation of WIL in the Interior Design programme between universities in Europe, America, Canada and Australia. The table shows a few differences in the implementation process.

2.4.2.4 Skills students need prior to doing WIL
The research showed that none of the institutions needed different skills than the design and technical skills to which they had already been exposed.
2.4.2.5 Managing WIL in the programme
According to the information in Table 2.2, it is clear that the universities abroad take WIL very seriously. All students have to be registered for the WIL component at the beginning of the year or study period. All students have to find their own company or workplace to do their WIL, except Lessius that has a well-defined interior design industry that works in close relationship with the institution, do their own selection of students from the institution and ensure a workplace for each student in a company.

The do not use any WIL guides. Supervisors send assessments of the student through to the co-ordinator in the departments where the results from the WIL training period are calculated as part of the credits needed for completion of the qualification. In some cases, the students have to return the evidence of their work done during WIL and this evaluated work counts for the credits needed for the qualification.

2.4.2.6 The process: students being prepared, placed, monitored, assessed and debriefed for WIL
Although 50% of the institutions have a preparation period, the other 50% feel it is not necessary. The reason is because the preparation students need for their work integrated learning period is covered in the curriculum under other sections of the curriculum.

Placement, however, occurs in co-operation with the three partners – the institution, the student and the industry. The student is expected to look for a placement and with the assistance of the co-ordinators in the departments the placement is finalised.

In all the universities researched abroad, the Career Service department available at the institution works with the work placement co-ordinator in the departments. Together they assist the students to formalise their placement in a company. The supervisors allocated to assist the students during WIL, assess the students and send a confidential assessment to the departmental WIL co-ordinator. When the students return to the university, the work brought back from the company is marked as evidence towards their credits needed for the qualification. In most of the
institutions the students are debriefed, and they have the scope and opportunity to
share their experience with their peers. The Career Services departments at
universities abroad play an important part in WIL and they also assist the students to
find permanent positions after graduation. With a support system like this available
to students, they build confidence in themselves as well as in their future
negotiations and opportunities.

2.4.3 Comparison – universities in South Africa and universities abroad
The Interior Design sphere of comparison in the following table is taken from the
data in the questionnaires to the different universities.

<table>
<thead>
<tr>
<th>FIELD OF COMPARISON</th>
<th>SOUTH UNIVERSITIES</th>
<th>AFRICAN UNIVERSITIES</th>
<th>UNIVERSITIES ABROAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>University has a compulsory WIL programme</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Students must register for the WIL programme</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The level for WIL in the programme – third year</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The level for WIL in the programme – second year</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The level for WIL in the programme – first year</td>
<td>✓</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Participating company must be approved by WIL co-ordinator</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Students are responsible for their placement</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WIL duration at company – two weeks = 80 hours</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WIL duration at company – six weeks = 240 hours</td>
<td>✓</td>
<td>X</td>
<td>✓</td>
</tr>
<tr>
<td>WIL duration at company – 12 weeks = 480 hours</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>WIL duration – months up to a year</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Students undergo a preparation period prior to WIL</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>WIL in-house training</td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>WIL industry training</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>WIL simulation training</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>WIL guide for practical projects to be updated and signed</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Supervisor assessment in WIL guide</td>
<td>X</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>Supervisor assessment confidential to WIL co-ordinator</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>University assessment of students/projects after WIL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Debriefing done by students after WIL</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Submit evidence of practical work done during WIL</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>WIL model is credit-bearing</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Results published as percentage</td>
<td>✓</td>
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<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Special skills other than design skills needed</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
</tbody>
</table>
To understand the comparison between universities in South Africa and those abroad for the Interior Design WIL management model for the Interior Design programme, the following areas of interest will be compared and discussed:

2.4.3.1 The curriculum for WIL in the Interior Design programme
According to Table 2.3, it is clear that all universities that form part of this study are determined to keep their WIL curriculum as part of the career-orientated focus. According to the research it is a well-known fact that all industries need well-skilled workers with new knowledge. The features for such workers would be their ability to apply trans-disciplinary knowledge in many different ways to solve a problem. This skill is applicable to all workers, regardless in which part of the globe they reside.

2.4.3.2 The duration of the WIL period
The WIL period varies between two and six weeks per annum in both South African universities and institutions abroad. Although the universities abroad apply WIL in their Interior Design qualification the connection and co-operation between the industry and the education sector is very close. The students feel relaxed and optimistic about WIL skills and training.

The South African educational institutions still have a divide between themselves and the industry. This matter should be addressed in the years to come. The industry should play a more important role in the education, training, curriculum contents and development of young interior designers.

The duration of the WIL period does not have to dictate the content for the period in industry, because all practical projects, assignments, lectures, research, teaching and learning form a collateral part of work integrated learning with the emphasis on problem-solving skills and cognitive application.

2.4.3.3 The level of WIL in the programme
Table 2.3 shows the direct opposite areas (yellow) where South African universities differ from those abroad in their implementation and execution of work integrated learning. In many of the areas people understand the important role WIL plays in the development of the student and former employee.
The lack of presented evidence or a need for WIL guides in the universities abroad shows a more mature outlook and confidence in both the industry and the students. This is surely one of the areas where South Africa still needs to pay attention to be able to certify the real value of WIL through the evidence of work and a well-kept WIL guide signed by the workplace supervisor. It is only through the supervisor’s evaluation, the discussion and logging of work done in the WIL guide as well as the real evidence of work submitted to the WIL co-ordinator that the value of the WIL period will be recognised.

2.4.3.4 Skills students need prior to doing WIL
The three areas where it shows a difference are the WIL guide that not everybody deems necessary, the presentation of evidence that forms the assessment foundation and the extra or expanded skills that students need in the workplace for completing WIL.

Experiencing the lack in education during the students’ school years, it seems necessary for universities in South Africa to put more emphasis on being prepared, learn more skills and refine these skills to perfection. The different design and technical skills that have been developed during the tertiary education period seem to suffice, but according to the industry, materials application and manufacturing knowledge still need more attention.

2.4.3.5 Managing WIL in the programme
Both national and international research show that students have to register for the WIL component at the beginning of the academic year. During their senior year of study students have to find their ultimate placement. This process is monitored by the co-ordinator in the department in South Africa and by the Career Service department abroad. In both cases, the co-ordinators play a significant role in placement, compiling the contract between student and industry, monitoring and providing feedback from the industry or supervisor. They also co-ordinate the assessment between the university and the student as well as the assessment between the supervisor and the student in the workplace. The role includes debriefing students and co-ordinating evidence from the WIL period, evaluation and
final assessment, the publication of results and finally the administrative tasking for the years thereafter.

2.4.3.6 The process: students being prepared, placed, monitored, assessed and debriefed for WIL

Research and information gathered in Table 2.3 show that students undergo a certain amount of preparation before they depart for WIL. Although a scheduled process is not strictly followed at each university, the main developmental skills, namely emotional, oral, communication, written and design skills have to be in place. These are interwoven in different subjects of the Interior Design qualification. As discussed previously in this chapter, the co-ordinators manage the process of WIL and are in full command of the essence of this component.

2.5 CONCLUSION

According to the CHE (2011:65), university lecturers should be concerned to ensure that the students who graduate from their programmes are prepared for the world in which they will live and work. The integration of professional and academic concerns in the qualification will go some way towards addressing this requirement.

In South Africa, the re-design processes required by the HEQSF speak directly to this need. Keeping up with developments in the profession and workplace is a challenge for university lecturers as well as for graduates. Lecturers and students alike need to be well-informed about trends and issues that are practised inside the university. University lecturers should locate workplace issues in a wider context. To do so, they should compare the information about the workplace and the new curricular development. University lecturers should consider carefully the relationship between the workplace and the university. A university education is not about job training and the WIL curriculum should not be dictated to by economic or narrow workplace interests. Instead, the university must be (as it has always been) responsive to society and responsive to the needs of students to become productive members of society. Beyond that, part of the mission of higher education has also been to look beyond immediate problems and to prepare students to change and improve existing structures, and not merely to adapt to the world as they find it.
The contribution from each of the abovementioned universities confirms the valuable contribution that WIL makes towards every student who graduates with employability skills and well-developed self-confidence.

According to Higgs (2010:144), in a later submission by BIHECC (2007) to the then Australian Minister of Education Science and Training on graduate employability skills, four of the nine recommendation actions dealing with employability skills referred to the conclusion of WIL in university programmes, including the following specific WIL recommendations:

- To improve and increase access to work integrated learning
- To explicitly report on employability skills demonstrated through work integrated learning.

The information received also shows the importance of the WIL component within the higher education sector and the role it plays in the already existing industry. It is evident that the WIL component is closing the gap between education, qualification, employability and “ready to go”; not only for Interior Design but also for many other industries that make use of skills development.

The results of the comparison between the management models of WIL for the Interior Design qualification in South African universities and universities abroad will contribute to the structuring of and recommendations to develop a management model for WIL for the Interior Design qualification.

In the following chapter, the methodology for this research project is discussed. It explains how gathering of important information through a survey by using a Likert scale focused on WIL students, employers and university staff, different aspects concerning preparation, placement, evaluation, assessment and debriefing for WIL candidates will be used to research and analyse results that are reflected in the chapters thereafter.
3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In this chapter the focus will be placed on defining the research problem, explaining the purpose of the empirical study, data collection methods and the structure of the questionnaire as a measuring instrument, the pilot study, administrative procedure used and data processing. The population sampling and the principles related to validity, reliability, generalisability and factor analysis in relation to the three population groups selected for this study, with a final conclusion, will follow the abovementioned sections.

The definition of the research problem and explanation of the purpose of this study in relation to the objectives of this study are presented below. This is followed by a discussion of the data collection methods in which a questionnaire has been used as a measuring instrument in this research, and in which all the advantages and disadvantages of a structured, closed-ended questionnaire as well as the structure of the questionnaire are discussed.

Thereafter a discussion of the pilot study is presented, followed by the administrative procedure used as well as the editing and coding of data and data processing. The population sampling is discussed and an explanation given of the principles of validity, reliability and generalisability.

The chapter is concluded by an explanation of the research design and methodology, population sample, availability of students and completion of questionnaires.
3.2 DEFINITION OF A RESEARCH PROBLEM

3.2.1 Defining the problem
According to Smith and Albaum (2012:7), research problems normally vary from easy to difficult (simple to complex). This depends on the quantity of variables and the complexity of their association. If the researcher understands the character of the problem, he/she will be better equipped to develop a logical resolution to the problem.

The problem, as defined in Chapter 1 (refer to chapter 1, no. 1.3.1, page 18), is an insufficient management model for work integrated learning (WIL) that exists for the Interior Design qualification in the Faculty of the Arts at the TUT. This research intends to determine the present status of WIL for the Interior Design qualification in specific targeted study populations in national tertiary institutions. These include one comprehensive university, universities of technology and industry organisations in Gauteng, KwaZulu-Natal and the Western Cape.

The aim was to obtain guidelines to develop a new management model for WIL for the Interior Design qualification in the Faculty of Arts at the TUT. Having defined the problem above, it is necessary to describe the purpose of this research.

3.3 THE PURPOSE OF THE EMPIRICAL INVESTIGATION

The purpose in this empirical investigation was to collect data from three target populations, namely higher education institutions (HEIs) and companies in the industry located in Gauteng, KwaZulu-Natal and the Western Cape. The study population within these target populations consisted of Interior Design students who have completed their WIL, academic heads and staff of Interior Design departments at the HEIs involved in WIL as well as the supervisors and human resources staff from selected companies in the interior design industry who have participated in WIL over the last three years.

From the research, the trends were observed in the study population and guidelines compiled from the different sample groups. These guidelines could then be used for
developing a new management model for WIL for the Interior Design qualification in the Faculty of Arts at the TUT.

Different data collection methods were explored for WIL.

3.4 DATA COLLECTION METHODS

3.4.1 The questionnaire as a measuring instrument
According to DeVault (2012:1), the most commonly used instruments for gathering elementary research data are surveys. Surveys are adaptable and reasonably cost-effective. Setting up and developing the survey requires careful consideration. To be assured that all questions are clear and understandable, it should be pilot-tested on another sample group before they are handed out and administered to the target sample group.

The selection of the wording for the questions should be thoroughly evaluated to guarantee the pertinence of each question and that it steers the person being questioned in the right direction. It should also correlate with the general context and purpose of the questionnaire.

Bryant (2012:1) explains that the use of a questionnaire is a valued technique to collect an extensive range of information from a substantial quantity of people, called the respondents. Suitable questionnaire construction is desired, with pertinent questions in a logical order. An appealing and easy-to-read format is needed to achieve a successful survey. If the above is not achieved it could make the survey valueless, as it may not reflect the views and opinions of the participants correctly.

According to Sincero (2012:2), questionnaires have been constructed in many ways over a long period of time. In the present day, depending on how the questionnaires are constructed, they are used in a variety of methods. These diverse methods consist of the self-administered, group-administered and the household drop-off methods. Advantages of a survey are that it is easy to ask closed-ended questions and it is successful for market or end-user research. Disadvantages of a survey are that it limits the researcher’s understanding of the respondents’ answers and it
requires funds for reproducing and distributing the questionnaires.

Oriola (2012:2) offers a few guidelines for the construction of useful questions or statements in a questionnaire:

- Construct questions that are understandable and clear in meaning.
- Use words related to the topic.
- Use only a few ranking options.
- Avoid double-barreled questions.
- Offer an option of “do not know” for questions that do not apply to the respondent.
- When using multiple-choice questions, include all the sections of the topic but do not overlap question contents.

3.4.2 The advantages and disadvantages of the structured (close-ended) questionnaire as a research method

According to Floyd and Fowler (2009:101), closed-ended questionnaires are often a more acceptable way of creating data. According to them, there are four reasons for this:

- The respondents can perform the task of answering the question more reliably when three or four answer choices are given.
- The researcher can interpret the meaning of the answers more reliably when the respondents are given three or four answer choices.
- Providing respondents with a restricted number of possible answer options increases the probability that a suitable quantity or respondents will provide statistically interesting answers.
- With the majority of data collection now being computer-aided, it is much easier for interviewers or respondents to proof answers by checking a provided answer rather than to key in narrative answers.

The HistoryLearningSite.co.za (2013:2), Structured questionnaires, describes the advantages and disadvantages of closed-ended questions used as a research method.
3.4.2.1 The advantages of the structured questionnaire as a research method
By using a postal questionnaire it is easy and efficient to question a large number of respondents quickly. Nowadays, with the use of technology, questionnaires can be constructed quickly and easily, and when closed-ended questions are set, feedback is simplified.

A questionnaire is easy to construct and standardised by means of the following methods:

- Every respondent must be asked the same questions, in the same order and in the same way.
- This method of collecting data makes it a very reliable method for conducting research.
- Questionnaires can be used to investigate potentially uneasy areas (such as sexual and criminal matters) more straightforwardly than with other methods.

3.4.2.2 The disadvantages of the structured questionnaire as a research method
The format/design of the questionnaire limits the researcher to asking basic questions. Once the questionnaire is dispatched, the researcher has no control as to whether or not the respondent does respond to the questionnaire or not. The researcher is also not present to explain what is intended by the questions if the respondent is uncertain of the questions. The researcher cannot be sure the respondent interprets the questions the same way as the researcher has expected. The volume of questionnaire returns can be small, as there is nothing and/or no-one to motivate the respondent to comply with the questionnaire request.

3.4.2.3 Motivation for using a structured questionnaire for this research
According to Maree (2010:160,164), the following reasons are stated why a structured questionnaire may be used:

- A WIL co-ordinators question provides for a set of responses from which the respondent has to select one or sometimes more than one response.
- Data obtained from the administration of WIL co-ordinator questionnaires is easier to analyse than data obtained from open-ended questions.
- They are quick and easy to answer.
• Coding and statistical analysis are easy.
• Sensitive questions are more easily answered.

3.4.3 Steps in conducting a survey
According to Stephen and Quartaroli (2009:93), as a popular form of quantitative research, survey research involves writing questions for surveys and interviews, measuring responses, and analysing data.

3.4.3.1 Design and planning phase
A structured, closed-ended interview was decided upon for this type of survey and the following survey was developed:

- Define population groups.
- Design the question layout.
- Write questions to measure variables.
- Plan a system for completing answers.
- Decide on response categories.
- Organise question sequences.
- Pilot-test the survey.
- Draw the population sample.
- Decide on the type of sample.
- Develop a sampling frame.
- Decide on the sample size and select the sample.

3.4.3.2 Data collection phase
The following steps have been followed for data collection:

- Locate and contact the respondents.
- Make appointments to fill out the questionnaire.
- Visit the respondents.
- Respondents complete the questionnaires.
- Thank respondents and continue to next respondent.
- End the data collection process and organise the data.

The structure of the questionnaire is described below.
3.5 THE STRUCTURE OF THE QUESTIONNAIRE

The covering letter and layout of the questionnaire will be described in the following sections.

3.5.1 The covering letter

According to wiseGEEC (2012:1), if one is to ask a respondent to fill out a questionnaire, a certain amount of etiquette is dictated. A covering letter is addressed to the respondent and carries the same title as the questionnaire. The letter states the purpose of the questionnaire, who has compiled the questionnaire and what the intended purpose of the questionnaire is. It should have the contact information of the company/person conducting the survey and the name of the company/institution that has commissioned it.

The company/institution requesting the questionnaire information will often commission a business that specialises in conducting surveys on its behalf. The document also has a date as to provide the recipient with a timeframe for completing it. The survey is explained, the objectives of the survey clarified and why it has been commissioned. If the company/institution envisages to develop new products or a certain policy or to receive feedback, the respondent is told what is expected of him/her. Details on how to complete the questionnaire is essential. The researcher should explain if it is an all multiple-choice question questionnaire or if it requires detailed answers. This paragraph explains that all information provided is treated as confidential and no personal information is required. The cover letter ends with a proper closing, such as “Yours faithfully” along with the researcher's name and job title. Once finished, the document is checked for spelling and grammar errors, read through once more and looked for ways to improve its composition. The researcher keeps a copy of each new questionnaire being sent out for record purposes. (Refer to Addendums: Appendix A, B and C – Information leaflet and informed consent page 398)
3.5.2 The layout of the questionnaire

According to Sincero (2012:1), more often than not, a respondent looks at the layout of a questionnaire before thinking of completing it. First impressions are crucial here. If the respondent feels there are a lot of pages and/or questions, this may preoccupy motivate him/her to not answer the questionnaire or not consider the questions and their answers efficiently. Therefore, a visually appealing questionnaire layout is an important factor in increasing response rates and accuracy of feedback.

3.5.2.1 The cover page

Having a cover page attached to your questionnaire is vital to get the respondents to buy into the survey. Knowing they are essential to the outcome increases their enthusiasm to complete the questionnaire. The composition of the questionnaire cover should include:

- The subject title of the survey/study
- A brief explanation of the survey, including the aim of the questionnaire
- A brief explanation prior to starting the questionnaire
- The surveying company name
- Names of sponsors if any are involved.

Simplicity of the cover and back page will show the proficiency of the compiler. It should be noted that when colour or patterns are used in the composition a 2-4% higher return could be anticipated.

3.5.2.2 The instructions page

This is the page on which one would give more detail and expand on the reason for the survey. Concise and relative descriptions are needed for the respondent on how to answer the survey questions. The expected date of return for the survey should be mentioned here as well as the confidential manner in which the survey will be handled. (Refer to Addendums: Appendix A, B and C – Information leaflet and informed consent, page 398)

3.5.2.3 The questionnaire proper
During the layout and design of the survey, the order of the questions should be considered; they should be in a structured order from general questions to more specific. The first question should be general, relating to either the goals or purpose of the survey and relevant to all respondents so as to relax the respondent.

3.5.2.4 The navigational path
In the context of a survey, a respondent is directed to the questions pertinent to him/her. The three types of navigation paths are outlined below:
- Oral (e.g. Skip to No. 12; Proceed to the Next Page)
- Numerical (e.g. Page 1, 2, 3)
- Symbolic (e.g. →, and other arrows)

Once a type of navigation path is decided upon, it should be used consistently throughout the questionnaire.

3.5.2.5 Survey length
According to Hugick & Best (2012:1), the length of a questionnaire is more of a reference to the time a respondent will take to complete the questionnaire than the length of the document. If the load on the respondents is too great, it may not motivate them to respond and they may give a lower quality of response.

The following information is an explanation of the questionnaire designed and structured for this research:

3.5.2.6 A structured questionnaire compiled from Chapter 1 and 2 of this study
A five-point Likert scale was used in these questionnaires which required respondents to make the following choices:

1. **Strongly agree**, indicating a high level of agreement
2. **Agree**, indicating a medium level of agreement
3. **Do not know**, indicating not knowing the answer
4. **Disagree**, indicating a medium level of disagreement
5. **Strongly disagree**, indicating a high level of disagreement.
According to Maree (2010:167), a very easy way of measuring a construct (concept or theory) is by using the Likert scale. One asks the respondents a series of Likert questions where the answers are in a number range and then one calculates a total from the results per respondent.

The questionnaire consisted of the following APPENDICES: (Refer to Appendix A, page 402.)

**APPENDIX A: Employer/Supervisor/Human Resources**

**SECTION A: Biographical information** (Refer to page 400)
Items in this section relate to biographical data needed to provide insight for the researcher with regard to different responses to the various questions relating to the capacity in which the questionnaire is completed.

Work integrated learning (WIL) activities in a company include:
- Question 1: Highest qualification
- Question 2: Position held
- Question 3: Total years of work experience in current position

**APPENDIX A: Employer/Supervisor/Human Resources**

**SECTION B: Demographical information** (Refer to page 403)
According to Alreck and Settle (2004:24) in Wessels (2007:138), demographic groups differ significantly on the issues of importance and can be used to identify segments, groups, audiences or constituencies of people who were both identifiable and behave in similar ways.

The following question topics were included as part of the demographic survey:
- Question 1: In which province is your company situated?
- Question 2: In which city is your company situated?
- Question 3: Number of employees in your company?
- Question 4: Which of the following best describes the sector in which your company operates?
- Question 5: In which sector does your company conduct its business?
APPENDIX A: Employer/Supervisor/Human Resources
SECTION C: Work integrated learning (WIL) activities in a company

The questions in this section investigated the basic activities in a company. Questions 1-25 which related to the activities in a company were of critical concern and therefore investigated. The questions were grouped in the following categories:

NOTE: The grouping was done by calculating the mean of the items which cluster together. As a result of the Likert scale used [1: strongly agree; 2: agree; 3: not sure; 4: disagree and 5 strongly disagree] the mean of such a cluster resulted in a number between 1 and 5. This implied that, if the mean of a construct was close to 1, then for that cluster the indication is that the respondents’ overall responses were close to “strongly agree”. On the other hand, if the mean was close to 5, it implied that for that construct the respondents’ overall responses were “strongly disagree”.

APPENDIX A: Employer/Supervisor/Human Resources
SECTION C: The skills which form part of the Interior Design programme
(Refer to page 404)

The questions were grouped in the following categories: Question 26 which related to the skills needed in a company; Question 27 which related to the student employee characteristics; Question 28 which related to higher thinking skills of the WIL student and question 29 which related to the three domains in respect of the WIL student; and Question 30 which related to the motivations of the WIL student. These questions were of critical concern and therefore investigated. All of these fields are important to companies.

APPENDIX B: Students who completed WIL
SECTION A: Biographical information (Refer to page 410)

The one item in this section related to biographical data needed to provide insight for the researcher with regard to WIL. Students who completed WIL were asked the following question:
Question 1: What is your highest qualification obtained.
APPENDIX B: Students who completed WIL (Refer to page 408)

SECTION B: Demographical information (Refer to page 410)

According to Alreck and Settle (2004:24) in Wessels (2007:138), demographic groups differ significantly on the issues of importance and can be used to identify segments, groups, audiences or constituencies of people who were both identifiable and behave in similar ways.

The following question topics were included as part of the demographic survey to students who had completed their WIL training:

Question 1:  Which is your home province?
Question 2:  Which is your home city when you are home-based with your parents?
Question 3:  At which institution are you currently studying?
Question 4:  In which city were you placed for your work integrated learning (WIL) period?
Question 5:  Which of the following best represents the company where you did your work integrated learning (WIL) training?

APPENDIX B: Students who completed WIL

SECTION C: Work integrated learning (WIL) activities during your WIL training period (Refer to page 412)

The questions in this section investigated the student’s basic (WIL) activities during his/her WIL training period. The questions (1-23) which related to the work integrated learning (WIL) activities during a WIL training period were of critical concern and therefore investigated. The questions were grouped in the following categories:

NOTE: The grouping was done by calculating the mean of the items which cluster together. As a result of the Likert scale used [1: strongly agree; 2: agree; 3: do not know; 4: disagree and 5: strongly disagree] the mean of such a cluster resulted in a number between 1 and 5. This implied that if the mean of a construct was close to 1, then for that cluster the indication was that the respondents’ overall responses were close to “strongly agree”. On the other hand, if the mean was close to 5, it implied that for that construct the respondents’ overall responses were “strongly disagree”.

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The questions in this section investigated the skills which form part of the Interior Design programme and that were important for the student during his/her WIL training period. Question 24 which related to skills; Question 25 which related to higher thinking skills; Question 26 which related to the three domains; Question 27 related to the motivations; and Question 28 related to the self-motivations. These aspects were of critical concern and therefore investigated.

APPENDIX C: Academic and work integrated learning (WIL) staff
SECTION A: Biographical information (Refer to page 418)
The one item in this section related to biographical data needed to provide insight for the researcher into different responses to the question with regard to academic staff in the Interior Design programme, working with WIL:
Question 1: What is the total number of years of work experience you have in your present position?

APPENDIX C: Academic and work integrated learning (WIL) staff
SECTION B: Demographical information (Refer to page 418)
According to Alreck and Settle (2004:24) in Wessels (2007:138), demographic groups differ significantly on the issues of importance and can be used to identify segments, groups, audiences or constituencies of people who were both identifiable and behave in similar ways. The following question topics were included as part of the demographic survey:
Question 1: In which province is your institution situated?
Question 2: In which city is your institution situated?
Question 3: Number of employees in your Interior Design department?
Question 4: How many lecturers in your Interior Design department are involved in work integrated learning (WIL)?

APPENDIX C: Academic and work integrated learning (WIL) staff
SECTION C: Work integrated learning (WIL) activities in your programme
(Refer to page 420)
The questions in this section investigated the work integrated learning (WIL) activities in the current Interior Design programme. Questions 1-14 which related to the work integrated learning (WIL) activities in the programme were of critical
concern and therefore investigated. The questions were grouped in categories as follows:

NOTE: The grouping was done by calculating the mean of the items which cluster together. As a result of the Likert scale used [1: strongly agree; 2: agree; 3: do not know; 4: disagree and 5: strongly disagree] the mean of such a cluster resulted in a number between 1 and 5. This implied that if the mean of a construct was close to 1, then for that cluster the indication was that the respondents’ overall responses were close to “strongly agree”. On the other hand, if the mean was 5, it implied that for that construct the respondents “strongly disagree(d)”.

Questions 15-18 in this section investigated the higher thinking skills and motivations of the WIL student. These skills are important in the Interior Design programme. Question 15 related to the higher thinking skills in the programme; Question 16 related to the three domains of the WIL student in the programme; Question 17 related to the motivations of the WIL student which are important in the programme; and Question 18 related to self-confidence stimulation that is needed for a successful WIL training session.

NOTE: The grouping was done by calculating the mean of the items which cluster together. As a result of the Likert scale used [1: not very important to 5: very important] the mean of such a cluster resulted in a number between 1 and 5. This implied that if the mean of a construct was 1, then for that cluster the indication was that the respondents’ responses were “not very important”. On the other hand, if the mean was close to 5, it implied that for that construct the respondents’ overall responses were “very important".
### TABLE 3.1
Clustering of questions (items) into constructs according to work integrated learning (WIL) activities in a company: employer/supervisor/human resources

<table>
<thead>
<tr>
<th>WORK INTEGRATED LEARNING (WIL) ACTIVITIES IN A COMPANY</th>
<th>QUESTIONS (ITEMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Skills needed to successfully complete WIL</td>
<td>14, 15, 26, 28</td>
</tr>
<tr>
<td>2. Student employee characteristics for WIL</td>
<td>27</td>
</tr>
<tr>
<td>3. Assessment during WIL</td>
<td>7, 8, 10, 11, 12</td>
</tr>
<tr>
<td>4. Three domains in respect of the WIL student</td>
<td>29</td>
</tr>
<tr>
<td>5. The responsibility for monitoring and debriefing WIL students</td>
<td>5, 6</td>
</tr>
<tr>
<td>6. Participate in the WIL process; prefer to make use of WIL students in work-related projects and during weekends; prefer feedback from the institution on the WIL training session; feel positive about WIL as a part of the Interior Design qualification</td>
<td>2, 4, 13, 16, 17, 18, 19, 20, 21, 23</td>
</tr>
<tr>
<td>7. The use of a website for accessing the company’s profile and making decisions for WIL placement</td>
<td>1, 3</td>
</tr>
<tr>
<td>8. The exchange of knowledge and technology only happens through guest lecturers by the industry for the university; requirement and needs from the industry</td>
<td>3, 9, 24</td>
</tr>
<tr>
<td>9. WIL is beneficial to students; syllabus content</td>
<td>22, 25</td>
</tr>
<tr>
<td>10. Student motivations</td>
<td>30</td>
</tr>
</tbody>
</table>

**APPENDIX A:** Work integrated learning (WIL) activities in a company: Employer/Supervisor/Human Resources
The questions in this section investigated work integrated learning (WIL) activities in the participant’s company in the study populations, namely employers, supervisors and human resources.

Data related to work integrated learning (WIL) activities in a company with regard to the three role players would be a directive to determine the tendencies of the current status of work integrated learning (WIL) activities in a company in the mentioned study populations as well as in the target populations from which tendencies were observed and guidelines proposed.

The questions were not asked in a specific sequence with the intention of preventing the respondent from becoming biased towards the areas under investigation. The questions were grouped in the following categories:

NOTE: The grouping was done by calculating the mean of the items which cluster together. As a result of the Likert scale used [1: strongly agree; 2: agree; 3: not sure; 4: disagree and 5: strongly disagree] the mean of such a cluster resulted in a number between 1 and 5. This implied that if the mean of a construct was close to 1, then for that cluster the indication was that the respondents’ overall responses were close to “strongly agree”. On the other hand, if the mean was close to 5, it implied that for that construct the respondents’ overall responses were close to “strongly disagree”.
TABLE 3.2
Clustering of questions (items) into constructs according to students who completed WIL

<table>
<thead>
<tr>
<th></th>
<th>WORK INTEGRATED LEARNING (WIL) ACTIVITIES DURING YOUR WIL TRAINING PERIOD</th>
<th>QUESTIONS (ITEMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Preparation and information on a company</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td>2.</td>
<td>Experience and benefits for the student doing WIL</td>
<td>3, 4, 6, 10</td>
</tr>
<tr>
<td>3.</td>
<td>Assessment</td>
<td>12</td>
</tr>
<tr>
<td>4.</td>
<td>WIL preparation and training</td>
<td>7, 8, 9, 11, 12</td>
</tr>
<tr>
<td>5.</td>
<td>Business practice skills</td>
<td>13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25</td>
</tr>
<tr>
<td>6.</td>
<td>Three domains</td>
<td>26</td>
</tr>
<tr>
<td>7.</td>
<td>Motivations and self-motivations for the WIL student</td>
<td>27, 28</td>
</tr>
</tbody>
</table>

APPENDIX B: Students who completed WIL
The questions in this section investigated students who had completed WIL. Data related to students who had completed WIL and would be a directive to determine the tendencies of the current status of students who had completed WIL in the mentioned study populations as well as in the target populations from which trends were observed and guidelines proposed.

The questions were not asked in a specific sequence with the intention of preventing the respondent from becoming biased towards the area under investigation. The questions were grouped in the following categories:

NOTE: The grouping was done by calculating the mean of the items which cluster together. As a result of the Likert scale used [1: strongly agree; 2: agree; 3:
disagree; 4: strongly disagree] the mean of such a cluster resulted in a number between 1 and 4. This implied that if the mean of a construct was close to 1, then for that cluster the indication was that the respondents’ overall responses were close to “strongly agree”. On the other hand, if the mean was close to 4, it implied that for that construct the respondents’ overall responses were close to “strongly disagree”.

**TABLE 3.3**
Clustering of questions (items) into constructs according to academic and work integrated learning (WIL) staff activities

<table>
<thead>
<tr>
<th>WORK INTEGRATED LEARNING (WIL) IN YOUR PROGRAMME</th>
<th>QUESTIONS (ITEMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Administrative procedures concerning WIL</td>
<td>1, 2, 4, 8</td>
</tr>
<tr>
<td>2. Syllabus, needs, preparation and participation</td>
<td>3, 4, 5, 6, 7, 12</td>
</tr>
<tr>
<td>3. All students should be prepared and placed.</td>
<td>5, 6, 9, 10, 11</td>
</tr>
<tr>
<td>4. Debriefing</td>
<td>13</td>
</tr>
<tr>
<td>5. Assessment</td>
<td>14</td>
</tr>
<tr>
<td>6. Skills</td>
<td>15</td>
</tr>
<tr>
<td>7. Domains</td>
<td>16</td>
</tr>
<tr>
<td>8. Motivation</td>
<td>17</td>
</tr>
<tr>
<td>9. Stimulating factors for self-confidence</td>
<td>18</td>
</tr>
</tbody>
</table>

**APPENDIX C: Academic and work integrated learning (WIL) staff activities**
The questions in this section investigated academic and work integrated learning (WIL) staff activities in different institutions teaching WIL in the Interior Design programme.

Data related to academic and work integrated learning (WIL) staff activities with regard to the three role players would be a directive to determine the tendencies of the current status of work integrated learning (WIL) activities in an institution in the mentioned study populations as well as in the target populations from which
tendencies were observed and guidelines proposed. The questions were grouped in the following categories:

NOTE: The grouping was done by calculating the mean of the items which cluster together. As a result of the Likert scale used [1: strongly agree; 2: agree; 3: not sure; 4: disagree and 5: strongly disagree] the mean of such a cluster resulted in a number between 1 and 5. This implied that if the mean of a construct was close to 1, then for that cluster the indication was that the respondents’ overall responses were close to “strongly agree”. On the other hand, if the mean was close to 5, it implied that for that construct the respondents’ overall responses were close to “strongly disagree”. A pilot study was undertaken before the questionnaires were distributed.

3.6 THE PILOT STUDY

According to Stephen and Quartaroli (2009:87), the way of testing survey questions to see how accurately respondents will interpret them is to discuss the questionnaires with experts in the field. Although pilot testing is a valuable method of determining survey length and general problems with selected items, it is helpful to know exactly how the respondents’ cognitive processes function to interpret the survey questions.

The goal of the pilot study (interview process) is to answer the four key questions:

- Are the key questions easily understood?
- Do respondents have access to the information needed to effectively answer the question?
- Do the response question options provide the answers the respondents want to choose so that they can be accurate?
- Are the response options accurately measuring what the questions set out to measure?

The pilot study was done to test the questions and to eliminate possible problems. The pilot was carried out on selected individuals within the range of the study populations, namely students, HoDs and supervisors within the target population.
(higher education institutions and companies in the industry). Subsequent to the receipt of the draft questionnaire following the pilot, the necessary adjustments were made, the final questionnaire was compiled and appointments with 18 supervisors in companies in the industry, 18 academic heads of departments and 64 postgraduate students in higher education institutions were finalised. The feedback of the targeted respondents on the questionnaire in question was recorded.

3.6.1 Feedback on the pilot study performed on the questionnaire
The targeted respondents provided the following feedback that was incorporated into the questionnaire:

- Change the Likert scale of the questionnaire in the following order: from 1: Strongly agree; 2: Agree; 3: Not sure; 4: Disagree and 5: Strongly disagree.
- Various grammar/editing adjustments were recommended.

The administrative procedure is discussed next.

3.7 THE ADMINISTRATIVE PROCEDURE

The various higher education institutions (HEIs) which included residential universities, universities of technology and companies in the industry in Gauteng, KwaZulu-Natal and the Western Cape were approached to obtain approval for visitation regarding the completion of questionnaires. A request was lodged via e-mail and supported by telephone discussions with the relevant heads of departments in higher education institutions and supervisors of companies for an appointment.

During visitation the questionnaires were explained to HEIs and companies in the industry and to all target populations. The anonymity of the information was guaranteed. The questionnaires were then completed by the target populations.

3.8 DISTRIBUTION OF THE QUESTIONNAIRE

The final questionnaires were presented in English only. After the questionnaire and purpose of the research project had been explained, and the questionnaires
completed by all the relevant respondents in the companies, students and WIL staff members at the different higher education institutions, the questionnaires were placed in enclosed envelopes for safekeeping by the researcher. Record keeping of research material and results (data) is essential and research must be available for three years after completion of the completion of the researcher’s current study.

3.9 RECORD KEEPING

All records of questionnaires of respondents (including statistical data), whether complete or incomplete, dates of completion of questionnaires and discussions with respondents have been stored. The researcher has reviewed the individual responses to the completed 100 questionnaires with the intention of transferring information from the questionnaires to an appropriate format for statistical analysis. The next step in the research process is the editing and coding of data.

3.10 EDITING AND CODING OF DATA

According to the Social Research Methods (2012:1), an investigation, such as a survey and/or experiment, its results are known to the researcher. He/She has results which are then termed as “quantitative data”. This data that has been obtained is now measurable, as it is focused on numerical values. The person conducting the research is now in a position to perform an analysis of the results. This is different qualitative data that can be considered as being more descriptive.

3.10.1 Quantitative analysis
A quantitative analysis can be described as a method of converting thoughts into a number value for the purpose of evaluating the information to determine whether or not the idea being investigated is valid or not.

3.10.2 Quantification of data
With quantitative questions the answers can be considered as coded, as they have a numerical value. Qualitative answers, therefore, have to be converted to numerical values by codification which can then be analysed more readily.
3.10.3 Developing code categories
Codification is the method whereby data provided by the questioner (raw data) is converted into a format that is processable by computers and can be analysed.

3.10.4 Data entries
An example of quantitative coding is a survey that ranks the answers on a numerical scale. Yes/no, male/female, political association and race answers would all need to be assigned a number value for quantitative analysis; i.e., male = 1; female = 2 or first year student = 1; second year student = 2; third year student = 3. Since age has already been represented numerically, the researcher may choose not to develop a coding system for this data.

Coding is a requirement to analyse data, as one has to convert raw data into numeric values to be analysed in programs, such as Microsoft Excel. This program can be formatted to carry out various calculations for convenient analysis, such as mean, median, mode, variance and standard deviation from the data set.

3.10.5 Dissemination of information and other issues
Once the data has been analysed it needs to be presented in a manner suitable for its dissemination. It is preferable to use tables as opposed to bar graphs, as they are difficult to create to show more than one individual variable. Tables help to eliminate opinions, and focus on the actual facts and data.

A flaw in the use of quantitative methodology is that there is a possibility of bias if a researcher favours one outcome over another. To assist in preventing bias creeping in, a thorough hypothesis should be carried out before the research process is initiated. If the conclusions that are recorded prove the hypothesis to be incorrect, the findings would still benefit other researchers working on related theories when the findings are disseminated.

When researching controversial topics, the data can be utilised with no bias if the research is carried out correctly and displayed visually in the appropriate tables.
3.10.6 Research tips

When using quantitative analysis, there are a few useful hints for the researcher to take notice of:

- Percentages are an ideal way of making comparisons. The percentages should be generated for individual dependant variables.
- In order to make comparisons, variables should be recorded; there are a few ways of doing this.
- An independent variable should be selected that makes sense when it is viewed separately.

To summarise, usually in a carrying out social research a social survey is conducted. The results of which are transformed from raw data into categories and calculations. This data then becomes the subject of quantitative data analysis. To do this, coding is used to perform an act of measurement. In classifying answers to a question, one is attempting to measure underlying social variables, which the survey question intends to reveal.

In the course of conducting a professional social survey, a lot of survey questions are in a fixed-choice format and the answers to questions are pre-coded into categories. After the editing and codification of the data, the data needs to be processed.

3.11 DATA PROCESSING

The questionnaires were coded for statistical analysis by the researcher prior to data capturing in collaboration with the Statistical Services of the TUT. Responses were captured directly from the questionnaires by the Statistical Services of TUT. The population and sampling in this research will be described next.

3.12 POPULATION AND SAMPLING

3.12.1 The target population

In most research, companies, markets and products are the set populations that are of interest to the researcher. In this case, the target populations refer to companies
in the industry and higher education institutions, including students and academic heads of departments at universities, comprehensive universities and universities of technology located in Gauteng, KwaZulu-Natal and the Western Cape.

3.12.2 Sample size, sample methods and responses
3.12.2.1 Sample size
According to Babbie (2010:188), in the context of surveys, sampling is the process of using selected observations. If one interviews every tenth person walking by on a street, one has used an important random method of sampling. This is the key to generalising from a sample to a larger population and is considered as “probability sampling”.

3.12.2.2 Sample method
A “no probability” sampling method (Babbie, 2010:192) was used. This sampling method is one in which samples are selected in a way that is not suggested by the chance theory. For example, if one interviews every tenth person entering a shopping mall, one has used an important random method of sampling a target group of people who use the shopping mall. Examples include reliance on available subjects as well as purposive (judgment), quota and snowball sampling.

3.12.2.3 Responses
Questionnaires were used as a research instrument. The questionnaires were completed by the respondents during appointments with the researcher. Questionnaires were completed by 100 respondents, consisting of 64 students, 18 WIL staff members of departments in higher education institutions and 18 supervisors or company owners in the industry. No interviews were conducted, as this was a quantitative research investigation.

Of the total of 100 individuals targeted in the study populations, 100 questionnaires were received back, consisting of 64 students, 18 WIL staff members of departments in higher education institutions and 18 from supervisors of companies in the industry or company owners and directors. Thus, a total of 100 responded from a total of 100 respondents targeted. Therefore, a 100% despondence was achieved.
Reliability and validity testing have been discussed, and results are recorded in Chapter 4.

**TABLE 3.4**
Criteria used in the selection of target population

<table>
<thead>
<tr>
<th>TARGET POPULATION</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher education institutions (HEIs)</td>
<td></td>
</tr>
<tr>
<td>1. One comprehensive university: UJ</td>
<td>• Government subsidised</td>
</tr>
<tr>
<td>2. Three Universities of Technology:</td>
<td>• Located in Gauteng, KwaZulu-Natal and Western Cape</td>
</tr>
<tr>
<td>TUT, DUT and CPUT</td>
<td>• Offer the Interior Design programme</td>
</tr>
<tr>
<td>Students</td>
<td>• Received training in government subsidised higher education institutions in Gauteng, KwaZulu-Natal and Western Cape</td>
</tr>
<tr>
<td>Students who completed their WIL training</td>
<td>• Completed work integrated learning (WIL) in one discipline: Interior Design</td>
</tr>
<tr>
<td>Academic staff</td>
<td>• Full-time academic staff members in the Interior Design discipline in government subsidised HEIs</td>
</tr>
<tr>
<td>Full-time academic staff working with WIL</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TARGET POPULATION</th>
<th>CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Companies: Supervisors</td>
<td></td>
</tr>
<tr>
<td><strong>KwaZulu-Natal</strong></td>
<td>• Well-established</td>
</tr>
<tr>
<td>Balito</td>
<td>• Approved WIL companies for training Interior Design students</td>
</tr>
<tr>
<td>Durban</td>
<td></td>
</tr>
<tr>
<td>Salt Rock</td>
<td></td>
</tr>
<tr>
<td>Umhlanga Rocks</td>
<td></td>
</tr>
<tr>
<td><strong>Gauteng</strong></td>
<td>• Well-established</td>
</tr>
<tr>
<td>Pretoria</td>
<td>• Approved WIL companies for training Interior Design students</td>
</tr>
<tr>
<td>Johannesburg</td>
<td></td>
</tr>
</tbody>
</table>
The Interior Design discipline was used for the purposes of this study. The motivational factors for the selection of the abovementioned discipline include the following:

- It is a vocational and professional career orientated learning programme.
- The programme has a professional body.
- All HEIs selected for the purpose of this study offer the Interior Design programme.
- All Interior Design graduates are required to register at a professional body (IID) before becoming a practising interior designer in the industry.

Students targeted were those who had completed work integrated learning in the postgraduate programme of Interior Design. The following guidelines were used for the student population by using a multidisciplinary approach:

- **Comprehensive university**: Students selected to complete questionnaires were mainly from the Interior Design, third-year programme, who had completed their work integrated learning training as part of the National Diploma in Interior Design.

- **Universities of Technology**: Since Universities of Technology consisted of a merger between three technikons, students selected to complete questionnaires were from the Interior Design, third-year programme, who had completed their work integrated learning training as part of the National Diploma in Interior Design.

### 3.12.3 Principles regarding sampling

According to O’Connor (2011:1), sampling is the method that a researcher uses to select people, places or elements to form the study. The quality of conclusions and generalisations that are generated from research is only as good as the sample from which they are selected. Samples are generally small parts or subsets of the whole
group that could be studied. If one were to sample all of the group and everything about the group, it would be considered as a quota sample.

Most research is, however, made up of non-quota samples. If, for example, one were interested in the state prison system, one might sample approximately 15 state prison systems. There are formulae to assist in determining sample size relevant to the group size, but the most important point is to be practical. For a relatively small group of interest, one would in all probability need to sample about 10-30% of that group; this would work on a sliding scale. For a large target group (more than 150 000), a sample as low as 1% would be sufficient. It is important to find out as much as possible about one’s population before gathering one’s sample. In survey terms, a population is the larger group from which the sample is taken. It is important to know some of the overall demographics of one’s population, such as age, gender, class, etc. This information will be utilised later in one’s research during the data analysis phase. The more differences and diversity in the population, the larger one’s sample size.

Establishing the variables in one’s population provides more variation in one’s sample. Since many statistical tests operate on the principles of variation, one needs to ensure the statistics used later can be utilised to their full potential.

According to the Basic Principles of Sampling (S.a.:1) and Some Basic Principles of Sampling Inspection by Attributes (Hamaker, 1958), sampling is a procedure, in which small group of a population is used to collect data, this is then utilised to complete the survey process and the results are extended back as representative of the whole population.

After consultation with the Statistical Consultation Services of the Tshwane University of Technology, Pretoria, no-recommendations were noted.
### TABLE 3.5
Target population

#### POPULATION 1: COMPANIES IN INDUSTRY

<table>
<thead>
<tr>
<th>Population: Supervisors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KwaZulu-Natal</strong></td>
<td></td>
</tr>
<tr>
<td>Companies</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
</tr>
<tr>
<td><strong>Western Cape Province</strong></td>
<td></td>
</tr>
<tr>
<td>Companies</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
<tr>
<td><strong>Gauteng</strong></td>
<td></td>
</tr>
<tr>
<td>Companies</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

#### POPULATION 2: HIGHER EDUCATION INSTITUTIONS STUDENTS

<table>
<thead>
<tr>
<th>Population: Students completed WIL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Population: Comprehensive universities</strong></td>
<td>Students of academic departments completed WIL training</td>
</tr>
<tr>
<td>University of Johannesburg</td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>Population: Universities of technology</strong></td>
<td>Staff members of academic departments involved with WIL</td>
</tr>
<tr>
<td>Tshwane University of Technology</td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
</tr>
<tr>
<td><strong>Durban University of Technology</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Population: Universities</td>
<td>Staff members of academic departments involved with WIL</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Population: Comprehensive Universities</td>
<td></td>
</tr>
<tr>
<td>University of Johannesburg</td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal</td>
<td>3</td>
</tr>
<tr>
<td>Population: Universities of technology</td>
<td></td>
</tr>
<tr>
<td>Tshwane University of Technology</td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
<tr>
<td>Cape Peninsula University of Technology</td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
</tr>
<tr>
<td>Grand Total</td>
<td>18</td>
</tr>
<tr>
<td>Final Grand Total</td>
<td>100</td>
</tr>
</tbody>
</table>
### TABLE 3.6
Response rate

<table>
<thead>
<tr>
<th>QUESTIONNAIRES APPOINTMENTS</th>
<th>QUESTIONNAIRES COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 1: COMPANIES IN INDUSTRY</td>
<td>18/18</td>
</tr>
<tr>
<td>Population 2: HIGHER EDUCATION INSTITUTIONS’ STUDENTS</td>
<td>64/64</td>
</tr>
<tr>
<td>Population 3: HIGHER EDUCATION INSTITUTIONS STAFF MEMBERS</td>
<td>18/18</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100/100</strong></td>
</tr>
</tbody>
</table>

Results obtained need to be assessed in terms of its validity, reliability and generalizability.

### 3.13 VALIDITY AND RELIABILITY

#### 3.13.1 Validity and reliability in quantitative research

According to Babbie (2010:150&153), validity in quantitative research is when the research results suitably reflects the realism of the idea that is being considered. Reliability is a measure of a particular technique, which when applied repeatedly to the same object, provides the same result each time. Two of the most important considerations of measurement tools for behaviour are reliability and validity.

#### 3.13.1.1 Validity in quantitative research

According to Babbie (2010:153), validity is a term, describing a measure what accurately reflects the concept it is intended to measure.

#### 3.13.1.2 Reliability in quantitative research

Stephen & Quartaroli (2009:86), indicate that in order to establish reliability, it is necessary to examine the way in which two respondents take the same survey
approach to the question in the survey. Babbie (2010:105) feels that reliability in quantitative research is when in repeated observations of the same occurrence; the same data would have been collected repeatedly. Panter and Sterba (2011:129), feel that reliability is the repeatability of the measurement instrument scores when the measurement procedure is replicated.

Cronbach’s Alpha is the mean reliability coefficient calculated from all possible split-half partitions of a measurements scale (Dillon, et al 1993:823 as quoted in Wessels 2007:159). It is possible to determine the proportion of true score variance by computing the sum of item variances with the variance of the sum scale by using the formula:

$$\alpha = \frac{k}{(k-1)^*} \frac{1-\sum s^2_i}{s^2_{sum}}$$

This formula is used for the most common index or reliability and is known as Cronbach’s coefficient Alpha ($\alpha$). The coefficient Alpha will be zero if there is no true score, but only an error in the items. The variance of the sum will then be the same as the sum of variances of the individual items. The Cronbach Alpha reliability coefficient testing was performed on all constructs by the Statistical Services of the TUT and results were recorded in Chapter four.

3.14 GENERALIZABILITY

According to Scott; Van Der Stoep & Deidre (2009:26), generalizability is where one compares findings from the sample in question to the entire population and verifying how much, how well, or how closely the findings are to each other. According to Rule & Vaughn (2011:104), generalizability is related to the notions of prediction and law-like properties, where the findings emerging from a unit or sample are claimed to be true of a larger population.

3.15 FACTOR ANALYSIS

According to Leedy and Ormrod (2010:282), factor analysis is when one analysis the similarities between selections of interrelated variables that are tending to bring to the fore underlying themes or factors within the data. According to Ary, Jacobs, Razavieh, & Sorensen, (2010) factor analysis is a procedure for empirical
determining whether a set of observed correlation can, with reasonable accuracy, be thought of as reflecting, or as generated by, a small number of hypothetical underlying factors.

- **Factor designs**
  
  In many situations, a researcher examines the effects of two or three none related variables in a single study; this method is described as factorial design (Leedy and Ormrod, 2010:240).

### 3.16 CONCLUSION

In this chapter the research design and methodology with regard to data collection and the target population involved in this research were discussed. The research problem, measuring instruments used in the empirical research, the pilot study, data editing, coding and processing, population sampling, validity, reliability, generalizability and factor analysis were also discussed. The size of the various study population samples were acceptable and specific tendencies could be observed from completed questionnaires considering the fact that it was an availability sampling method of study and not a random sampling method.

In higher education institutions, availability of students was based on the fact that they had completed Work Integrated Learning as part of their undergraduate learning programme; and heads of departments were selected on grounds of being experts in their field of study and the most knowledgeable about Interior Design, HEI’s and because they could provide the best response in the discipline; and lastly, companies in industry were selected on the basis of the high level of expertise in Interior Design in industry and supervision experience of students. In so doing, the most appropriate information could be gathered for this study.

Finally, through the completion of questionnaires, data was collected from target and study populations in question. This enabled the researcher to observe certain tendencies in Work Integrated Learning on the current position/status of Interior Design relating to biographical and demographic information, the basic principles and nature of Interior Design in higher education institutions and companies in industry, considering the multidisciplinary nature of these learning programmes. In the following Chapter the analysis and interpretation of data with results are discussed.
4

RESEARCH FINDINGS: ANALYSIS, INTERPRETATION AND DISCUSSION OF DATA AND RESULTS

4.1 INTRODUCTION

In Chapter 3, the various instruments and procedures used during the empirical study were discussed. The aim of the empirical study was to use a structured questionnaire (refer to Addendums with Appendices A, B, and C, page 395) to determine the current status of a management model for work integrated learning in the Interior Design qualification. A multidisciplinary approach in government-subsidised higher education institutions and industry was employed to enable the researcher to compile guidelines for a new management model for work integrated learning in the Interior Design programme at TUT.

In this chapter, the results obtained from the questionnaires will be used to:

- Obtain a biographical and demographical scope of the study populations in their specific work environments using a multidisciplinary approach. The populations include students and academic heads of departments in HEI’s as well as supervisors of companies in the industry in Gauteng, KwaZulu-Natal and the Western Cape;
- Determine the status with regard to the development of an Interior Design Programme Management Model for Work Integrated Learning in the target population and study populations;
- Perform a frequency analysis to determine the sub-groupings; and
- Perform a percentage analysis of participants according to categories or levels of variables.

4.2 OUTCOMES OF THE CRONBACH ALPHA TESTING OF THE ENVISAGED UNDERLYING CONSTRUCT
Firstly, it is important to have the outcomes of the Alpha testing of the envisaged hidden construct. This will indicate that the items were reliably tested against the underlying construct.

**APPENDIX A: Employer/Supervisor/Human Resources**

**Section C: Work integrated learning (WIL) activities in a company**

<table>
<thead>
<tr>
<th>Item</th>
<th>No of Items</th>
<th>Cronbach Alpha result</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>14</td>
<td>0.7400</td>
</tr>
<tr>
<td>27</td>
<td>6</td>
<td>0.8491</td>
</tr>
<tr>
<td>28</td>
<td>3</td>
<td>0.7000</td>
</tr>
<tr>
<td>29</td>
<td>4</td>
<td>0.8523</td>
</tr>
<tr>
<td>30</td>
<td>16</td>
<td>0.8462</td>
</tr>
</tbody>
</table>

**APPENDIX B: Students who have completed WIL**

**Section C: Work integrated learning (WIL) activities during their WIL training period**

<table>
<thead>
<tr>
<th>Item</th>
<th>No of Items</th>
<th>Cronbach Alpha result</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>23</td>
<td>0.8181</td>
</tr>
<tr>
<td>24</td>
<td>11</td>
<td>0.7059</td>
</tr>
<tr>
<td>25</td>
<td>6</td>
<td>0.8006</td>
</tr>
<tr>
<td>26</td>
<td>3</td>
<td>0.7000</td>
</tr>
<tr>
<td>27</td>
<td>3</td>
<td>0.8498</td>
</tr>
<tr>
<td>28</td>
<td>9</td>
<td>0.8320</td>
</tr>
</tbody>
</table>

**APPENDIX C: Academic and work integrated learning (WIL) staff**

**Section C: Work integrated learning (WIL) staff and activities in your department**

<table>
<thead>
<tr>
<th>Section</th>
<th>No of Items</th>
<th>Cronbach Alpha result</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>25</td>
<td>0.8072</td>
</tr>
<tr>
<td>26</td>
<td>8</td>
<td>0.8829</td>
</tr>
<tr>
<td>27</td>
<td>22</td>
<td>0.7839</td>
</tr>
<tr>
<td>28</td>
<td>6</td>
<td>0.9331</td>
</tr>
<tr>
<td>29</td>
<td>3</td>
<td>0.7773</td>
</tr>
<tr>
<td>30</td>
<td>4</td>
<td>0.7000</td>
</tr>
</tbody>
</table>

The above Cronbach’s Alpha results indicate that the items were reliably tested against the underlying construct.
4.3 INTERPRETATION OF BIOGRAPHICAL DATA

According to the objectives of the study, a multidisciplinary approach was followed on data in three groups, namely: (refer to Appendices A, B, and C, page 395)

- Group 1: employer-supervisors/human resources
- Group 2: students who have completed WIL
- Group 3: heads of academic departments (HoDs) in Gauteng, KwaZulu-Natal and the Western Cape.

This data is represented in Table 4.1 and onwards. Data with regard to biographical information for all three groups is interpreted as follows:

4.3.1 Interpretation of biographical information (employer/supervisor/human resources): Appendix A – Section A

Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables. (Refer to chapter 1, no. 1.5.3.3. page 25.)

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>No qualification</th>
<th>Grade 12</th>
<th>Degree or National Diploma</th>
<th>Honours degree or equivalent</th>
<th>Master’s degree</th>
<th>Doctoral degree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest qualification obtained</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>72.22</td>
<td>16.67</td>
<td>5.56</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants have a degree or a national diploma (n = 13; 72.22%). The number of participants with a master’s degree and Grade 12 qualification were equal (n = 1; 5.56%). The second highest participant count was in respect of the honours degree (n = 3; 16.67%).
TABLE 4.1 A2  What position do you hold where you are presently employed?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Supervisor/ design co-ordinator</th>
<th>Human Resource Manager</th>
<th>Company Manager</th>
<th>Section Head</th>
<th>Other</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>What position do you hold where you are presently employed?</td>
<td>7</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>38.89</td>
<td>0.00</td>
<td>33.33</td>
<td>16.67</td>
<td>11.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

It is evident from Table 4.1 A2 that most of the participants are acting supervisors or design co-ordinators in the different companies in which they are employed (n = 7; 38.89%). Almost equal to this section are company managers (n = 6; 33.33%) with the Section Head position in the company in third position (n = 3; 16.67%). The section named “Other” was answered by two participants (n = 2; 11.11%).

TABLE 4.1 A3  Total years of work experience in your position, as indicated under point 4.2 above

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>0-3 years (years)</th>
<th>4-9 years (years)</th>
<th>10+ years (years)</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total years of work experience in your position as indicated under point 4.2 above</td>
<td>3</td>
<td>13</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>16.67</td>
<td>72.22</td>
<td>11.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most participants in the different positions mentioned in Table 4.1 A3 with years of work experience fall in the 4-9 year category (n = 13; 72.22%). There were three participants with 0-3 years’ experience (n = 3; 16.67%) and two participants with 10 and more years’ experience (n = 2; 11.11%).

4.3.2 Interpretation of biographical information (students who have completed WIL): Appendix B – Section A
Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables.

### TABLE 4.1 A4 Highest qualification obtained

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Grade 12 and completed first year of undergraduate qualification</th>
<th>Grade 12 and completed second year of undergraduate qualification</th>
<th>Grade 12 and busy with third year of undergraduate qualification</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest qualification obtained</td>
<td>1</td>
<td>10</td>
<td>53</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>1.56</td>
<td>15.63</td>
<td>82.81</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.1 A4, the highest qualification obtained under the student participants is Grade 12. However, this group is busy with their third year undergraduate qualification and have also completed a WIL training period (n = 53; 82.81%). The participants who had completed their second year undergraduate qualification were second most (n = 10; 15.63%). Only one student is still busy with his first year of study, has completed Grade 12 and is ready to do WIL (n = 1; 1.56%).

#### 4.3.3 Interpretation of biographical information (academic and work integrated learning [WIL] staff): Appendix C – Section A

Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables.

### TABLE 4.1 A5 Total years of work experience in your present position

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>0-3 years</th>
<th>4-9 years</th>
<th>10+ years</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total years of work experience in your present position</td>
<td>4</td>
<td>7</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>22.22</td>
<td>38.89</td>
<td>38.89</td>
<td>100%</td>
</tr>
</tbody>
</table>
The total years of work experience by staff in their respective institutions are the same for those between 4-9 years and 10 years and longer (n = 7; 38.89%) each. Only four staff members have between 0-3 years’ work experience in the current position appointed at institutions (n = 4; 22.22%).

4.4 INTERPRETATION OF DEMOGRAPHICAL DATA

According to the objectives of the study, a multidisciplinary approach was followed on data in three groups, namely:

- Group 1: employer/supervisors/human resources,
- Group 2: students who have completed WIL,
- Group 3: heads of academic departments (HoDs), in Gauteng, KwaZulu-Natal and the Western Cape.

This data is presented in Table 4.2.

Data with regard to demographical information for all three groups would therefore be interpreted as follows:

4.4.1 Interpretation of demographical information (employer/ supervisor/ human resources): Appendix A - Section B

(Refer to Appendices A, B, and C, page 398.)

Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables.

<table>
<thead>
<tr>
<th>TABLE 4.2 B1</th>
<th>In which province is your company situated?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
<td>Western Cape</td>
</tr>
<tr>
<td>In which province is your company situated?</td>
<td>5</td>
</tr>
<tr>
<td>%</td>
<td>27.78</td>
</tr>
</tbody>
</table>
According to the demographical evidence of the table above half of the participants’ companies are situated in Gauteng (n = 9; 50.00%). The other participants’ companies are divided between the Western Cape (n = 5; 27.78%) and KwaZulu-Natal (n = 4; 22.22%).

**TABLE 4.2 B2** In which city is your company situated?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Pretoria</th>
<th>Johannesburg</th>
<th>Durban</th>
<th>Cape Town</th>
<th>Port Elizabeth</th>
<th>Other</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>In which city is your company situated?</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>33.33</td>
<td>22.22</td>
<td>5.56</td>
<td>22.22</td>
<td>0.00</td>
<td>16.67</td>
<td>100%</td>
</tr>
</tbody>
</table>

Indicating Gauteng in the previous table as the province where the most companies are situated, Table 4.2 B2 indicates that Pretoria is the city where the most companies are located (n = 6; 33.33%). An equal number of companies are located in Johannesburg and Cape Town respectively (n = 4; 22.22%). Three companies are situated in other cities (n = 3; 16.67%) and Durban reflects only one company (n = 1; 5.56%).

**TABLE 4.2 B3** Number of employees in your company

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1-5</th>
<th>6-10</th>
<th>11-20</th>
<th>21-30</th>
<th>Other</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees in your company</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>50.00</td>
<td>11.11</td>
<td>5.56</td>
<td>11.11</td>
<td>22.22</td>
<td>100%</td>
</tr>
</tbody>
</table>

The number of employees in the companies represented by the participants with a number of 1-5 employees are the highest (n = 9; 50.00%). Companies with 6-10 employees and 21-30 employees were equal in number (n = 2; 11.11%). Under the section “Other”, four companies were listed (n = 4; 22.22%). Only one company has between 11 and 20 employees (n = 1; 5.56%).
According to Table 4.2 B4, participants indicated that most of the companies operate in the interior design sector (n = 10; 55.56%). Three participants are working in other sectors of design (n = 3; 16.67%). An equal number of companies (n = 1; 5.56%) operate in exhibition design, retail design and office design respectively. Very notable is that two companies operate in graphic design (n = 2; 11.11%).

The sectors that conduct the WIL business per company are equally represented between management and a combination of management, personnel/human resources and staff/supervisors (n = 9; 50.00%).
4.4.2 Interpretation of demographical information (students who have completed WIL): Appendix B - Section B

Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables.

<table>
<thead>
<tr>
<th>TABLE 4.2 B6 Which is your home province?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Which is your home province?</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

According to these results, the highest percentage of participants are situated in Gauteng (n = 29; 45.31%), followed by KwaZulu-Natal in second place (n = 15; 23.44%) and the Western Cape in third spot (n = 12; 18.75%). Four student participants are from Limpopo (n = 4; 6.25%), two from Mpumalanga (n = 2; 3.13%) and one each from the North-West Province and the Northern Cape (n = 1; 1.56%).

<table>
<thead>
<tr>
<th>TABLE 4.2 B7 Which is your home city when you are home with your parents?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Which is your home city when you are home with your parents?</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

Table 4.2 B7 signifies that the highest percentage participants indicated that their home city is Johannesburg (n = 21; 32.81%). The rest of the participants are very
equally divided between Pretoria, Durban and Cape Town (n = 11; 17.19%). Ten of the participants’ home cities are situated elsewhere (n = 10; 15.63%).

**TABLE 4.2 B8**  
At which institution are you currently studying?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Tshwane University of Technology</th>
<th>University of Johannesburg</th>
<th>Durban University of Technology</th>
<th>Cape University of Technology</th>
<th>Other</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>At which institution are you currently studying?</td>
<td>19</td>
<td>20</td>
<td>12</td>
<td>13</td>
<td>0</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>29.69</td>
<td>31.25</td>
<td>18.75</td>
<td>20.31</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.2 B8, most of the participants are studying at the University of Johannesburg (n = 20; 31.25%) with the Tshwane University of Technology in Pretoria with one student less than UJ (n =19; 29.69%). The rest of the students are divided between the Durban University of Technology with 12 participants (n = 12; 18.75%) and the Cape Peninsula University of Technology with 13 participants (n = 13; 20.31%). It is evident that Gauteng has the most Interior Design WIL students currently studying at different institutions.

**TABLE 4.2 B9**  
In which city were you placed for your work integrated learning (WIL) period?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Johannesburg-burg</th>
<th>Pretoria</th>
<th>Durban</th>
<th>Port Elizabeth</th>
<th>Cape Town</th>
<th>Was not placed</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>In which city were you placed for your work integrated learning (WIL) period?</td>
<td>30</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>12</td>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>46.88</td>
<td>15.63</td>
<td>15.63</td>
<td>0.00</td>
<td>18.75</td>
<td>3.13</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.2 B9 shows the placement of WIL students and indicates which cities are more popular than others. Johannesburg, with its vast amount of interior design
companies, has the most participants, namely 30 (n = 30; 46.88%). Cape Town, a very popular city in which to work, is second (n = 12; 18.75%); students from Johannesburg and Pretoria are also placed there. Pretoria and Durban has ten participants each (n = 10; 15.63%), while two participants have not been placed for WIL yet (n = 2; 3.13%).

<table>
<thead>
<tr>
<th>TABLE 4.2 B10</th>
<th>Which of the following best represents the company where you did your work integrated learning (WIL) training?</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCT</td>
<td>Construct (Likert scale): The tables below provide the frequency (Freq.) and percentage of participants according to categories or levels of variables.</td>
</tr>
<tr>
<td>Interior design</td>
<td>37</td>
</tr>
<tr>
<td>Office design</td>
<td>57.81</td>
</tr>
<tr>
<td>Space planning</td>
<td>0.00</td>
</tr>
<tr>
<td>Model building</td>
<td>0.00</td>
</tr>
<tr>
<td>Photography</td>
<td>0.00</td>
</tr>
<tr>
<td>Technical drawing</td>
<td>0.00</td>
</tr>
<tr>
<td>Exhibition design</td>
<td>0.00</td>
</tr>
<tr>
<td>Retail design</td>
<td>0.00</td>
</tr>
<tr>
<td>Graphic design</td>
<td>0.00</td>
</tr>
</tbody>
</table>

It is evident from Table 4.2 B10 that most of the WIL training occurs in companies that practise interior design (n = 37; 57.81%) because most of the students prefer to do their training in interior design companies. Retail design takes second place (n = 7; 10.94%), while office design and technical drawing share third place (n = 6; 9.38%). Space planning is fourth (n = 5; 7.81%) and exhibition design last (n = 3; 4.69%).

**4.4.3 Interpretation of demographical information (academic and work integrated learning [WIL] staff): Appendix C - Section B**

Construct (Likert scale): The tables below provide the frequency (Freq.) and percentage of participants according to categories or levels of variables.
TABLE 4.2 B11  In which province is your institution situated?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Western Cape</th>
<th>Eastern Cape</th>
<th>KwaZulu-Natal</th>
<th>Northern Cape</th>
<th>Free State</th>
<th>North-West</th>
<th>Gauteng</th>
<th>Mpumalanga</th>
<th>Limpopo</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>In which province is your</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>institution situated?</td>
<td>%</td>
<td>33.33</td>
<td>0.00</td>
<td>16.67</td>
<td>0.00</td>
<td>0.00</td>
<td>50.00</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the academic staff’s participation and information in Table 4.2 B11, half of the institutions that participate in WIL training are situated in the Gauteng (n = 9; 50.00%). The Western Cape is second (n = 6; 33.33%), followed by KwaZulu-Natal (n = 3; 16.67%).

TABLE 4.2 B12  In which city is your institution situated?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Pretoria</th>
<th>Johannes -burg</th>
<th>Durban</th>
<th>Cape Town</th>
<th>Port Elizabeth</th>
<th>Other</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>In which city is your</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>institution situated?</td>
<td>%</td>
<td>33.33</td>
<td>16.67</td>
<td>16.67</td>
<td>33.33</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the academic staff participants, Pretoria and Cape Town are the two cities where most of the academic institutions that participate in WIL training are situated (n = 6; 33.33%). Johannesburg and Durban are equal with three participants (n = 3; 16.67%). With Pretoria and Johannesburg both situated in Gauteng, it is evident that half of the institutions involved in WIL are situated in this province. Many smaller institutions situated in this province also refer their students to companies in Gauteng for WIL training.
According to the above information, there are eight employees involved with WIL in Interior Design departments with nine and more staff members (n = 8; 44.44%) with between five and six employees in second place (n = 7; 38.89%). On the other hand, three Interior Design departments with 3-4 employees are also equipped to offer WIL training to their students (n = 3; 16.67%).

Most of the participants indicated the number of lecturers in the Interior Design department, involved with WIL as being between 1 - 2 staff members (n = 9; 50.00%). Secondly (n = 8; 44.44%) of the participants make use of between 3 - 4 staff members to participate in WIL. Only one participant (n = 1; 5.56%) indicated that there are nine and more staff members to assist with WIL.

### 4.5 INTERPRETATION OF DATA ON WORK INTEGRATED LEARNING (WIL) ACTIVITIES IN YOUR COMPANY: APPENDIX A - SECTION C
Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables. (Refer to chapter 4. Appendix A, Section C, page 404; Appendix B, section C, page 412; Appendix C, section C, page 420.)

**TABLE 4.3 C1**  
A website is necessary where students can read the company’s profile when making decisions for WIL placement

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>A website is necessary where students can read the company’s profile when making decisions for WIL placement</td>
<td>6</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>33.33</td>
<td>66.67</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants agree that a website is necessary where students can read the company’s profile when making decisions for WIL placement (n = 12; 66.67%) while six participants have indicated that they strongly agree with this statement (n = 6; 33.33%).

**TABLE 4.3 C2**  
Your company feels positive about WIL as part of your contribution towards educating Interior Design students

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company feels positive about WIL as part of your contribution towards educating Interior Design students</td>
<td>7</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>38.89</td>
<td>55.56</td>
<td>5.56</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>
Most of the participants agree that their companies feel positive about WIL as part of their contribution towards educating Interior Design students (n = 10; 55.56%). Those who strongly agree with this statement are in second place (n = 7; 38.89%). Only one participant is not sure that the company feels positive about WIL as part of its contribution towards educating Interior Design students (n = 1; 5.56%).

An equal number of participants agree and strongly agree that it must be a prerequisite for a student to be knowledgeable about the latest Interior Design computer software before starting his/her WIL period at their companies (n = 7; 38.89%) with four participants who have responded that they disagree with the statement (n = 4; 22.22%).

#### TABLE 4.3 C3
It is a prerequisite for a student to be knowledgeable about the latest interior design computer software before starting his/her WIL period at your company

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is a prerequisite for a student to be knowledgeable about the latest interior design computer software before starting his/her WIL period at your company</td>
<td>7</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>38.89</td>
<td>38.89</td>
<td>0.00</td>
<td>22.22</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### TABLE 4.3 C4
Your company wants to interview different students for WIL placement

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company wants to interview different students for WIL placement</td>
<td>6</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>33.33</td>
<td>55.56</td>
<td>5.56</td>
<td>5.56</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>
Most of the participants agree that their companies want to interview different students for WIL placement (n = 10; 55.56%). Those participants who strongly agree that their companies want to interview different students for WIL placement with (n = 6; 33.33%). One participant said that he was not sure whether his company wanted to interview different students for WIL placement while another respondent said that he disagreed with the statement (n = 1; 5.56%) each.

### TABLE 4.3 C5  The responsibility to monitor students during WIL lies with the supervisor

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The responsibility to monitor students during WIL lies with the supervisor</td>
<td>5</td>
<td>12</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>27.78</td>
<td>66.67</td>
<td>0.00</td>
<td>5.56</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

The majority of participants agree that the responsibility to monitor students during WIL lies with the supervisor (n = 12; 66.67). Five participants strongly agree with the statement (n = 5; 27.78%). Only one participant (n = 1; 5.56%) has disagreed that the responsibility to monitor students during WIL lies with the supervisor.

### TABLE 4.3 C6  The responsibility to monitor the student during WIL lies with the institution

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The responsibility to monitor the student during WIL lies with the institution</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>50.00</td>
<td>0.00</td>
<td>44.44</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>
Half of the participants responded that they agree that the responsibility to monitor the student during WIL lies with the institution (n = 9; 50.00%). Very close to agree are the participants who do not agree with the statement (n = 8; 44.44%). Only one participant responded with strongly agree that the responsibility to monitor the student during WIL lies with the institution (n = 1; 5.56%).

According to the data reflected in Table 4.3 C7, half of the participants agree that it is necessary for the university to assess the students during WIL (n = 9; 50.00%). Five (n = 5; 27.78%) of the participants strongly agree with the statement. In contrast to this outcome, three participants (n = 3; 16.67%) disagree that the university should assess the students during WIL, and only one participant is not sure about the statement (n = 1; 5.56%).

Half of the participants indicated that they agree that the university staff should visit and assess students during WIL (n = 9; 50.00%). Four participants responded that they strongly agree (n = 4; 22.22%). In contrast to the latter, there are three
participants who disagree with the statement (n = 3; 16.67%). Two participants are not sure that university staff should visit and assess students during WIL (n = 2; 11.11%).

<table>
<thead>
<tr>
<th>TABLE 4.3 C9</th>
<th>The exchange of knowledge and technology only happens through visits by guest lecturers from the industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCT</td>
<td>The exchange of knowledge and technology only happens through visits by guest lecturers from the industry</td>
</tr>
<tr>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.56</td>
</tr>
</tbody>
</table>

Most of the participants disagree that the exchange of knowledge and technology only happens through visits by guest lecturers from industry (n = 7; 38.89%). Six participants have indicated that they are not sure about the statement (n = 6; 33.33%). Three participants (n = 3; 16.67%) agree that the exchange of knowledge and technology only happens through visits by guest lecturers from the industry for the university. An equal number of participants with (n = 1; 5.56%) strongly agree or strongly disagree.

<table>
<thead>
<tr>
<th>TABLE 4.3 C10</th>
<th>The assessment of WIL is the responsibility of the supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCT</td>
<td>The assessment of WIL is the responsibility of the supervisor</td>
</tr>
<tr>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.11</td>
</tr>
</tbody>
</table>

The majority of the participants agree that the assessment of WIL is the responsibility of the supervisor (n = 11; 61.11%), with (n = 2; 11.11%) participants
that strongly agree. Four participants disagree that the assessment of WIL is the responsibility of the supervisor (n = 4; 22.22%) and one participant is not sure whether the statement is true (n = 1; 5.56%).

More than half of the participants agree that the WIL guide provides enough clarification, assessment and information to the supervisor (n = 10; 55.56%). Five participants indicated that they disagree that the WIL guide provides enough clarification, assessment and information to the supervisor (n = 5; 27.78%). Three participants are not sure that the WIL guide provides enough clarification, assessment and information to the supervisor (n = 3; 16.67%).

Most of the participants agree that the WIL guide provides enough clarification, assessment and information to the students (n = 8; 44.44%). Seven participants
have indicated that they disagree (n = 7; 38.89%) with the statement. Two participants strongly agree with the statement (n = 2; 11.11%) while one participant is not sure that the WIL guide provides enough clarification, assessment and information to the student (n = 1; 5.56%).

TABLE 4.3 C13 Your company prefers feedback on the debriefing process of WIL students to use as information for further participation

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company prefers feedback on the debriefing process of WIL students to use as information for further participation</td>
<td>7</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>38.39</td>
<td>61.11</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than the half of the participants agree that their companies prefer feedback on the debriefing process of WIL students to use as information for further participation (n = 11; 61.11%). Seven participants strongly agree that their companies prefer feedback on the debriefing process of WIL students to use as information for further participation (n = 7; 38.39%).

TABLE 4.3 C14 An Interior Design WIL student has enough design skills to be utilised in your company

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>An Interior Design WIL student has enough design skills to be utilised in your company</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>16.67</td>
<td>33.33</td>
<td>22.22</td>
<td>16.67</td>
<td>11.11</td>
<td>100%</td>
</tr>
</tbody>
</table>
Most of the participants agree that an Interior Design WIL student has enough design skills to be utilised in their companies (n = 6; 33.33%). Four participants are not sure that an Interior Design WIL student has enough design skills to be utilised in their company (n = 4; 22.22%). In contrast with this, the participants who strongly agree and disagree are equal in number (n = 3; 16.67%). Only two participants strongly disagree with the statement (n = 2; 11.11%).

**TABLE 4.3 C15 Design skills are a necessity for good company practice**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design skills are a necessity for good company practice</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>61.11</td>
<td>27.78</td>
<td>11.11</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the statistics in Table 4.3 C15, more than half of the participants strongly agree that design skills are a necessity for good company practice (n = 11; 61.11%). Five (n = 5; 27.78%) participants agree with this statement and only two participants are not sure that design skills are a necessity for good company practice (n = 2; 11.11%).

**TABLE 4.3 C16 Your company is willing to take in a first-year Interior Design student for WIL observation purposes only**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company is willing to take in a first-year Interior Design student for WIL observation purposes only.</td>
<td>4</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>22.22</td>
<td>50.00</td>
<td>11.11</td>
<td>16.67</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

175
According to the outcome reflected in Table 4.3 C16, half of the participants agree that their companies are willing to take in first-year Interior Design students for WIL observation purposes only (n = 9; 50.00%). Those who strongly agree that their companies are willing to do this amounted to four (n = 4; 22.22%). Three participants disagree with the statement (n = 3; 16.67%) and two participants are not sure with the statement (n = 2; 11.11%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company would like to participate in the advisory committee for Interior Design</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>33.33</td>
<td>38.89</td>
<td>16.67</td>
<td>11.11</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

The statistics reflected in Table 4.3 C17 show a positive outcome where most of the participants agree that their companies would like to participate in the advisory committee for Interior Design (n = 7; 38.89%). Those who strongly agree to participate in the advisory committee for Interior Design amounted to six (n = 6; 33.33%). A few participants are not sure with the statement (n = 3; 16.67%) and two participants disagree that their companies would be keen to participate in the advisory committee for Interior Design (n = 2; 11.11%).
TABLE 4.3 C18  Your company prefers to make use of WIL students for work-related projects on an ad hoc basis

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company prefers to make use of WIL students for work related projects on an ad hoc basis</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>22.22</td>
<td>55.56</td>
<td>11.11</td>
<td>11.11</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants agree that their companies prefer to make use of WIL students for work-related projects on an ad hoc basis (n = 10; 55.56%). Secondly, a few participants strongly agree with the statement (n = 4; 22.22%). Those participants who responded negatively with not sure and disagree were equal in number (n = 2; 11.11%).

TABLE 4.3 C19  Your company perceives WIL as a waste of time and money

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company perceives WIL as a waste of time and money</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>10</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>11.11</td>
<td>55.56</td>
<td>27.78</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants disagree that their companies perceive WIL as a waste of time and money (n = 10; 55.56%). Those who strongly disagree with the above statement amounted to five (n = 5; 27.78%). Two participants are not sure (n = 2; 11.11%) and one participant agrees (n = 1; 5.56%) that their companies perceive WIL as a waste of time and money.
TABLE 4.3 C20  WIL forms an integral part of curriculum development and implementation, and conveys the teaching and learning strategy of the university

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIL forms an integral part of curriculum development and implementation, and conveys the teaching and learning strategy of the university</td>
<td>10</td>
<td>6</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>55.56</td>
<td>33.33</td>
<td>0.00</td>
<td>11.11</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the information in Table 4.3 C20, more than half of the participants strongly agree that WIL forms an integral part of curriculum development and implementation, and conveys the teaching and learning strategy of the university (n = 10; 55.56%). Those who agree with the statement numbered six (n = 6; 33.33%) and two participants have indicated that they disagree with the statement (n = 2; 11.11%).

TABLE 4.3 C21  Your company prefers to make use of WIL during weekends

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your company prefers to make use of WIL during weekends</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>27.78</td>
<td>11.11</td>
<td>33.33</td>
<td>22.22</td>
<td>100%</td>
</tr>
</tbody>
</table>

From the statistics in Table 4.3 C21 above, it is evident that all the participants have different opinions about work over weekends. The most participants disagree that their companies prefer to make use of WIL during weekends (n = 6; 33.33%). Those participants who agree that their companies prefer to do this amounted to five (n = 5; 27.78%). Four participants (n = 4; 22.22%) strongly disagree about the assumption.
Two participants indicated that they are not sure (n = 2; 11.11%) and one participant (n = 1; 5.56%) strongly agrees that his company prefers to make use of WIL during weekends.

### TABLE 4.3 C22 WIL is beneficial to students

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIL is beneficial to students</td>
<td>13</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>72.22</td>
<td>27.78</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the statistics in Table 4.3 C22, more than half of the participants strongly agree that WIL is beneficial to students (n = 13; 72.22%), while the rest of the participants indicated that they agree that WIL is beneficial to students (n = 5; 27.78%). The result provides a very positive outcome regarding the success that WIL has.

### TABLE 4.3 C23 A supervisor should be assigned by your company to supervise and coach students during the WIL period

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>A supervisor should be assigned by your company to supervise and coach students during the WIL period</td>
<td>5</td>
<td>9</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>27.78</td>
<td>50.00</td>
<td>0.00</td>
<td>22.22</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half (50%) of the participants agree that a supervisor should be assigned by their companies to supervise and coach students during the WIL period (n = 9; 50.00%). In support of this outcome, five of the participants strongly agree (n = 5; 27.78%) with the statement, while four other participants disagree that a supervisor should be
assigned by their companies to supervise and coach students during the WIL period (n = 4; 22.22%).

Table 4.3 C24 shows another positive outcome where most participants agree that companies must remunerate students during WIL (n = 8; 44.44%). Seven participants have responded that they strongly agree that companies must remunerate students during WIL (n = 7; 38.89%). The participants who have disagreed with the statement are in the minority (n = 3; 16.67%).
The following tables, TABLE 4.3 C26i to TABLE 4.3 C30iv, rate skills on a scale of 1 = not important; 2 = not very important; 3 = necessary; 4 = important and 5 = very important.

The following skills form part of the Interior Design programme. Rate the skills.

TABLE 4.3 C26i  Design skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design skills</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>94.44</td>
<td>100%</td>
</tr>
</tbody>
</table>

Nearly all the participants (n = 17; 94.44%) rate design skills as a very important skill that forms part of the Interior Design programme, except for one participant (n = 1; 5.56%) who rates design skills as not important.

TABLE 4.3 C26ii  Writing skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing skills</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>5.56</td>
<td>50.00</td>
<td>38.89</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half of the participants (n = 9; 50.00%) rate writing skills as an important skill that forms part of the Interior Design programme. Those who rate writing skills as very important amounted to seven (n = 7; 38.89%) One participant (n = 1; 5.56%) rates the skill as necessary and another one (n = 1; 5.56%) rates the skill as not important.

TABLE 4.3 C26iii  Oral skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral skills</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>5.56</td>
<td>22.22</td>
<td>72.22</td>
<td>100%</td>
</tr>
</tbody>
</table>
The vast majority of the participants rate oral skills as *very important* (n = 13; 72.22%). Four participants (n = 4; 22.22%) rate oral skills as an *important* skill that forms part of the Interior Design programme. Only one participant (n = 1; 5.56%) rates oral skills as *necessary* on a constraint of 3.

**TABLE 4.3 C26iv  Presentation skills**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation skills</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>9</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>0.00</td>
<td>50.00</td>
<td>44.44</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half of the participants rate presentation skills as an *important* skill that forms part of the Interior Design programme (n = 9; 50.00%). Those participants who rate presentation skills as *very important* amounted to eight (n = 8; 44.44%). Only one participant has rated presentation skills as *not very important* (n = 1; 5.56%).

**TABLE 4.3 C26v  Model-building skills**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model-building skills</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>22.22</td>
<td>16.67</td>
<td>33.33</td>
<td>11.11</td>
<td>16.67</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate model-building skills as a *necessary* skill that must form part of the Interior Design programme (n = 6; 33.33%). Those who rate model-building skills as *not important* numbered four (n = 4; 22.22%). Three participants each have rated the given skill as *not very important*, while three other participants have rate model-building skills as *very important* (n = 3; 16.67%). Two participants have rated model-building skills as *important* (n = 2; 11.11%).
Most of the participants rate photography skills as a necessary skill that forms part of the Interior Design programme (n = 8; 44.44%). Five participants rate photography skills as not important (n = 5; 27.78%) while three participants rate the above skill as important (n = 3; 16.67%). Only one participant rates photography skills as very important and one other participant rates the skill as not very important with (n = 1; 5.56%) each.

More than half of the participants rate technical skills as a very important skill that forms part of the Interior Design programme (n = 11; 61.11%). Those that rate technical skills as important numbered five (n = 5; 27.78%). One participant rates technical skills necessary and another participant rates the skill as not important (n = 1; 5.56%).
More than half of the participants rate computer skills as a very important skill that forms part of the Interior Design programme (n = 13; 72.22%). Four participants rate computer skills as important (n = 4; 22.22%) and only one participant rates computer skills as not very important (n = 1; 5.56%).

Which of the following characteristics student employees must demonstrate in your company are important?

### TABLE 4.3 C27i Punctuality

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punctuality</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>88.89</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate punctuality as a very important characteristic student employee must demonstrate in their companies (n = 16; 88.89%). Those participants who feel punctuality is important as a characteristic student employees have to demonstrate in their companies number two in total (n = 2; 11.11%).

### TABLE 4.3 C27ii Knowledgeable

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledgeable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>22.22</td>
<td>77.78</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate the ability to be knowledgeable as a very important characteristic student employees must demonstrate in their companies (n = 14; 77.78%). Four participants have indicated that they rate the ability to be knowledgeable hard as an important characteristic student employees must demonstrate in their companies (n = 4; 22.22%).
More than half of the participants rate diligence as a very important characteristic student employees must demonstrate in their companies (n = 14; 77.78%). Those who have rated diligence as an important characteristic number three (n = 3; 16.67%). One participant has rated diligence as a necessary characteristic (n = 1; 5.56%).

More than half of the participants rate trustworthiness as a very important characteristic student employees must demonstrate in their companies (n = 16; 88.89%), while one participant has rated trustworthiness as important (n = 1; 5.56%) and another has rated trustworthiness as a necessary characteristic student employees must demonstrate in their company (n = 1; 5.56%).

More than half of the participants rate friendliness as a very important characteristic student employees must demonstrate in their companies (n = 18; 100%).
More than half of the participants rate friendliness as a *very important* characteristic of student employees must demonstrate in their companies (n = 11; 61.11%). Those participants who think friendliness is *important* numbered three (n = 3; 16.67%) with four participants rating friendliness as a *necessary* characteristic of student employees must demonstrate in their companies (n = 4; 22.22%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intelligence</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>8</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>16.67</td>
<td>44.44</td>
<td>38.89</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate intelligence an *important* characteristic of student employees (n = 8; 44.44%). Seven participants rate intelligence as *very important* (n = 7; 38.89%) and three participants rate intelligence a *necessary* characteristic of student employees in their companies (n = 3; 16.67%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helpfulness</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>5.56</td>
<td>44.44</td>
<td>50.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half of the participants rate helpfulness *very important* as a characteristic of student employees in their companies (n = 9; 50.00%). Those participants who rate helpfulness *important* numbered eight (n = 8; 44.44%) and one participant rates helpfulness a *necessary* characteristic of student employees (n = 1; 5.56%).
Most of the participants rate being quiet as a necessary characteristic of student employees in their companies (n = 8; 44.44%). Seven participants rate this characteristic as not important (n = 7; 38.89%). Two participants rate being quiet as not very important as a characteristic expected of student employees (n = 2; 11.11%) and one other participant rates being quiet as an important characteristic of student employees (n = 1; 5.56%).

Half of the participants rate being unconcerned as not very important as a characteristic of student employees in their companies (n = 9; 50.00%). Those who rate being unconcerned as not important make up a total of four (n = 4; 22.22%). Three participants rate being unconcerned as very important (n = 3; 16.67%). One participant rates employee students who are unconcerned as important to the company (n = 1; 5.56%), while one participant rates the characteristic as necessary (n = 1; 5.56%).
TABLE 4.3 C27x  Working independently

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working independently</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>33.33</td>
<td>33.33</td>
<td>27.78</td>
<td>100%</td>
</tr>
</tbody>
</table>

An equal number of participants rate the ability to work independently as a necessary and important characteristic of student employees in their companies (n = 6; 33.33%). Those who rate being able to work independently as very important totalled five (n = 5; 27.78%). One participant rates student employees who can work independently as not important (n = 1; 5.56%).

TABLE 4.3 C27xi  Calmness

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calmness</td>
<td>2</td>
<td>0</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>11.11</td>
<td>0.00</td>
<td>38.89</td>
<td>38.89</td>
<td>11.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

An equal number of participants rate calmness as a characteristic of student employees that is necessary and important (n = 7; 38.89%) respectively. Two participants in each category rate calmness as very important and not important to their companies (n = 2; 11.11%).

TABLE 4.3 C27xii  Being talkative

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being talkative</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>7</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>11.11</td>
<td>5.56</td>
<td>44.44</td>
<td>38.89</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Eight participants rate being talkative as a characteristic of student employees that is necessary (n = 8; 44.44%). Those who rate talkativeness as important to their
companies totalled seven (n = 7; 38.89%). Two participants rate talkativeness as *not important* to their companies (n = 2; 11.11%) with one participant who rates being talkative as a *not very important* characteristic of student employees (n = 1; 5.56%).

**TABLE 4.3 C27xiii  Anxiousness**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiousness</td>
<td>4</td>
<td>13</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>22.22</td>
<td>72.22</td>
<td>5.56</td>
<td>0.00</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate anxiousness as a *not very important* characteristic of student employees (n = 13; 72.22%). Those who rate anxiousness as *not important* to their companies total four (n = 4; 22.22%). Only one participant rates anxiousness as a *necessary* characteristic of student employees in his company (n = 1; 5.56%).

**TABLE 4.3 C27xiv  Confidence**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>61.11</td>
<td>27.78</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate confidence as an *important* characteristic which student employees should demonstrate in their companies (n = 11; 61.11%). Those who rate confidence as *very important* to their companies numbered five (n = 5; 27.78%). Two participants rate confidence as a *necessary* characteristic which student employees should have (n = 2; 11.11%).
TABLE 4.3  Creativity

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creativity</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>27.78</td>
<td>72.22</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate creativity as a characteristic in student employees that is very important to their companies (n = 13; 72.22%). Those participants who rate creativity as important to their companies numbered five (n = 5; 27.78%).

TABLE 4.3  Leadership

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>10</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>16.67</td>
<td>55.56</td>
<td>27.78</td>
<td>100%</td>
</tr>
</tbody>
</table>

Ten participants rate leadership as a characteristic student employee that is important to their companies (n = 10; 55.56%). Those who rate leadership as very important to their companies totalled five (n = 5; 27.78%). Three participants rate leadership as a necessary characteristic in student employees in their companies (n = 3; 16.67%).

TABLE 4.3  Being a busybody

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being a busybody</td>
<td>5</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>27.78</td>
<td>22.22</td>
<td>38.89</td>
<td>11.11</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

The participants who rate being a busybody as a characteristic in student employees that is necessary to their companies totalled seven (n = 7; 38.89%). Those who rate
being a busybody as *not important* to their companies numbered five (n = 5; 27.78%). Four participants rate being a busybody as *not very important* to their companies (n = 4; 22.22%). Only two participants rate being a busybody as *important* (n = 2; 11.11%).

<table>
<thead>
<tr>
<th>TABLE 43 C27xviii Laziness</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Laziness</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

Nearly all the participants rate laziness as a characteristic in student employees that is *not very important* (n = 17; 94.44%). Only one participant rates laziness as *important* (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>TABLE 4.3 C27xix Being deceptive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Being deceptive</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

The entire participant group rate being a liar as a characteristic in student employees that is *not very important* to their companies (n = 18; 100.00%).

<table>
<thead>
<tr>
<th>TABLE 4.3 C27xx Dependence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Dependence</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>
The participants who rate dependence as a characteristic in student employees as necessary to their companies totalled six (n = 6; 33.33%). Those who rate dependence as very important to their companies numbered five (n = 5; 27.78%). Four participants rate dependence as a characteristic that is not very important to their companies (n = 4; 22.22%). Only two participants rate dependence as not important (n = 2; 11.11%). Only one participant rates dependence in student employees as important (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>TABLE 4.3 C27xxi</th>
<th>Being unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCT</td>
<td>1</td>
</tr>
<tr>
<td>Being unsure</td>
<td>6</td>
</tr>
<tr>
<td>%</td>
<td>33.33</td>
</tr>
</tbody>
</table>

Half of the participants rate being unsure as a characteristic in student employees that is not very important to their companies (n = 9; 50.00%). Those who rate being unsure as not important to their companies totalled six (n = 6; 33.33%). Only three participants rate being unsure as a necessary characteristic that student employees should demonstrate in their companies (n = 3; 16.67%).

<table>
<thead>
<tr>
<th>TABLE 4.3 C27xxii</th>
<th>Negativity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCT</td>
<td>1</td>
</tr>
<tr>
<td>Negativity</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
</tr>
</tbody>
</table>

The entire participant population rate negativity as a characteristic in student employees that is not very important to their companies (n = 18; 100.00%).
Which of the following higher thinking skills of the WIL student are important to your company?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>5.56</td>
<td>44.44</td>
<td>44.44</td>
<td>100%</td>
</tr>
</tbody>
</table>

An equal number of participants rate knowledge to be either an important or very important higher thinking skill of WIL students in their companies with eight each (n = 8; 44.44%). One participant rates knowledge as not very important and a further one participant rates knowledge as a necessary higher thinking skill of WIL students in their companies (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>5.56</td>
<td>22.22</td>
<td>66.67</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate comprehension as a very important higher thinking skill to their companies (n = 12; 66.67%). Four participants rate comprehension as higher thinking skill of WIL students to their companies as important (n = 4; 22.22%). One participant each rated it necessary or not important as higher thinking skill (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>5.56</td>
<td>50.00</td>
<td>38.89</td>
<td>100%</td>
</tr>
</tbody>
</table>
Half of the participants rate application as a higher thinking skill of WIL students as *important* to their companies (n = 9; 50.00%). A further seven participants rate application as *very important* (n = 7; 38.89%). One participant each rate the skill as *necessary* or *not important* (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being able to analyse</td>
<td></td>
<td>1</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>22.22</td>
<td>38.89</td>
<td>33.33</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate the ability of WIL students to analyse as a higher thinking skill as *important* to their companies (n = 7; 38.89%). A further six participants rate WIL students being able to analyse as a *very important* skill to their companies (n = 6; 33.33%). Four of the participants rate being able to analyse as *necessary* (n = 4; 22.22%) and only one participant rates being able to analyse as a skill that is *not important* to his company (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to synthesise</td>
<td></td>
<td>0</td>
<td>4</td>
<td>9</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>22.22</td>
<td>50.00</td>
<td>22.22</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half of the participants rate the skill to synthesise as an *important* higher thinking skill of WIL students (n = 9; 50.00%). Other participants rate WIL students being able to synthesise as *very important* to their companies (n = 4; 22.22%). Four of the participants rate WIL students being able to synthesise as *necessary* (n = 4; 22.22%) and one participant rates WIL students being able to synthesise as a higher thinking skill that is *not important* to his company (n = 1; 5.56%).
TABLE 4.3 C28vi  The ability to evaluate

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ability to evaluate</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>22.22</td>
<td>22.22</td>
<td>50.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half of the participants rate WIL students being able to evaluate something as a higher thinking skill as *very important* to their companies (n = 9; 50.00%). Four participants rate WIL students being able to evaluate something as higher thinking skill as *important* to their companies (n = 4; 22.22%). Four of the participants rate the ability to evaluate as *necessary* (n = 4; 22.22%), while one participant rates WIL students being able to evaluate something as *not important* to the company (n = 1; 5.56%).

Which of the following three domains in respect of the WIL student are important to your company?

TABLE 4.3 C29i  Cognitive: recall or recognition of knowledge or the development of knowledge and intellect

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive: recall or recognition of knowledge or the development of knowledge and intellect</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>0.00</td>
<td>33.33</td>
<td>61.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.3 C29Ci, more than half of the participants rate cognitive: recall or recognition of knowledge or the development of knowledge and intellect as *very important* to their companies (n = 11; 61.11%). Other participants rate this domain as *important* to their companies (n = 6; 33.33%). One participant rates the given domain as *not important* (n = 1; 5.56%).
TABLE 4.3 C29ii  Affective: including objectives describing changes in interest, attitudes and values

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective: including objectives describing changes in interest, attitudes and values</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>0.00</td>
<td>44.44</td>
<td>50.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.3 C29Cii, half of the participants rate affective: including objectives describing changes in interest, attitudes and values as very important to their companies (n = 9; 50.00%). Other participants rate this domain as important to their companies (n = 8; 44.44%). Only one participant rates the given domain as not important (n = 1; 5.56%).

TABLE 4.3 C29iii Psychomotor: including the development of manipulative or motor skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychomotor: including the development of manipulative or motor skills</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>61.11</td>
<td>27.78</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.3 C29Ciii, more than half of the participants rate psychomotor: including the development of manipulative or motor skills as important to their companies (n = 11; 61.11%). Other participants rate this domain as very important to their companies (n = 5; 27.78%). Two participants rate the given domain as necessary (n = 2; 11.11%).
Which of the following motivations of the WIL student are important to your company?

TABLE 4.3 C30i  The expectancy of work success

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The expectancy of work success</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>16.67</td>
<td>33.33</td>
<td>50.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the above calculated information, half of the participants rate the WIL student’s expectancy of work success as a very important motivation to their companies (n = 9; 50.00%). Other participants rate the expectancy of work success important to their companies (n = 6; 33.33%), while three participants rate this motivation necessary to their companies (n = 3; 16.67%).

TABLE 4.3 C30ii  Achieving work success

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achieving work success</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>13</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>16.67</td>
<td>72.22</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the above calculated information in Table 44.2 C30iv, more than half of the participants rate the WIL student’s subsequent work success as very important as a motivational factor to their companies (n = 13; 72.22%). Three participants rate the motivational factor of achieving subsequent work success as important to their companies (n = 3; 16.67%). Only two participants rate the factor as necessary to their companies (n = 2; 11.11%).
TABLE 4.3 C30iii  The value of the practical task

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The value of the practical task</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>5.56</td>
<td>27.78</td>
<td>66.67</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the above calculated information, more than half of the participants rate the value of the practical task as a very important motivational factor to their companies (n = 12; 66.67%). Other participants rate the value of the practical task as important to their companies (n = 5; 27.78%) with one participant rating the value of the practical task as necessary to his company (n = 1; 5.56%).

TABLE 4.3 C30iv  Task involvement

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task involvement</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>5.56</td>
<td>27.78</td>
<td>66.67</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the above calculated information, more than half of the participants rate the WIL student’s task involvement as a very important motivational factor to their companies (n = 12; 66.67%). Other participants rate the motivational factor of task involvement as important to their companies (n = 5; 27.78%). Only one participant rates the motivational factor of task involvement as necessary to the company (n = 1; 5.56%).

4.6  INTERPRETATION OF DATA ON WORK INTEGRATED LEARNING (WIL) ACTIVITIES STUDENTS LEARN IN YOUR COMPANY: APPENDIX B - SECTION C

Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables.
TABLE 4.4 C1  You know where to search on the Internet for more information on a company

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>You know where to search on the Internet for more info</td>
<td>37</td>
<td>21</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>on a company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>57.81</td>
<td>32.81</td>
<td>3.13</td>
<td>4.60</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C1, more than half of the participants *strongly agree* that they know where to search on the Internet for more information on a company (n = 37; 57.81%). The other participants *agree* that they know where to search on the Internet for more information on a company (n = 21; 32.81%). Three of the participants *disagree* with the statement (n = 3; 4.60%). Two other participants are *not sure* with the statement (n = 2; 3.13%) and one participant *strongly disagrees* that he/she knows where to search on the Internet for more information on a company (n = 1; 1.56%).

TABLE 4.4 C2  You use an Internet website to browse for company profiles

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>You use an internet website to browse for company profiles</td>
<td>36</td>
<td>23</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>56.25</td>
<td>35.94</td>
<td>0.00</td>
<td>7.81</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C2, more than half of the participants *strongly agree* that they use an Internet website to browse for company profiles (n = 36; 56.25%). The other participants *agree* that they use an Internet website to browse for company profiles (n = 23; 35.94%). Five of the participants *disagree* that they use an Internet website to browse for company profiles (n = 5; 7.81%).
According to Table 4.4 C3, most of the participants agree that the WIL period allows ample time for them to explore different areas in the company where they work (n = 22; 34.38%). Twenty participants disagree with the statement (n = 20; 31.25%). Some of the participants strongly agree that the WIL period allows ample time for them to explore different areas in the company where they work (n = 13; 20.31%). Eight other participants are not sure (n = 8; 12.50%) and one participant strongly disagrees that the WIL period allows ample time for him to explore different areas in the company where he works (n = 1; 1.56%).

According to Table 4.4 C4, most of the participants disagree that the time they spend with the company is sufficient to specialise in a design direction (n = 23; 35.94%).
Other participants agree with this statement ($n = 17; 26.56\%$). Some of the participants are not sure that the time they spend with the company is enough to specialize in a design direction ($n = 12; 18.75\%$). Seven participants strongly agree ($n = 7; 10.94\%$) and five participants strongly disagree with this statement ($n = 5; 7.81\%$).

### TABLE 4.4 C5  You would like to see a database providing information and names of WIL companies from which you can select

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>You would like to see database providing information and names of WIL companies from which you can select</td>
<td>42</td>
<td>17</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>65.63</td>
<td>26.56</td>
<td>3.13</td>
<td>3.13</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C5, more than half of the participants strongly agree that they would like to see a database providing information and names of WIL companies from which they can select ($n = 42; 65.63\%$). The other participants agree that they would like to see such a database being provided ($n = 17; 26.56\%$). Some participants are not sure with the statement ($n = 2; 3.13\%$). Two other participants disagree ($n = 2; 3.13\%$) and one participant strongly disagrees with this statement ($n = 1; 1.56\%$).

### TABLE 4.4 C6  Will you be able to learn through observing company practices?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will you be able to learn through observing company practices?</td>
<td>39</td>
<td>21</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>60.94</td>
<td>32.81</td>
<td>3.13</td>
<td>1.56</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

201
According to Table 4.4 C6, more than half of the participants *strongly agree* that they will be able to learn through observing company practices (n = 29; 60.94%). Most of the remaining participants *agree* that they will be able to learn through observing company practices (n = 21; 32.81%). Two participants are not sure with the statement (n = 2; 3.13%) while one participant *disagrees* (n = 1; 1.56%) and one participant *strongly disagrees* (n = 1; 1.56%) that they will not be able to learn through observing company practices.

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have enough academic knowledge at third-year level to enter the industry?</td>
<td>19</td>
<td>31</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>29.69</td>
<td>48.44</td>
<td>12.50</td>
<td>7.81</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C7, most of the participants *agree* that they have enough academic knowledge at third-year level to enter the industry (n = 31; 48.44%). Nineteen other participants *strongly agree* that they have enough academic knowledge at third-year level to do so (n = 19; 29.69%). Some participants are *not sure* with the statement (n = 8; 12.50%). Five participants *disagree* they have enough academic knowledge (n = 5; 7.81%). One participant *strongly disagrees* that he has enough academic knowledge at third-year level to enter the industry (n = 1; 1.56%).
According to Table 4.4 C8, more than half of the participants strongly agree with the statement regarding the necessity of WIL preparation and training (n = 53; 82.81%). Six other participants also agree with the statement (n = 6; 9.38%). However, some participants are not sure that WIL preparation and training are necessary (n = 3; 4.69%). Only one other participant disagrees (n = 1; 1.56%), while one participant strongly disagrees with the statement (n = 1; 1.56%).

According to Table 4.4 C9, most of the participants agree that they were prepared for WIL by their respective departments (n = 30; 46.88%). Many other participants strongly agree that they were prepared for WIL (n = 25; 39.06%). Five of the participants are not sure that they were prepared for WIL (n = 5; 7.81%). Three participants disagree that they were prepared for WIL by their departments (n = 3; 4.69%). One participant strongly disagrees that he was prepared for WIL by the department (n = 1; 1.56%).

### TABLE 4.4 C8  Is WIL preparation and training necessary?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is WIL preparation and training necessary?</td>
<td>53</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>82.81</td>
<td>9.38</td>
<td>4.69</td>
<td>1.56</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

### TABLE 4.4 C9  Where you prepared for WIL by your department?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were you prepared for WIL by your department?</td>
<td>25</td>
<td>30</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>39.06</td>
<td>46.88</td>
<td>7.81</td>
<td>4.69</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C9, most of the participants agree that they were prepared for WIL by their respective departments (n = 30; 46.88%). Many other participants strongly agree that they were prepared for WIL (n = 25; 39.06%). Five of the participants are not sure that they were prepared for WIL (n = 5; 7.81%). Three participants disagree that they were prepared for WIL by their departments (n = 3; 4.69%). One participant strongly disagrees that he was prepared for WIL by the department (n = 1; 1.56%).
TABLE 4.4 C10  Does the WIL guide give a realistic/true reflection of what you have learned or experienced?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the WIL guide give a realistic/true reflection of what you have learned or experienced?</td>
<td>18</td>
<td>28</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>28.13</td>
<td>43.75</td>
<td>18.75</td>
<td>7.81</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the statistics contained in Table 4.4 C10, most of the participants agree that the WIL guide provides a realistic/true reflection of what they have learned or experienced (n = 28; 43.75%). Quite a number of the remaining participants strongly agree with the statement (n = 18; 28.13%). Some of the participants are not sure that the WIL guide provides a realistic/true reflection of what they have learned or experienced (n = 12; 18.75%). Five participants disagree with the statement (n = 5; 7.81%) Only one participant strongly disagrees that the WIL guide offers a realistic/true reflection of what he/has learned or experienced (n = 1; 1.56%).

TABLE 4.4 C11  Are visits from the sending institution important to you during your WIL period?

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are visits from the sending institution important to you during your WIL period?</td>
<td>9</td>
<td>24</td>
<td>22</td>
<td>8</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>14.06</td>
<td>37.50</td>
<td>34.38</td>
<td>12.50</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C11, most of the participants agree that visits from the sending institution are important to them during their WIL period (n = 24; 37.50%). The other participants are not sure with the statement (n = 22; 34.38%). Some of the
participants strongly agree that visits from the sending institution are important (n = 9; 14.06%). Eight participants disagree with the statement (n = 8; 12.50%), while one participant strongly disagrees that visits from the sending institution are important to him/her during the WIL period (n = 1; 1.56%).

TABLE 4.4 C12  The assessment of your portfolio of practical work is a true reflection of what has been executed during the WIL period

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The assessment of your portfolio of practical work is a true reflection</td>
<td>17</td>
<td>27</td>
<td>10</td>
<td>8</td>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td>of what has been executed during the WIL period</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>26.56</td>
<td>42.19</td>
<td>15.63</td>
<td>12.50</td>
<td>3.13</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C12, most of the participants agree that the assessment of their portfolios of practical work is a true reflection of what they have done during their WIL period (n = 27; 42.19%). Seventeen other participants strongly agree that assessment of their portfolios of practical work is a true reflection of what they have done during the WIL period (n = 17; 26.56%). Some of the participants are not sure with the statement (n = 10; 15.63%). Eight participants disagree that assessment of their portfolio of practical work is a true reflection of what has been executed during the WIL period (n = 8; 12.50%). Two participants strongly disagree that assessment of your portfolio of practical work is a true reflection of what they have done during the WIL period (n = 2; 3.13%).
TABLE 4.4 C13  You have enough business practice skills to assist company staff during WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>You have enough business practice skills to assist company staff during WIL.</td>
<td>14</td>
<td>33</td>
<td>12</td>
<td>5</td>
<td>0</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>21.88</td>
<td>51.56</td>
<td>18.75</td>
<td>7.81</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C13, more than half of the participants agree that they have enough business practice skills to assist company staff during WIL (n = 33; 51.56%). Fourteen more participants strongly agree with the statement (n = 14; 21.88%). Twelve of the participants are not sure (n = 12; 18.75%) and five participants disagree that they have enough business practice skills to assist company staff during WIL (n = 5; 7.81%).

TABLE 4.4 C14  Design skills are important during WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design skills are important during WIL</td>
<td>31</td>
<td>25</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>48.44</td>
<td>39.06</td>
<td>3.13</td>
<td>9.38</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C14, most of the participants strongly agree that design skills are important during WIL (n = 31; 48.44%), while twenty-five participants agree that design skills are important during WIL (n = 25; 39.06%). Six participants disagree that design skills are important during WIL (n = 6; 9.38%) and only two of the participants are not sure with the statement (n = 2; 3.13%).
According to Table 4.4 C15, most of the participants agree that writing skills are important during WIL (n = 30; 46.88%). Many other participants strongly agree that writing skills are important during WIL (n = 23; 35.94%). Eight participants disagree that writing skills are important (n = 8; 12.50%), while two of the participants are not sure (n = 2; 3.13%) and one participant strongly disagrees that writing skills are important during WIL (n = 1; 1.56%).

According to Table 4.4 C16, more than half of the participants strongly agree that oral skills are important during WIL (n = 35; 54.69%). Twenty-eight more participants agree that oral skills are important during WIL (n = 28; 43.75%). One participant disagrees with this statement (n = 1; 1.56%).
TABLE 4.4 C17  Presentation skills are important during WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation skills are important during WIL</td>
<td>33</td>
<td>28</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>51.56</td>
<td>43.75</td>
<td>1.56</td>
<td>3.13</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C17, thirty three participants strongly agree that presentation skills are important during WIL (n = 33; 51.56%). A large number of participants agree that presentation skills are important during WIL (n = 28; 43.75%). Two of the participants disagree with the statement (n = 2; 3.13%) and one participant is not sure that presentation skills are important during WIL (n = 1; 1.56%).

TABLE 4.4 C18  Model-building skills are important during WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model building skills are important during WIL</td>
<td>3</td>
<td>13</td>
<td>14</td>
<td>23</td>
<td>11</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>4.69</td>
<td>20.31</td>
<td>21.88</td>
<td>35.94</td>
<td>17.19</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C18, most participants disagree that model-building skills are important during WIL (n = 23; 35.94%). Fourteen participants are not sure with this statement (n = 14; 21.88%). Thirteen participants agree that model-building skills are important (n = 13; 20.31%) and 11 participants (n = 11; 17.19%) strongly disagree with the statement. Another three participants strongly agree that model-building skills are important during WIL (n =3; 4.69%).
According to Table 4.4 C19, most of the participants agree that photography skills are important during WIL (n = 21; 32.81%). Nineteen participants disagree that photography skills were important during WIL (n = 19; 29.69%). Other participants are not sure that photography skills were important (n = 10; 15.63%). Nine participants strongly agree (n = 9; 14.06%) and five participants strongly disagree that photography skills are important during WIL (n = 5; 7.81%).

According to Table 4.4 C20, more than half of the participants strongly agree that technical skills are important during WIL (n = 36; 56.25%), while a large number of the remaining participants agree with the statement (n = 26; 40.63%). Only two participants strongly disagree that technical skills are important during WIL (n = 2; 3.13%).
TABLE 4.4 C21  Computer skills are important during WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer skills are important</td>
<td>50</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>during WIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>78.13</td>
<td>20.31</td>
<td>0.00</td>
<td>0.00</td>
<td>1.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C21, almost all the participants *strongly agree* that computer skills are important during WIL (n = 50; 78.13%). Thirteen other participants *agree* with this statement (n = 13; 20.31%), while only one participant *strongly disagrees* that computer skills are important during WIL (n = 1; 1.56%).

TABLE 4.4 C22  Intellectual skills are important during WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intellectual skills are important</td>
<td>41</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>64</td>
</tr>
<tr>
<td>during WIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>64.06</td>
<td>31.25</td>
<td>1.56</td>
<td>0.00</td>
<td>3.13</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C22, more than half of the participants *strongly agree* that intellectual skills are important during WIL (n = 41; 64.06%). Twenty other participants *agree* with the statement (n = 20; 31.25%). Only two of the participants *strongly disagree* that intellectual skills are important during WIL (n = 2; 3.13%) and one participant is *not sure* with the statement (n = 1; 1.56%).
According to Table 4.4 C23, twenty-two participants agree that motor skills are important during WIL (n = 22; 34.38%), while almost the same number of participants, namely twenty-one, strongly agree that motor skills are important during WIL (n = 21; 32.81%). Ten participants are not sure that motor skills are important (n = 10; 15.63%) and the same number of participants disagree on the matter (n = 10; 15.63%). One participant strongly disagrees that motor skills are important during WIL (n = 1; 1.56%).

The following questions put to WIL students in TABLE 4.4 C24i to TABLE 4.4 C28x are rated on a scale of 1 = not important; 2 = not very important; 3 = necessary; 4 = important and 5 = very important.

Rate the skills that were important during your WIL training period.

More than half of the participants rate design skills as a very important skill during their WIL training period (n = 44; 68.75%). Eleven participants rate design skills as important during their WIL training period (n = 11; 17.19%), while five other participants rate design skills as necessary (n = 5; 7.81%). Some of the participants rate design skills as not important (n = 3; 4.69%) and one participant rates design skills as not very important during the WIL training period (n = 1; 1.56%).
Most of the participants rate writing skills as *very important* during their WIL training period (n = 19; 29.69%), while eighteen participants rate writing skills as *important* during their WIL training period (n = 18; 28.13%). Fourteen participants rate writing skills as *necessary* during their WIL training period (n = 14; 21.88%). Eight of the participants rate writing skills as *not important* (n = 8; 12.50%) and the minority rate writing skills as *not very important* during their WIL training period (n = 5; 7.81%).

Just more than half of the participants rate oral skills as *very important* during their WIL training period (n = 33; 51.56%) with twenty-seven other participants rating oral skills as *important* during their WIL training period (n = 27; 42.91%). Three other participants rate oral skills as *necessary* during their WIL training period (n = 3; 4.69%), while only one participant rates oral skills as *not important* during the WIL training period (n = 1; 1.56%).
TABLE 4.4 C24iv  Presentation skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation skills</td>
<td>3</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>38</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>4.69</td>
<td>1.56</td>
<td>17.19</td>
<td>17.19</td>
<td>59.38</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate presentation skills as very important during their WIL training period (n = 38; 59.38%). An equal number of participants rate presentation skills as either important or necessary during their WIL training period (n = 11; 17.19%). A few participants rate presentation skills as not important (n = 3; 4.69%) and only one participant rates presentation skills as not very important during the WIL training period (n = 1; 1.56%).

TABLE 4.4 C24v  Model-building skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model-building skills</td>
<td>10</td>
<td>28</td>
<td>15</td>
<td>8</td>
<td>3</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>15.63</td>
<td>43.75</td>
<td>23.44</td>
<td>12.50</td>
<td>4.69</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate model-building skills as not very important during their WIL training period (n = 28; 43.75%) with some participants rating model-building skills as necessary (n = 15; 23.44%). Ten participants rate model-building skills as not important during their WIL training period (n = 10; 15.63%), while eight participants rate model-building skills as important (n = 8; 12.50%). Only three participants rate model-building skills as very important during their WIL training period (n = 3; 4.69%).

TABLE 4.4 C24vi  Photography skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photography skills</td>
<td>12</td>
<td>18</td>
<td>16</td>
<td>9</td>
<td>9</td>
<td>64</td>
</tr>
</tbody>
</table>
Most of the participants rate photography skills as *not very important* during their WIL training period (n = 18; 28.13%), while sixteen participants rate photography skills as *necessary* during their WIL training period (n = 16; 25.00%). Twelve participants rate photography skills as *not important* (n = 12; 18.75%) with an equal number (nine) of participants rating photography skills as *important* or *very important* during their WIL training period (n = 9; 14.06%).

TABLE 4.4 C24vii  Technical skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical skills</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>15</td>
<td>47</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>3.13</td>
<td>23.44</td>
<td>73.44</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate technical skills as *very important* during their WIL training period (n = 47; 73.44%). A minority of the participants rate technical skills as *important* during their WIL training period (n = 15; 23.44%), while only two participants rate technical skills as *necessary* (n = 2; 3.13%).

TABLE 4.4 C24viii  Computer skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer skills</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>58</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>1.56</td>
<td>7.81</td>
<td>90.63</td>
<td>100%</td>
</tr>
</tbody>
</table>

Nearly all the participants rate computer skills as *very important* during their WIL training period (n = 58; 90.63%). Very few participants rate computer skills as *important* during their WIL training period (n = 5; 7.81%) and only one participant rates computer skills as *necessary* during the WIL training period (n = 1; 1.56%).
More than half of the participants rate intellectual skills as very important during their WIL training period (n = 42; 65.63%) while seventeen participants rate intellectual skills as important (n = 17; 26.56%). Four participants rate intellectual skills as necessary (n = 4; 6.25%) and only one participant rates intellectual skills as not important during the WIL training period (n = 1; 1.56%).

Many participants rate motor skills as very important during their WIL training period (n = 19; 29.69%). Eighteen participants rate motor skills as important (n = 18; 28.13%), while fifteen participants rate motor skills as necessary during their WIL training period (n = 15; 23.44%). Six participants each rate motor skills as not important or not very important (n = 6; 9.38%).
More than half of the participants rate higher thinking skills as very important during their WIL training period (n = 40; 62.50%). A further twenty participants rate higher thinking skills as important (n = 20; 31.25%). In the minority are three participants who rate higher thinking skills as necessary during their WIL training period (n = 3; 4.69%) and one participant who rates higher thinking skills as not important (n = 1; 1.56%).

Which of the following higher thinking skills were important during your WIL training period?

TABLE 4.4 C25i Knowledge

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>21</td>
<td>40</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>4.69</td>
<td>32.81</td>
<td>62.50</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate knowledge as a higher thinking skill as very important during their WIL training period (n = 40; 62.50%). Twenty-one other participants rate knowledge as important (n = 21; 32.81%), while a few participants rate knowledge as a higher thinking skill as necessary during their WIL training period (n = 3; 4.69%).

TABLE 4.4 C25ii Comprehension

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td>5</td>
<td>0</td>
<td>4</td>
<td>26</td>
<td>29</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>7.81</td>
<td>0.00</td>
<td>6.25</td>
<td>40.63</td>
<td>45.31</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate comprehension as part of higher thinking skills as very important during their WIL training period (n = 29; 45.31%), while twenty-six other participants rate it as important (n = 26; 40.63%). On a lower scale, five participants rate comprehension as not important (n = 5; 7.81%) and four participants rate comprehension as necessary during their WIL training period (n = 4; 6.25%).
TABLE 4.4 C25iii Application

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>26</td>
<td>33</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>1.56</td>
<td>0.00</td>
<td>6.25</td>
<td>40.63</td>
<td>51.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

Just more than half of the participants rate application as part of higher thinking skills as *very important* during their WIL training period (n = 33; 51.56%). Another twenty-six participants rate application as *important* (n = 26; 40.63%). Four participants rate application as *necessary* (n = 4; 6.25%) and only one participant rates application as part of higher thinking skills as *not important* during the WIL training period (n = 1; 1.56%).

TABLE 4.4 C25iv Ability to analyse

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to analyse</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>22</td>
<td>31</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>3.13</td>
<td>0.00</td>
<td>14.06</td>
<td>34.38</td>
<td>48.44</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate the ability to analyse as part of higher thinking skills as *very important* during their WIL training period (n = 31; 48.44%). Other participants rate this higher thinking skill as *important* (n = 22; 34.38%). Nine participants rate the ability to analyse as *necessary* (n = 9; 14.06%) and two participants rate the ability to analyse as part of higher thinking skills as *not important* during their WIL training period (n = 2; 3.13%).
TABLE 4.4 C25v  Ability to synthesise

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to synthesise</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>26</td>
<td>20</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>3.13</td>
<td>0.00</td>
<td>25.00</td>
<td>40.63</td>
<td>31.25</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate the ability to synthesise as part of higher thinking skills as *important* during their WIL training period (n = 26; 40.63%) while a few less participants rating this skill as *very important* (n = 20; 31.25%). Sixteen participants rate the ability to synthesise as *necessary* (n = 16; 25.00%) and two participants rate the ability to synthesise as part of higher thinking skills as *not important* during their WIL training period (n = 2; 3.13%).

TABLE 4.4 C25vi  Ability to evaluate

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to evaluate</td>
<td>1</td>
<td>0</td>
<td>9</td>
<td>28</td>
<td>26</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>1.56</td>
<td>0.00</td>
<td>14.06</td>
<td>43.75</td>
<td>40.63</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate the ability to evaluate as part of higher thinking skills as *important* during their WIL training period (n = 28; 43.75%). Also high, twenty-six participants rate the ability to evaluate as part of higher thinking skills as *very important* (n = 26; 40.63%). Nine other participants rate the ability to evaluate as *necessary* (n = 9; 14.06%) and one participant rates the ability to evaluate as part of higher thinking skills as *not important* during the WIL training period (n = 1; 1.56%).

Which of the following three domains were important during your WIL training period?
TABLE 4.4 C26i  Cognitive: recall or recognition of knowledge or the development of knowledge and intellect

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive: recall or recognition of knowledge or the development of knowledge and intellect</td>
<td>0</td>
<td>0</td>
<td>11</td>
<td>24</td>
<td>29</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>17.19</td>
<td>37.50</td>
<td>45.31</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C26i, most of the participants rate cognitive: recall or recognition of knowledge or the development of knowledge and intellect as very important to their WIL training period (n = 29; 45.31%). Other participants rate the domain as important to their WIL training period (n = 24; 37.50%). Eleven participants rate the given statement as necessary (n = 11; 17.19%).

TABLE 4.4 C26ii  Affective: including objectives describing changes in interest, attitudes and values

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective: including objectives describing changes in interest, attitudes and values</td>
<td>1</td>
<td>0</td>
<td>16</td>
<td>27</td>
<td>20</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>1.56</td>
<td>0.00</td>
<td>25.00</td>
<td>42.19</td>
<td>31.25</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C26ii, most of the participants rate affective: including objectives describing changes in interest, attitudes and values as important to their WIL training period (n = 27; 42.19%). Other participants rate this domain as very important to their WIL training period (n = 20; 31.25%). A number of participants rate the given statement as necessary (n = 16; 25.00%) and one participant rates the said domain as not important to the WIL training period (n = 1; 1.56%).
TABLE 4.4 C26iii Psychomotor: including the development of manipulative or motor skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychomotor: including the development of manipulative or motor skills</td>
<td>8</td>
<td>2</td>
<td>22</td>
<td>22</td>
<td>10</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>12.50</td>
<td>3.13</td>
<td>34.38</td>
<td>34.38</td>
<td>15.63</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C26iii, most of the participants rate psychomotor: including the development of manipulative or motor skills either *important* or *necessary* (n = 22; 34.38%) for each of these ratings. Other participants rate the psychomotor domain as *very important* to their WIL training period (n = 10; 15.63%). A number of participants rate the given statement as *not important* (n = 8; 12.50%) and two participants rate the domain as *not very important* to their WIL training period (n = 2; 3.13%).

**Which of the following motivations were important during your WIL period?**

TABLE 4.4 C27i The expectancy of success

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The expectancy of success</td>
<td>3</td>
<td>0</td>
<td>5</td>
<td>22</td>
<td>34</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>4.69</td>
<td>0.00</td>
<td>7.81</td>
<td>34.38</td>
<td>53.13</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C27i, half of the participants rate the expectancy of success as *very important* as a motivational factor during the WIL period (n = 34; 53.13%). Other participants rate the motivational factor as *important* during the WIL period (n = 22; 34.38%). A few participants rate the expectancy of success as *necessary* during their WIL period (n = 5; 7.81%). Only three participants rate the expectancy of success as motivational factors as *not important* during their WIL period (n = 3; 4.69%).

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TABLE 4.4 C27ii The value of the practical task

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The value of the practical task</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>16</td>
<td>46</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>3.13</td>
<td>25.00</td>
<td>71.88</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C27ii, more than half of the participants rate the value of the practical task as a very important motivational factor during the WIL period (n = 46; 71.88%). Other participants rate the factor as important during the WIL period (n = 16; 25.00%). A few participants rate the value of the practical task as necessary during their WIL period (n = 2; 3.13%).

TABLE 4.4 C27iii Task involvement

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task involvement</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>23</td>
<td>37</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>6.25</td>
<td>35.94</td>
<td>57.81</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.4 C27iii, more than half of the participants rate task involvement as a very important motivational factor during the WIL period (n = 37; 57.81%). Other participants rate task involvement as important (n = 23; 35.94%) and four participants rate task involvement as a necessary motivational factor during their WIL period (n = 4; 6.25%).

TABLE 4.4 C27iv Subsequent achievement

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsequent achievement</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>22</td>
<td>35</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>3.13</td>
<td>0.00</td>
<td>7.81</td>
<td>34.38</td>
<td>54.69</td>
<td>100%</td>
</tr>
</tbody>
</table>
According to Table 4.4 C27iv, more than half of the participants rate subsequent achievement as a *very important* motivational factor during the WIL period (n = 35; 54.69%). Other participants rate subsequent achievement as *important* as a motivational aspect during the WIL period (n = 22; 34.38%). A few participants rate subsequent achievement as *necessary* (n = 5; 7.81%) and two participants rate the subsequent achievement as a motivational factor that is *not important* during their WIL period (n = 2; 3.13%).

Which of the following self-motivational factors were important during your WIL period?

<table>
<thead>
<tr>
<th>TABLE 4.4 C28i Positive attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Positive attitude</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

More than half of the participants rate a positive attitude as self-motivation *very important* during their WIL period (n = 53; 82.81%), while the remaining participants rate this self-motivational factor as *important* during their WIL period (n = 11; 17.19%).

<table>
<thead>
<tr>
<th>TABLE 4.4 C28ii Selfbelief</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Selfbelief</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

More than half of the participants rate selfbelief as a self-motivational factor to be *very important* during their WIL period (n = 52; 81.25%). Other participants rate this factor as *important* during their WIL period (n = 11; 17.19%) and one participant rates selfbelief as a self-motivational factor as *not important* during the WIL period (n =1; 1.56%).
TABLE 4.4  C28iii  Selfknowledge

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selfknowledge</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>15</td>
<td>47</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>3.13</td>
<td>23.44</td>
<td>73.44</td>
<td>100%</td>
</tr>
</tbody>
</table>

More than half of the participants rate selfknowledge as a self-motivational factor as *very important* during their WIL period (n = 47; 73.44%). Fifteen participants rate selfknowledge as *important* during their WIL period (n = 15; 23.44%) and two participants rate the self-motivational factor as *necessary* during their WIL period (n = 2; 3.13%).

TABLE 4.4  C28iv  Selftrust

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selftrust</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>14</td>
<td>48</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>3.13</td>
<td>21.88</td>
<td>75.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Again, more than half of the participants rate selftrust as a self-motivational factor as *very important* during their WIL period (n = 48; 75.00%), while a number of participants rate selftrust as *important* during their WIL period (n = 14; 21.88%) and two participants rate selftrust as a self-motivational factor as *necessary* during their WIL period (n = 2; 3.13%).

TABLE 4.4  C28v  Ability to value success

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to value success</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>15</td>
<td>45</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>6.25</td>
<td>23.44</td>
<td>70.31</td>
<td>100%</td>
</tr>
</tbody>
</table>

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Once more, the majority of the participants rate the ability to value of success as a self-motivational factor as *very important* during their WIL period (n = 45; 70.31%). Fifteen other participants rate this self-motivational factor as *important* during their WIL period (n = 15; 23.44%) and four participants rate the factor as *necessary* during their WIL period (n = 4; 6.25%)

<table>
<thead>
<tr>
<th>TABLE 4.4 C28vi  Selfpride</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Selfpride</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

More than half of the participants rate selfpride as a self-motivational factor to be *very important* during their WIL period (n = 45; 70.31%). Other participants rate selfpride as *important* during their WIL period (n = 13; 20.31%) and six participants rate the self-motivational factor of selfpride as *necessary* during their WIL period (n = 6; 9.38%).

<table>
<thead>
<tr>
<th>TABLE 4.4 C28vii  Ability to value achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSTRUCT</strong></td>
</tr>
<tr>
<td>Ability to value achievement</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

More than half of the participants rate the ability to value achievement as a self-motivational factor as *very important* during their WIL period (n = 48; 75.00%). Thirteen participants rate this self-motivational factor as *important* during their WIL period (n = 13; 20.31%), while three participants rate the ability to value achievement as a self-motivational factor as *necessary* during their WIL period (n = 3; 4.69%).
### TABLE 4.4 C28viii Work satisfaction

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work satisfaction</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>12</td>
<td>50</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>1.56</td>
<td>0.00</td>
<td>1.56</td>
<td>18.75</td>
<td>78.13</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half of the participants rate work satisfaction as a self-motivational factor as *very important* during their WIL period (n = 50; 78.13%). Other participants rate this self-motivational factor as *important* during their WIL period (n = 12; 18.75%) with an equal number of participants rating work satisfaction as a self-motivation factor as either *necessary* or *not important* during their WIL period (n = 1; 1.56%).

### TABLE 4.4 C28ix Happiness

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>13</td>
<td>44</td>
<td>64</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>10.94</td>
<td>20.31</td>
<td>68.75</td>
<td>100%</td>
</tr>
</tbody>
</table>

Half of the participants rate happiness as a self-motivational factor as *very important* during their WIL period (n = 44; 68.75%), while a number of participants rate happiness as *important* during their WIL period (n = 13; 20.31%). Seven participants rate happiness to be *necessary* during their WIL period (n = 7; 0.94%).

### 4.7 INTERPRETATION OF DATA ON WORK INTEGRATED LEARNING (WIL) ACTIVITIES FOR STAFF IN YOUR PROGRAMME: Staff appointed to WIL

Construct (Likert scale): The tables below indicate the frequency (Freq.) and percentage of participants according to categories or levels of variables.
TABLE 4.5 C1 Administrative procedures concerning WIL form part of the faculty’s responsibilities

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative procedures concerning WIL form part of the faculty’s responsibilities</td>
<td>9</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>50.00</td>
<td>33.33</td>
<td>0.00</td>
<td>5.56</td>
<td>11.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C1, half of the participants *strongly agree* that administrative procedures concerning WIL form part of the faculty’s responsibilities \( (n = 9; 50.00\%) \) and six other participants *agree* with the statement \( (n = 6; 33.33\%) \). Two of the participants *strongly disagree* \( (n = 2; 11.11\%) \) and only one participant *disagrees* \( (n = 1; 5.56\%) \) that administrative procedures concerning WIL form part of the faculty’s responsibilities.

TABLE 4.5 C2 Administrative procedures concerning WIL form part of the department’s responsibilities

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative procedures concerning WIL form part of the department’s responsibilities</td>
<td>5</td>
<td>8</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>27.78</td>
<td>44.44</td>
<td>0.00</td>
<td>22.22</td>
<td>5.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C2, most of the participants *agree* that administrative procedures concerning WIL form part of the department’s responsibilities \( (n = 8; 44.44\%) \), while five other participants *strongly agree* with this statement \( (n = 5; 27.78\%) \). Four of the participants *disagree* that administrative procedures
concerning WIL form part of the department’s responsibilities (n = 4; 22.22%) and one participant strongly disagrees (n = 1; 56%) with the statement above.

**TABLE 4.5 C3** The Advisory Committee meeting held annually is enough to discuss all problems relating to WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Advisory Committee meeting held annually is enough to discuss all problems relating to WIL</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>38.89</td>
<td>22.22</td>
<td>27.78</td>
<td>5.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C3, most of the participants agree that the Advisory Committee meeting held once annually is enough to discuss all problems relating to WIL (n = 7; 38.89%). The other participants disagree with the statement (n = 5; 27.78%), while four participants are not sure that the Advisory Committee meeting held once annually is enough to discuss all problems relating to WIL (n = 4; 22.22%). An equal number of participants, namely one each, responded that they strongly agree and strongly disagree that the Advisory Committee meeting held once annually is enough to discuss all problems relating to WIL (n = 1; 5.56%).

**TABLE 4.5 C4** Workplace experience can be simulated in the absence of an active industry

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace experience can be simulated in the absence of an active industry</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>38.89</td>
<td>5.56</td>
<td>27.78</td>
<td>22.22</td>
<td>100%</td>
</tr>
</tbody>
</table>
According to Table 4.5 C4, most of the participants agree that workplace experience can be simulated in the absence of an active industry (n = 7; 38.89%). Five participants disagree with the statement (n = 5; 27.78%). Four of the participants strongly disagree with the statement above (n = 4; 22.22%) with one participant each strongly agreeing and is not sure that the workplace experience can be simulated in the absence of an active industry (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>WIL should be introduced for the first time at third-year level</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>16.67</td>
<td>11.11</td>
<td>55.56</td>
<td>11.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C5, ten of the participants disagree that WIL should be introduced at third year level for the first time (n = 10; 55.56%). Three other participants agree with this statement (n = 3; 16.67%), while two participants each either strongly disagree or not sure that WIL should be introduced at third year level only (n = 2; 11.11%) and one other participant strongly agrees that WIL should be introduced at third year level only (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior exposure to WIL (in first and second year) will enhance student progress</td>
<td>9</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>50.00</td>
<td>38.89</td>
<td>5.56</td>
<td>5.56</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 4.5 C6 indicates that most participants *strongly agree* that prior exposure to WIL (in first and second year) will enhance student progress ($n = 9; 50.00\%$). The other participants *agree* with this statement ($n = 7; 38.89\%$). One participant each has indicated that they are not sure and *disagree* that prior exposure to WIL (in first and second year) will enhance student progress ($n = 1; 5.56\%$).

**TABLE 4.5 C7 Work-based WIL should be the future strategy**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-based WIL should be the future strategy</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>38.89</td>
<td>44.44</td>
<td>5.56</td>
<td>11.11</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C7, most of the participants *agree* that work-based WIL should be the future strategy ($n = 8; 44.44\%$). Seven participants *strongly agree* that this should be the case ($n = 7; 38.89\%$). Two participants *disagree* that work based WIL should be the future strategy ($n = 2; 11.11\%$) and one participant is *not sure* that work-based WIL should be the future strategy ($n = 1; 5.56\%$).

**TABLE 4.5 C8 You have the necessary resources to execute WIL in your programme**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>You have the necessary resources to execute WIL in your programme</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>11.11</td>
<td>44.44</td>
<td>5.56</td>
<td>22.22</td>
<td>16.67</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.5 C8 points out that most participants *agree* that they have the necessary resources to execute WIL in their programme ($n = 8; 44.44\%$). Four participants *disagree* with this assumption ($n = 4; 22.22\%$), although three other participants *strongly disagree* that this is true for them ($n = 3; 16.67\%$). Two participants *strongly*
agree with the statement and one participant is not sure that the necessary resources are available to execute WIL in the programme (n = 1; 5.56%).

TABLE 4.5 C9 All students should be prepared for WIL and the workplace prior to placement

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students should be prepared for WIL and the workplace prior to placement</td>
<td>8</td>
<td>9</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>44.44</td>
<td>50.00</td>
<td>0.00</td>
<td>5.56</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C9, nine participants agree that all students should be prepared for WIL and the workplace prior to placement (n = 9; 50.00%). A further eight participants strongly agree that all students should be prepared for WIL and the workplace prior to placement (n = 8; 44.44%) and one participant disagrees with the statement (n = 1; 5.56%).

TABLE 4.5 C10 Students are prepared/coached for WIL in the department prior to placement

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students are prepared/coached for WIL in the department prior to placement</td>
<td>7</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>38.89</td>
<td>55.56</td>
<td>0.00</td>
<td>0.00</td>
<td>5.56</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to TABLE 4.5 C10, more than half of the participants agree that students are prepared/coached for WIL in the department prior to placement (n = 10; 55.56%). Seven other participants strongly agree with the statement (n = 7; 38.89%) and one
other participant strongly disagrees that students are prepared/coached for WIL in the department prior to placement (n = 1; 5.56%).

Table indicated that most participants agree that placement is the joint responsibility of academic staff and students (n = 8; 44.44%). Four participants strongly agree that this is the case (n = 4; 22.22%) as well as four other participants who disagree that placement is the joint responsibility of academic staff and students (n = 4; 22.22%). Only two participants strongly disagree that placement is the joint responsibility of academic staff and students (n = 2; 11.11%).

According to TABLE 4.5 C12, ten participants agree that the WIL period, as described by the curriculum, is sufficient for the programme (n = 10; 55.56%). Five participants disagree that it is satisfactory for the programme (n = 5; 27.78%) as well as two participants who strongly disagree with the statement (n = 2; 11.11%). Only
one participant is not sure that the WIL period as described by the curriculum is sufficient for the programme (n = 1; 5.56%).

**TABLE 4.5 C13**  Debriefing (reflection of learning) of students after attending WIL is important to identify successful candidates

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debriefing (reflection of learning) of students after attending WIL is important to identify successful candidates</td>
<td>11</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>61.11</td>
<td>27.78</td>
<td>0.00</td>
<td>11.11</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to TABLE 4.5 C13, more than half of the participants strongly agree that debriefing (reflection of learning) of students after attending WIL is important to identify successful candidates (n = 11; 61.11%). A number of other participants agree that debriefing (reflection of learning) of students after attending WIL is important to identify successful candidates (n = 5; 27.78%), while the remaining two participants disagree with the statement (n = 2; 11.11%).

**TABLE 4.5 C14**  It is necessary to visit students at the workplace during WIL

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is necessary to visit students at the workplace during WIL</td>
<td>4</td>
<td>10</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>22.22</td>
<td>55.56</td>
<td>5.56</td>
<td>16.67</td>
<td>0.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.5 C14 points out that half of the participants agree that it is necessary to visit students at the workplace during WIL (n = 10; 55.56%). Four participants strongly agree that it is necessary that it should be done (n = 4; 22.22%). Some of the other
participants disagree that it is necessary to visit students at the workplace during WIL (n = 3; 16.67%). One participant is not sure that it is necessary (n = 1; 5.56%).

The following questions/statements in TABLE 4.5 C15i to TABLE 4.5 C18xvi are rated on a scale of 1 = not important, 2. not very important, 3. necessary, 4. important and 5 = very important.

Which of the following higher thinking skills of the WIL students are important to your programme? (Staff appointed to WIL)

<table>
<thead>
<tr>
<th>TABLE 4.5 C15i Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCT</td>
</tr>
<tr>
<td>Knowledge</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

More than half of the participants rate knowledge as a very important higher thinking skill (n = 12; 60.67%). Other participants rate knowledge as important to their programme (n = 4; 22.22%) and a few participants rate knowledge as a necessary higher thinking skill of WIL students to their programme (n = 2; 11.11%).

<table>
<thead>
<tr>
<th>TABLE 4.5 C15ii Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCT</td>
</tr>
<tr>
<td>Comprehension</td>
</tr>
<tr>
<td>%</td>
</tr>
</tbody>
</table>

Most of the participants rate comprehension as part of higher thinking skills as very important to their programme (n = 15; 83.33%). Two other participants rate comprehension as part of higher thinking skills to be necessary to their programme (n = 2; 11.11%). One participant rates comprehension as important to the programme (n = 1; 5.56%).
Almost all the participants rate application as part of higher thinking skills as *very important* to their programme (n = 15; 83.33%). The other three participants rate application as part of higher thinking skills to be *important* to their programme (n = 3; 16.67%).

Most of the participants rate analysis as part of higher thinking skills *very important* to their programme. (n = 12; 66.67%). Four participants rate analysis as *important* to their programme (n = 4; 22.22%) and the remaining two participants rate analysis as *necessary* to their programme (n = 2; 11.11%).

Thirteen participants rate synthesis as part of higher thinking skills to be *very important* to their programme (n = 13; 72.22%), while four participants rate this
higher thinking skill as *important* to their programme (n = 4; 22.22%). Only one participant rates synthesis as *necessary* to the programme (n = 1; 5.56%).

**TABLE 4.5 C15vi Evaluation**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>27.78</td>
<td>11.11</td>
<td>61.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

Most of the participants rate evaluation as part of higher thinking skills as *very important* to their programme (n = 11; 61.11%). Five other participants rate this thinking skill as *necessary* to their programme (n = 5; 27.78%), while two participants rate evaluation as *important* (n = 2; 11.11%).

**Which of the following three domains of the WIL students are important to your programme? (Staff appointed to WIL)**

**TABLE 4.5 C16i Cognitive: recall or recognition of knowledge or the development of knowledge and intellect**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive: recall or recognition of knowledge or the development of knowledge and intellect</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>88.89</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C16i, nearly all the participants rate cognitive: recall or recognition of knowledge or the development of knowledge and intellect as *very important* to their programme (n = 16; 88.89%). Only two participants rate this domain as *important* to their programme (n = 2; 11.11%).
TABLE 4.5 C16ii  Affective: including objectives describing changes in interest, attitudes and values

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective: including objectives describing changes in interest, attitudes and values</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>27.78</td>
<td>11.11</td>
<td>61.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.5 C16ii indicates that most of the participants rate affective, including objectives describing changes in interest, attitudes and values as very important to their WIL training programme (n = 11; 61.11%). Another five participants rate the domain as necessary to their programme (n = 5; 27.78%), while the remaining two participants rate the given domain as important to their programme (n = 2; 11.11).

TABLE 4.5 C16iii  Psychomotor: including the development of manipulative or motor skills

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychomotor: including the development of manipulative or motor skills</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>0.00</td>
<td>27.78</td>
<td>16.67</td>
<td>50.00</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C26iii, half of the participants rate psychomotor: including the development of manipulative or motor skills as very important to their programme (n = 9; 50.00%). Five of the other participants rate this domain as necessary to their programme (n = 5; 27.78%). Three participants rate psychomotor: including the development of manipulative or motor skills as important to their programme (n = 3; 16.67%) and only one participant rates this domain as not important to the programme (n = 1; 5.56%).

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Which of the following motivations of the WIL student are important to your programme?

### TABLE 4.5 C17i  The expectancy of success

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The expectancy of success</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>22.22</td>
<td>11.11</td>
<td>61.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C17i, more than half of the participants rate the expectancy of success as *very important* to their programme (n = 11; 61.11%). Four participants rate the expectancy of success as *necessary* to their programme (n = 4; 22.22%), while two participants rate this motivation as *important* to their programme (n = 2; 11.11%). Only one participant rates the expectancy of success as *not very important* (n = 1; 5.56%).

### TABLE 4.5 C17ii  The value of the practical task

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>The value of the practical task</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>5.56</td>
<td>83.33</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.5 C17ii shows that almost all the participants rate the value of the practical task as *very important* to their programme (n = 15; 83.33%). Two participants rate this motivation as *necessary* to their programme (n = 2; 11.11%) with only one participant rating the value of the practical task as *important* to the programme (n = 1; 5.56%).
According to Table 4.5 C17iii, fourteen participants rate task involvement as very important to their programme (n = 14; 77.78%). Other participants rate task involvement as important to their programme (n = 3; 16.67%). Only one participant rates task involvement as necessary (n = 1; 5.56%).

Table 4.5 C17iv indicates that more than half of the participants rate subsequent achievement as very important to their programme (n = 13; 72.22%). Four participants rate subsequent achievement as important to their programme (n = 4; 22.22%), while one participant rates subsequent achievement as a motivational factor as necessary to the programme (n = 1; 5.56%).

**Which of the following factors help to stimulate self-confidence that is needed for a successful WIL training session? (Briefing and placement)**

Table 4.5 C18i

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1</td>
<td>3</td>
<td>9</td>
<td>2</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>5.56</td>
<td>16.67</td>
<td>50.00</td>
<td>11.11</td>
<td>16.67</td>
<td>100%</td>
</tr>
</tbody>
</table>
According to the calculated information, half of the participants rate age as a necessary factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 9; 50.00%). An equal number of participants rate age as not very important and very important factors (n = 3; 16.67%). Two participants rate age as an important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 2; 11.11%) and only one participant rates age as not important (n = 1; 5.56%).

**TABLE 4.5 C18ii  Positive attitude**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitude</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>88.89</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the calculated information, almost all participants rate a positive attitude as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 16; 88.89%) and two participants rate positive attitude an important factor (n = 2; 11.11%).

**TABLE 4.5 C18iii  Knowledge**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>33.33</td>
<td>66.67</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the calculated information, twelve participants rate knowledge as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 12; 66.67%), while six participants rate knowledge as an important factor (n = 6; 33.33%).
According to Table 4.5 C18iv, thirteen participants rate skill as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 13; 72.22%) with another five participants rating skill as an important factor (n = 5; 27.78%).

According to Table 4.5 C18v, more than half of the participants rate self-knowledge as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 11; 61.11%). Four of the remaining participants rate this element as a necessary factor to help stimulate self-confidence (n = 4; 22.22%). Two participants rate self-knowledge as an important factor (n = 2; 11.11%) and one participant rates self-knowledge as not important to help stimulate self-confidence (n = 1; 5.56%).

According to Table 4.5 C18vi, financial and emotional stability

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial and emotional stability</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>11.11</td>
<td>0.00</td>
<td>22.22</td>
<td>38.89</td>
<td>27.78</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table shows the frequency distribution of financial and emotional stability among participants.
According to Table 4.5 C18vi, seven participants rate financial and emotional stability as an important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 7; 38.89%). Another five participants rate stability as a very important factor (n = 5; 27.78%), while four participants rate financial and emotional stability as necessary to help stimulate self-confidence (n = 4; 22.22%) with two participants rating stability as not important to help stimulate self-confidence that is needed for a successful WIL training session (n = 2; 11.11%).

| TABLE 4.5 C18vii  Positive input from peers, family and the community |
|------------------------|--------|--------|--------|--------|--------|---------|
| CONSTRUCT              | 1      | 2      | 3      | 4      | 5      | FREQ    |
| Positive input from peers, family and the community | 2      | 0      | 3      | 5      | 8      | 18      |
| %                      | 11.11  | 0.00   | 16.67  | 27.78  | 44.44  | 100%    |

Table 4.5 C18viii indicates that eight participants rate positive input from peers, family members and the community as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 8; 44.44%). Another five participants rate this element as an important factor (n = 5; 27.78%). Three participants rate positive input a necessary factor to help stimulate self-confidence (n = 3; 16.67%) and two participants rate positive input from peers, family members and the community as a factor that is not important to help stimulate self-confidence that is needed for a successful WIL training session (n = 2; 11.11%).

| TABLE 4.5 C18viii  Peer pressure |
|-------------------------------|--------|--------|--------|--------|--------|---------|
| CONSTRUCT                   | 1      | 2      | 3      | 4      | 5      | FREQ    |
| Peer pressure               | 1      | 2      | 7      | 5      | 3      | 18      |
| %                           | 5.56   | 11.11  | 38.89  | 27.78  | 16.67  | 100%    |

According to Table 4.5 C18ix, seven participants rate peer pressure as a necessary factor to help stimulate self-confidence that is needed for a successful WIL training
session (n = 7; 38.89%). Five participants rate peer pressure important to help stimulate self-confidence (n = 5; 27.78%). Three participants rate peer pressure to be a very important factor (n = 3; 16.67%). Two participants rate peer pressure as a not very important factor (n = 2; 11.11%) and one participant rates the given statement as not important (n = 1; 5.56%).

### TABLE 4.5 C18x Negative input (environment)

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative input (environment)</td>
<td>2</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>11.11</td>
<td>33.33</td>
<td>16.67</td>
<td>27.78</td>
<td>11.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to Table 4.5 C18x, six participants rate negative input (environment) as a factor that is not very important to help stimulate self-confidence that is needed for a successful WIL training session (n = 6; 33.33%), while five participants rate negative input (environment) to be an important factor in this regard (n = 5; 27.78%). Three participants rate negative input (environment) as a necessary factor (n = 3; 16.67%), with two participants who rate negative input (environment) as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 2; 11.11%). The remaining two participants rate negative input (environment) as a factor that is not important to help stimulate self-confidence (n = 2; 11.11%).

### TABLE 4.5 C18x Upbringing and development

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upbringing and development</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>11.11</td>
<td>11.11</td>
<td>22.22</td>
<td>22.22</td>
<td>33.33</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the calculated information in Table 4.5 C18x above, six participants rate upbringing and development as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 6; 33.33%). An
equal number of participants rate upbringing and development as either an important or necessary factor to help stimulate self-confidence (n = 4; 22.22%). Another equal number of participants rate upbringing and development as a not important and not very important factor regarding self-confidence needed for successful WIL training (n = 2; 11.11%) each.

**TABLE 4.5 C18xi  Understanding the field of qualification**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding the field of qualification</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>11.11</td>
<td>27.78</td>
<td>61.11</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the calculated information in Table 4.5 C18xi above, more than half of the participants rate understanding the field of qualification as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 11; 61.11%). Five other participants rate understanding the field of qualification as an important factor regarding successful WIL training (n = 5; 27.78%), while only two participants rate understanding the field of qualification as a necessary factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 2; 11.11%).

**TABLE 4.5 C18xii  Language proficiency**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language proficiency</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>27.78</td>
<td>27.78</td>
<td>44.44</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.5 C18xii above indicates that almost half the participants rate language proficiency as a very important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 8; 44.44%). An equal number of participants rate language proficiency as either an important or a necessary factor to
help stimulate self-confidence that is needed for a successful WIL training session (n = 5; 27.78%).

According to Table 4.5 C18xiii above, exactly half of the participants rate transport and mobility as an important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 9; 50.00%). Four participants rate transport and mobility to be a very important factor which leads to successful WIL training (n = 4; 22.22%). Three participants rate transport and mobility as a factor that is not important to help stimulate self confidence that is needed for a successful WIL training session (n = 3; 16.67%), with one participant rating transport and mobility as not very important while another participant also rate it as a necessary factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 1; 5.56% each).

According to the calculated information in Table 4.5 C18xiv above, seven participants rate good health as an important factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 7; 38.89%). An equal number of participants respectively rate good health as a very important and necessary factor for a successful WIL training session (n = 4; 22.22% each). Two participants rate good health as a factor that is not important (n = 2; 11.11%), with one participant
who rates good health as a *not very important* factor to help stimulate self-confidence needed for successful WIL training (n = 1; 5.56%).

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>FREQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maturity</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>5.56</td>
<td>5.56</td>
<td>50.00</td>
<td>38.89</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.5 C18xvi shows that half the participants rate maturity as an *important* factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 9; 50.00%). Seven of the remaining participants rate maturity as a *very important* factor (n = 7; 38.89%) and lastly, an equal number of participants rate maturity as either a *not very important* or *necessary* factor to help stimulate self-confidence that is needed for a successful WIL training session (n = 1; 5.56%).

4.8 OVERVIEW OF THE RESPONSES FROM COMPANIES IN THE INDUSTRY IN GAUTENG, KWAZULU-NATAL AND THE WESTERN CAPE IN SOUTH AFRICA

APPENDIX A

The responses received from the industry working in the interior design field in Gauteng, KwaZulu-Natal and the Western Cape reveal that there is an insignificant difference in opinion with regard to WIL training and the preparation, placement, assessment and debriefing of students.

The following information provides an overview of the responses from the industry and will be discussed under the same categories as set out in the questionnaire:

- Company participation in WIL
- Company needs and requirements for employees
- Preparation of students prior to WIL
- Placement in a company
Assessment responsibility
- Evidence and debriefing following WIL
- General opinion.

4.8.1 Company participation in WIL (Refer to chapter 4, table 4.3 C2, page 125 and C3, page 126)

It is evident that all the companies that have participated in the research have a positive outlook on WIL. All the companies agree that WIL is important for the student as well as for the company. Both student and the industry benefit from WIL, as they learn from each other and can gain experience in different areas of interior design.

Although the financial pressure has been felt in the industry during 2012, some companies decided to not participate in the WIL programme for reasons stated, namely that it would not have been profitable to increase the workforce with the amount of work currently done by the company. The global economic crisis has also left its mark on South Africa and did not spare the industry. Money was tight all-around.

4.8.2 Company needs and requirements for employees (Refer to chapter 4 4.3 C1, page 125; C15, page 132; 4.5 C10, page 187)

As noted from the statistics, the responses received from the interior design industry were similar regarding the requirements for employees. The majority of the respondents agreed that third-year students had sufficient design skills to be utilised in a company, and that it was very important that students acquired different technical and personal skills prior to doing WIL.

Recommendation
The important skills that are necessary and important for the employee to function and gain optimal benefits from the WIL training period include design, writing, oral, technical and computer skills. The skills that are not important are presentation, model-building and photography skills. Although the latter skills can be useful, these are rated as between not important and not very important. This information is
crucial to the Department of Interior Design because the allocation of time can be changed to focus more on the important skills that will benefit the student in the future.

The industry provided valuable comments regarding the characteristics of the employee towards WIL and highlighted a few very important characteristics that it would prefer to observe in the WIL employee during training. These positive characteristics included punctuality, diligence, trustworthiness, helpfulness, creativity and leadership.

The negative characteristics included, inter alia, being a busy-body, being lazy and being a liar. The workable characteristics that are tolerable in the workplace and industry are intelligence, independence, anxiousness and insecurity.

4.8.3 Preparation of students prior to WIL (Refer to Chapter 4, 4.3 C24, page 137 and 4.4 C8 page 160)
According to the research outcomes, the industry welcomed preparation of the student by the institution prior to starting WIL. The fact that the student was familiar with the company profile, and had studied the operation and function of the selected workplace were advantageous to the industry and the company alike. The writing and distribution of the curricula vitae to the different companies provided the employer with background information regarding the employee before the commencement of WIL.

Preparation in addressing aspects such as labour laws, sexual harassment and conflict management is necessary to the industry, company and the student, and to put all involved at ease in that they know their rights and how to interact with one another.

4.8.4 Placement in a company (Refer to chapter 4, 4.3 C13, page 131 and 4.3 C14, page 131)
According to the research findings, placement of a student in the industry requires time and knowledge from all concerned, namely the institution, the student as well as the company. The companies put their trust in the institution to ensure that the
employee placed is the correct candidate for the WIL position and would complement the work they deliver. The company, in turn, has to be in contact with the institution and student, and by means of an interview, must ensure that the correct candidate is selected for the WIL position.

4.8.5 _Assessment and monitoring responsibility_ (Refer to chapter 4, 4.4 C12, page 162 and 4.3 C7, page 128)

The feedback from the industry has indicated that there is consensus regarding the assessment and monitoring responsibility of students. The participants have all agreed on the matter, namely that the majority of the assessment must be conducted by the institution or university. Various companies are reluctant to do assessments, but are prepared to take responsibility for monitoring the student during WIL.

It is concluded that the supervisor is prepared to monitor the student and will assist with assessment during the student’s WIL period at the company by completing the workbook of the student. The content of the workbook assists the institution and the student to understand the strengths and weaknesses of the training.

The companies all seem positive towards WIL, student placement and assessment. They are willing to accept more responsibilities, namely with the process of assessment during WIL, setting up of curricula for WIL in collaboration with the universities and providing feedback regarding the WIL period by completing the workbook.

4.8.6 _Evidence and debriefing following WIL_ (Refer to Chapter 4, 4.3 C13, page 131)

The industry has indicated that it is keen to receive feedback from the university after the debriefing session with the WIL students in order for them to respond to the weaknesses and highlights pointed out by the students. All companies have indicated that they are willing to return evidence with the students for the debriefing sessions following WIL.

4.8.7 _General opinion_ (Refer to Chapter 4, 4.3 C30i, page 154)
The industry’s opinion on WIL in general is that there is a need for students to be enthusiastic to work as interior designers in their selected field of study. The industry prefers students who can benefit their companies. They perceive the WIL period as a challenge to their participation and truly want to assist with the development of the students placed at their companies.

4.9 OVERVIEW OF THE RESPONSES OF STUDENTS IN GOVERNMENT-SUBSIDISED HIGHER EDUCATION INSTITUTIONS (ONE COMPREHENSIVE UNIVERSITY AND THREE UNIVERSITIES OF TECHNOLOGY) IN GAUTENG, KWAZULU-NATAL AND THE WESTERN CAPE IN SOUTH AFRICA

APPENDIX B
The responses from the students at government-subsidised higher education institutions in Gauteng, KwaZulu-Natal and the Western Cape working in the interior design field indicate very clear differences in opinion with regard to WIL training as well as their preparation, placement, assessment and debriefing.

The following information provides an overview of the responses from students. It will be discussed under the same categories as set out in the questionnaire:

- Student participation in WIL
- Student needs and requirements for employees
- Preparation of students ahead of WIL
- Student placement in a company
- Assessment responsibility
- Evidence and debriefing following WIL
- General opinion.

4.9.1 Student participation in WIL (Refer to chapter 4, 4.5 C7, page 186)
With regard to student participation during WIL, the research results have indicated a 50% positive and a 50% negative response. Half of the participants agreed that the time they spent at a company was adequate to make a decision for specialisation,
and most of them felt they would be able to learn from observation as well. The responses regarding practical use of the WIL guide, given to both students and the industry to read and complete, also differed in a similar way. Half of the respondents agreed with the statement and the other half were of the opinion that the WIL guide was neither user-friendly nor helpful.

Recommendation
Review of the WIL guide needs to be considered in all institutions.

4.9.2 Student needs and requirements for employees (Refer to chapter 4, 4.5 C8, page 186 and 4.5 C11, pages 188)

According to the analysis of the data, the skills that are necessary to ensure that students are ready for WIL include business practice skills, design skills, writing skills, oral skills and presentation skills. Technical, computer, motor and intellectual skills are all rated very high and the students believe that these skills are necessary to make a good impression, and enable them to add value to the industry and company where they are placed.

Recommendation
Skills such as model-building and photography, and in some cases graphic design, do not appeal to the students. Higher education institutions like the TUT should reconsider whether these skills should still form part of the course in the future.

According to the outcomes of skills for the Interior Design profession, intellectual, cognitive and motor skills are rated high among employers.

Recommendations
The emphasis on skills development in South Africa, the industries and workplaces should be investigated thoroughly and the essential skills integrated into the Interior Design qualification programme. It should also form part of the preparation cycle for WIL.

4.9.3 Preparation of students prior to WIL (Refer to chapter 4, 4.5 C9, page 187)
Students are all familiar with the use of the Internet, and prepare themselves by obtaining information and profiles of companies before making a decision regarding placement.

**Recommendation**

An interior design industrial database for access by students is an urgent need which has to be compiled and updated by the respective institutions.

### 4.9.4 Student placement in a company

The responsibility for the placement at a company lies with the student. This information is repeatedly brought to the students’ attention from the first year of study. During this short period, students have ample time to get to know, to research and to explore the possibilities at different companies. When a placement company has been identified, students are provided with a professional letter from the sending institution for submission to the company in order to commence with negotiations. Subsequently, the preparation for WIL commences and forms part of the curriculum of the course. Students consider preparation before WIL as very important and participate in all preparation sessions.

### 4.9.5 Assessment responsibility (Refer to chapter 4, 4.5 C18xii, page 200)

From the analysis, the deduction is made that the assessment of the WIL training in the workplace as well as evidence provided to the institution for assessment seems to be very important. Not all students have been positive about visits from their WIL coordinator during their WIL training. Half of the students feel that it is necessary for a visit so that the practicality of the workplace can be assessed.

**Recommendation**

It is recommended that visits and company assessments form part of WIL and the assessment process in future.

### 4.9.6 Evidence and debriefing following WIL (Refer to chapter 4, 4.5 C13, page 189)
Although the companies provide evidence of work done by the students during WIL, followed by a written report from the supervisor, the students still maintain that company visits weigh more and lend more credibility to the qualification and subject. The evidence and debriefing session marks the end to the WIL period and is characterised by a positive attitude amongst students. To the students it is a time of pride and joy to share the evidence of the work completed.

4.9.7 General overview
According to the information gathered from the questionnaire analysis, it is clear that the majority of students doing WIL training are attached to the institutions in Gauteng, namely those in Johannesburg and Pretoria. The qualification pattern has indicated that most students are in their third year of study and have completed their WIL training; hence, they have been able to easily answer the questionnaire.

4.10 OVERVIEW OF THE RESPONSES OF ACADEMIC HEADS OF DEPARTMENTS (HOD'S) IN GOVERNMENT-SUBSIDISED HIGHER EDUCATION INSTITUTIONS (ONE COMPREHENSIVE UNIVERSITY AND THREE UNIVERSITIES OF TECHNOLOGY) IN GAUTENG, KWAZULU-NATAL AND THE WESTERN CAPE

APPENDIX C
The responses from the academic heads of departments (HoD's) in government-subsidised higher education institutions (comprehensive universities and universities of technology) in Gauteng, KwaZulu-Natal and the Western Cape show very little difference in opinion regarding WIL training as well as the preparation, placement, assessment and debriefing of students.

The following information provides an overview of the responses from HoD’s and it is discussed under the same categories as set out in the questionnaire:

- Academic programme: participation in WIL
- Academic programme: needs and requirements
- Academic programme: preparation of students prior to WIL
• Academic programme: role in placement
• Academic programme: role in assessment responsibility
• Academic programme: role in evidence and debriefing following WIL
• Academic programme: general opinion.

4.10.1 Academic programme: participation in WIL (Refer to chapter 4, 4.5 C14, page 189)
The responses received regarding administrative procedures are all very positive with the participants indicating that it is the responsibility of the programme co-ordinator as well as the faculty co-ordinator to be in charge of the administrative duties and the procedures concerning WIL.

The resources, for example adequate staff to help with the preparation and administration procedures before the commencement of WIL, the administration for placement simulation have all received a positive rating. It seems that all the universities are on par with regard to duties, knowledge and procedures in making WIL a great success for the industry as well as the students.

4.10.2 Academic programme: needs and requirements with preparation
(Refer to chapter 4, 4.5 C12, page 188)
According to the analysis, all the universities have agreed that their needs and requirements for WIL can be discussed during their annual advisory committee meeting with industry representatives in attendance.

The universities all differ in their responses as to at what level WIL should be incorporated into the curriculum. Some universities are of the opinion that students in their first and second year are ready to commence with WIL participation, while others do not agree and are of the opinion that WIL can only be incorporated on the third-year level of the programme. Information received from the interior design industry is that all academic institutions that present Interior Design programmes should agree that WIL is to be the future strategy. This answer is very positive and complements the decision made by the Department of Higher Education to incorporate WIL in ALL programmes offered at universities. (Refer to the Strategy for
Co-operative Education. Higher Education Development and Support. TUT October 2013)

**Recommendation**
The decision on how long the WIL period should be, has been left for each institution to decide but all agreed on the 40 credits that should be awarded to the WIL programme in future. It is recommended that the 40 credits be maintained for the qualification. It is also recommended that the WIL period be continued at the discretion of each institution.

4.10.3 Academic programme: preparation of students prior to WIL (Refer to chapter 4, 4.5 C11, page 188)

On the subject of preparation, there is a definite divide in thoughts between universities and academic programmes. Most of the participants are of the opinion that preparation for WIL is a necessity, while some of the participants are of the opinion that preparation is not necessary. The reason is that students can do WIL in their own time and in a place of their choice without the institution’s participation or involvement. These students do not receive any help from their Interior Design programme and are not prepared before commencing with WIL.

**Recommendation**
What is concerning about this issue is that these students are not monitored and workplaces are not approved by a higher education institution; therefore, qualifications are obtained without the approval and correct procedures set by government, the Department of Higher Education and the higher education institution itself. It is recommended that the students are monitored and workplaces are approved by a higher education institution.

4.10.4 Academic programme: role in placement (Refer to chapter 4, 4.5 C14, page 189)

The statement, *Placement is a joint responsibility of academic staff and students*, elicited a very positive response with participants agreeing unanimously that students and staff will work together to find the correct placement to complete their WIL training.
**Recommendation**

In future, visits to the companies should form part of the approval of placement procedures to ensure that the students receive the best training according to the stipulation in the workbook. If there is a lack of placement in the interior design industry, students should be assisted with simulation on campus (incubator system).

4.10.5 **Academic programme: role in assessment responsibility** (Refer to chapter 4, 4.5 C14, page 189)

It is the role and task of the academic staff attached to a higher education institution to visit the students at their workplace to ensure that the workplace is suitable and technically appropriate to provide the students with the maximum exposure to the Interior Design profession. Students will be orally assessed during the visit from the institution to the workplace. Collaboration between the supervisor and the co-ordinator will take place and matter relating to WIL will be discussed.

**Recommendation**

A visit to the students’ workplace should form part of the assessment procedure.

4.10.6 **Academic programme: role in evidence and debriefing following WIL**

(Refer to chapter 4, 4.5 C13, page 189)

The design project evidence supplied by the students upon their return from WIL serves as part of the assessment procedure. The portfolio of evidence is the practical component of the debriefing session, and together with the theoretical work and oral presentation it forms the final assessment of WIL, confirming the pass grade necessary to complete the qualification.

**Recommendation**

This procedure should be maintained as a way towards assessment and debriefing the students.

4.10.7 **Academic programme: general opinion**
On the information relating to thinking skills and cognitive skills as motivating factors that students need to become properly educated interior designers, as well as regarding factors that help to stimulate confidence in students, the participants had diverse opinions and either agreed or disagreed. Although these answers could be a personal opinion, many of the given examples were taken as a necessity and are important and have to form part of training, teaching and learning in the interior programme. A few unnecessary skills were pointed out and will be excluded from the content curriculum of the WIL programme.

4.11 SUMMARY

Through statistical techniques, interpretation and a brief explanation of the given data, results from different respondents were analysed to find a formal solution and to gain a better understanding of work integrated learning (WIL) for Interior Design. The interpretation of data was done, based on biographical and demographic information received from the employers, supervisors, human resources; students who had completed WIL as well as academic and work integrated learning (WIL) staff at the TUT.

The interpretation of data also included work integrated learning (WIL) activities in the programme, in the company as well as during the WIL training period. Cronbach Alpha reliability values were recorded. The tables below provide the frequency and percentage of participants according to categories or levels of variables. The construct used is the Likert scale, a five-point scale where 1 = strongly agree and 5 = strongly disagree.

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Not sure</th>
<th>Disagree</th>
<th>Strongly disagree</th>
<th>FREQ</th>
</tr>
</thead>
</table>

The construct depicted below was then reversed in certain questions, using a construct with a five-point scale where 1 = not important and 5 = very important.
A frequency analysis was performed to determine the sub-groupings. Differences were analysed and discussed.

According to the empirical data, the following important deductions can be made from the findings with regard to biographical and demographic information:

- The majority of supervisors or employers in companies participating in this study hold a degree or diploma. They also hold the position of design coordinator for the company, and have between four and nine years’ experience in the same company. The majority of companies are situated in Johannesburg and Pretoria with a staff ratio of four to five designers per company.

- Although most companies specialise in interior design, their work also covers different design fields; for example, office design and retail design.

- The majority of academic heads of departments participating in this study in government-subsidised higher education institutions have between nine and ten or more years’ work experience.

- The majority of the institutions are situated in the Gauteng province. The number of staff working in an Interior Design programme is nine and more. Although only one staff member is or perhaps two members are allocated to WIL per programme, other staff members are available to assist where needed.

- The majority of students in government-subsidized higher education institutions and who have participated in this study, are busy with their third year of study, had no work experience, but have completed WIL. They are distributed between Gauteng, KwaZulu-Natal and the Western Cape. The majority of students have completed their WIL in Johannesburg, covering the interior design, office design and technical drawing design fields.

- The majority of the participating students have received work integrated learning for several weeks or more per annum. In isolated instances, students have been allowed to seek work experience that does not fall under
the supervision of the university; however, the institution has accepted the training as prerequisite for the formal Interior Design qualification based on the proof of design work done for the company.

4.12 CONCLUSION

This chapter contains the findings from the accumulated survey with regard to work integrated learning as well as biographical and demographic information. The analysed information will assist in the design process of the proposed new micro-management model for WIL for the Interior Design qualification programme.

The structuring of the new WIL management model will be discussed in detail in the next chapter and provide a better understanding of the layout, association with, relevance to each division of the model as well as the priorities that are linked to each individual division.
5
THE DEVELOPMENT OF A MANAGEMENT MODEL FOR WORK INTEGRATED LEARNING FOR THE INTERIOR DESIGN QUALIFICATION (Micro level)

5.1 INTRODUCTION

According to Vardi (2009:1), increasing demands on academic work have resulted in many academics working long hours and expressing dissatisfaction with their working conditions. These concerns have led to a number of faculties and universities adopting workload allocation models to improve job satisfaction and to manage workloads better. A confluence of factors appears to underlie this increasing load. Within a highly competitive environment, these factors have increased demand on academics in research, teaching and administration. Concerns about staff well-being, motivation and work performance have compelled faculties and universities around the world to consider how they might better manage the work and load of individual staff (Vardi, 2009:2).

To manage the WIL workload of staff in the Interior Design programme and taking into consideration the new development of a strategy for co-operative education at TUT (2012:17), a new management model for WIL for the Interior Design qualification at TUT (Faculty of Arts) is an additional benefit to be developed. This model will be less complex and more transparent so that discontent and problems do not impact disproportionately on staff, students and managers at workstations for WIL. To support the new Interior Design programme management model for WIL for the Interior Design qualification at TUT (Faculty of Arts), other relevant societies, the Southern African Society for Co-operative Education (SASCE), Department of Education (DoE), the revised Higher Education Qualification Sub-Framework (HEQSF), South African Technology Network (SATN), the new Strategy for Co-operative Education at TUT (2013) and other management models have to be investigated. This investigation will provide background information for designing the new Interior Design management model for WIL.
Some of the students’ outcomes will be dependent on both the theoretical classroom study periods and the more practical work integrated learning phases. If work integrated learning (WIL) is an integral part of a student’s qualification, the expectancy of learning allocated to WIL should be kept relevant to the requirements of the qualification. In this regard, the onus of finding placement for students in WIL programmes will be on the institution. It is a requirement that these programmes be suitably structured, well-supervised and assessed fairly (DoE, 2007:9).

This statement generated the following from the South African Technology Network, a subdivision of Higher Education South Africa (HESA) representing the interests of universities of technology. The work integrated learning research unit (WILRU) was commissioned to write a position paper on WIL. In this position paper, WILRU had a concern regarding the HEQF formation of WIL and suggested that it be described as “an educational approach that aligns academic and workplace practices for the mutual benefit of students and workplaces” (Engel-Hills et al., 2008). The position paper then suggested a programme for WIL be made up of work-directed theoretical learning, problem-based learning, project-based learning and workplace learning with possibilities for many hybrid combinations.

5.2 THE SOUTHERN AFRICAN SOCIETY FOR CO-OPERATIVE EDUCATION (SASCE)

According to Skosana (2012:1), SASCE promotes the integration of academic studies with quality work integrated learning. The latter facilitates work integrated learning placement opportunities by producing work-ready graduates and promoting employment and job creation. SASCE intends to accomplish this by providing quality hands-on and critical skills training, as well as addressing scarce and common skills via a commitment to WIL.

“The advantage of co-operative education is that students will be able to graduate with the competitive accredited work experience related to their qualification disciplines,” said Shakeel Ori, President of SASCE (2012).
With reference to the SASCE constitution (2007), the mission states that they foster the practice of co-operative education by facilitating work integrated learning placement opportunities and thereby producing work-ready graduates, employment, job creation, placement and learner support. In addition to WIL, it influences the skills development and focus on career planning opportunities such as masonry, carpentry, plumbing, welding etc.

5.3 THE REVISED HIGHER EDUCATION QUALIFICATION SUB-FRAMEWORK

According to the revised Higher Education Qualification Sub-Framework HEQSF) (2013:11), some qualifications will be designed to integrate theory and practice through the incorporation of work integrated learning (WIL) into the curriculum. In most cases WIL forms a fraction of the interior design vocational programme and may be incorporated into programmes at all levels of the HEQSF. In the HEQSF, WIL may take various forms, including simulated learning, work-directed theoretical learning, problem-based learning, project-based learning and work-place-based learning (Government Gazette, August 2013, no 36721:48).

The selection of appropriate forms of WIL depends on the nature and purpose of the qualification type, programme objectives and outcomes, the NQF level at which the WIL component is offered, institutional capacity to provide WIL opportunities, and the structures and systems that are in place within professional settings and sites of practice to support student learning. According to the HEQSF (2013), “WIL is a structured part of any qualification where the volume of learning allocated to WIL should be appropriate to the purpose of the qualification and to the cognitive demands of the learning outcome and assessment criteria contained in the appropriate level descriptors” (Government Gazette, August 2013, no 36721:49).

Furthermore, it states: “The entire WIL component or any part thereof takes the form of workplace-based learning. It is the responsibility of institutions that offer programmes that require credits for such learning to help and approve the placing of students at appropriate workplaces. Such workplace-based learning must be appropriately structured, properly supervised and assessed” (HEQF/SAQA, 2013).
The Deputy Minister of the Department of Higher Education and Training (DHET, 2012), presented the Annual Performance Plan and Budget for 2012. During this presentation, the acting Deputy Director General: Skills Development highlighted the targets for qualified artisans to graduate from the system. There will also be an emphasis on artisan training with credible institution mechanisms for skills planning to support an inclusive economic growth path. Support was also to be increased to university students with focus on African and woman students. This was linked to the performance agreement and signed by the minister. The acting DDGI noted that these targets had been met and were expected to be achieved.

The acting DDG then highlighted the targets for workplace exposure and work integrated learning, as defined by the skills accord signed by the Department and industry. The National Skills Development Strategy was developed to manage all skills development and training within South Africa. SETA would need to align its strategic plans to this strategy and sign service level agreements to ensure that it responds to the strategic needs of the country (DHET, 2012). The acting DDG (2012) mentioned that R2.3 billion was earmarked for 400 priority projects nationwide. Finally, he highlighted the current regulatory frameworks that were being gazetted and developed to ensure greater efficiency and guidance within the training and skills development sectors. This would address the issue of current fragmentation within the artisan training sectors. Forums were established to ensure regular engagements between the Department and SETA.

The Department of Higher education and training in the presence of the Deputy Minister, (DHET,2012/2013), provided a brief overview of the Annual Performance Plan and budget for 2013/2014. During the presentation the Deputy Minister highlighted the strategic objectives and identifying the six programmes of Administration, Human Resource Development, Planning and Monitoring Coordination, University Education, Vocational and Continuing Education, and Training and Skills Development. He also noted that there were learners being unable to find work placement to complete their qualification. The National Skills Fund (NSF) will
aid and support projects for these students. The Department would have to serve a growing number of young people and adults by providing entry points and pathways into the learning system and ensuring that quality learning takes place. The strategic objectives of the Department to address the need to expand access to education and training for the youth, capacitate institutions, increase the number of students successfully entering the labour market upon completion of training, and expanding research, development and innovation capacity for economic growth and social development.

### 5.5 THE SOUTH AFRICAN TECHNOLOGY NETWORK (SATN)

According to the policy statement of WIL in the HEQC (2012) document, some qualifications have for many years used WIL as an alternative form of learning. Additional and variable demands have been made on the UoT’s, staff and students as well as the workplaces. Some of these demands include credit-bearing WIL modules that have to comply with standard quality assurance and fit into the co-operative education policy of the university. The HEQC needs to provide more detailed development guidelines for WIL (SATN Position Paper on WIL, 2007).

### 5.6 NEW STRATEGY FOR CO-OPERATIVE EDUCATION AT TUT

A previous Strategy for Co-operative Education, dated 23 March 2006, (hereinafter referred to as “the Post-Merger Strategy”) was formulated after the TUT merger. Since the co-operative education outlook and perspective of each of the merging institutions have been incongruent, the post-merger strategy has attempted to take their diverse viewpoints into account, compromise where necessary, and reach consensus on an acceptable way forward.

Unfortunately, practical implementation of the post-merger strategy on WIL, over the past few years has unmistakably proved that it fails to meet TUT’s WIL requirements. Consequently, the Academic Committee has recognised the need to appoint a task team to thrash out the various issues involved and generate a proposal for the structural alignment of co-operative education at TUT. Numerous weaknesses of the
current co-operative education system at TUT were highlighted. Inputs towards a draft revised strategy were provided.

According to the new Strategy for Co-operative Education (2012:3), WIL at TUT should ideally be structured as follows:

**WORK-INTEGRATED LEARNING (WIL)**

What should WIL look like at TUT?

Clinical placements

Internships

Service Learning

Simulations

Professional Teaching Practice

May also include:

- Project-based Learning
- Problem-based Learning
- Workplace Learning
- Work-directed theoretical learning

**Clinical placements**

This refers to the WIL component in qualifications in the health sciences. WIL forms part of the curriculum and is a requirement for obtaining the qualification. During such training, the student is exposed to the real clinical work environment. Included are fields such as biomedical technology, physiotherapy, nursing, orthotics and prosthetics, and environmental health and clinical technology.

During clinical placements, students have the opportunity to integrate theory and practice with work experience and to be employed.

**Internships**

This refers to periods of study-related service or employment, primarily for the purpose of gaining experience. Internships are normally associated with the health sciences and accounting, but can be done in any field of study. Some
Interns are paid and others are not. Organisations often use the term "internships" when referring to WIL.

**Service learning**

This is an applied learning, which is directed at specific community needs and integrated into the academic programme and curriculum. It could be credit-bearing and assessed, and may take place in a work environment (for example, nursing sciences).

The development of the new Interior Design management model for WIL will slot into **Simulations**, as described below. The new Interior Design management model for WIL will be work-based **on-** and **off-campus**.

**Simulation**

This is when WIL (non-work-based) is performed in a simulated environment, either on or off-campus. The workplace environment and its applications are simulated successfully. This may be particularly applied in the health sciences qualifications (such as biomedical technology) or the arts, economics, information technology and engineering sciences (for example, P1). Learning takes place in an equipped environment, on or off-campus.

**Professional teaching practice**

This refers to the WIL component of all levels of the professional teaching qualifications, such as pre-primary, primary, secondary and tertiary level teaching qualifications. Students are required to do classroom practice, which is assessed by supervisors and the university.

As mentioned under 5.6 on page 220 in the work integrated learning diagram proposed for TUT, the following four possible WIL areas are indicated in **RED**. Project-based learning (PJBL), problem-based learning (PBL), workplace learning (WL) and work-directed technical learning (WDWL) form well-described foundations for the development of an Interior Design management model and will, therefore, be added to the development of the new management model for WIL in Interior Design for the same qualification.
| Project-based learning (PJBL) | PJBL combines problem-based learning (PBL) and workplace learning in that it brings together intellectual inquiry, real-world problems and student engagement in relevant meaningful work. **PJBL requires students to develop and demonstrate essential skills and knowledge, and to draw on multiple disciplines to solve problems and deepen their conceptual understanding** (CHE, 2011:75).

PJBL may also be applied to WIL in the qualification, such as in engineering and management sciences. |
| Problem-based learning (PBL) | PBL is used to describe a range of pedagogic approaches that encourage students to learn through structured exploration of a **research- or practice-based problem**. In such cases, students work in small self-directed groups to define, carry out and reflect upon a task (that is usually related to or based on real-life problems. This approach may also be used in WIL as part of a qualification; for example, in the health sciences (CHE, 2011:74). |

**DIAGRAM 5.1 WORK INTEGRATED LEARNING (WESSELS, 2013)**

According to the above information, the management model for WIL for the Interior Design qualification at TUT (Faculty of Arts) will be developed in line with the new Strategy for Co-operative Education (WIL) at TUT.

**FACULTIES TO ESTABLISH A CO-OPERATIVE EDUCATION INFORMATION CENTRE**

In designing a co-operative education system for TUT, a fundamental principle to bear in mind is the need for a functional structure that offers one-stop and equitable service delivery to 1) Staff and students in all faculties and on all campuses; and 2) employers.
To this end, each faculty should establish its own co-operative education information centre. The recommended components of such a centre are as follows:

**WIL section**
- Faculty WIL Co-ordinator
- Administrators

**Employability**
- Faculty's Employability Practitioner (EP)
- Administrators

**Reception area**
- Administrator/s information and contract with industry

**Computer workstations for**
- Tables with computer and Internet access

**What type of services and/or information would the co-operative education information centre offer students, staff members and employers?**

It is with this question in mind that an amalgamation of the abovementioned centre and the proposed Interior Design WIL incubator centre, as described in the management model for the Interior Design qualification, can work together and establish a well-managed WIL centre for both the Faculty of Arts, the Visual Communication Department, the industry (one of the role players) as well as TUT's employability staff. This amalgamation of different centres can be an asset to the co-operative education information centre at TUT. (The Interior Design incubator for WIL will be diagrammatically illustrated and discussed under diagram 5.9 on page 310 in this chapter).
According to the new strategy for co-operative education at TUT (2012:3), proposed by Dr Wessels, the following information is essential for students and staff to know where to find this kind of information:

WIL-related information and services

Information and services relating to the five (5) stages of (WIL)

- **Preparation** of students to be prepared for their time working in the industry.
- **Placement** of students in search of a company.
- **Monitoring** of students during WIL – visits from the WIL co-ordinator to ensure proper training and a well-equipped workstation.
- **Assessment** of students during WIL.
- **Debriefing** when students return from WIL and have to reflect on their work experience and provide evidence to their peers of their work done in the industry.

This proposed building to house the abovementioned should be the branding of the Faculty of Arts in the sense that this structure (wooden building) will be the trademark (per faculty) for the WIL employment incubator, and should include offices and infrastructure to support the WIL functions. These functions will include: local and international placement, WIL guides (issue and receipt), access to an employer database, academic advisory committees, partnerships, certification of workstations and transport to visit students.

Graduate recruitment and employability – related information and services
This includes information and services rendered in relation to the following:

- Employability online systems
- Management of graduates
- Interview cubicles for employers
- Partnership arrangements
- Recruitment drives
- CV preparation, portfolio compilation, work ethics, professionalism in the world of work, career planning, employment search strategies, interview preparation, etc.
- Career fairs
- Employer networking functions
- Internship arrangements
- SETA arrangements.

Miscellaneous information and services

Additional services

- Employer-student database for access to students and staff
- Arrangements for WIL, graduate recruitment and employability
- Online service for WIL, graduate recruitment and employability
- ITS administration
- Co-op Ed ITS subsystem
- Blackboard/myTUTor administration
- Materials management (for example brochures, pamphlets, DVDs, web-management, document management)
- SAGRA and SASCE / WACE information management.

The abovementioned proposed models for recruitment and employability was discussed and will form part of the WIL management model for the Interior Design qualification.
5.7 OTHER WIL MANAGEMENT MODELS

It is important to have a background of other work integrated learning management models to analyse and envisage the functionality, efficiency and effectiveness of the different WIL management models in their different higher education institutions. The background information can assist the researcher in the development of a management model for WIL for the Interior Design qualification.

The discussions of the five models that follow are a direct version of the WIL model examples that have been published from different sources, practitioners and authors. Each of these models has influenced the management model for WIL for the Interior Design qualification.

5.7.1 MODEL 1 Work integrated learning process model

Van Rensburg, Rheeder and Groenewald (2011) are of the opinion that the model sketched below extends well beyond curriculum design and learning development. The model indeed reflects a comprehensive work integrated learning process, including the planning, design, development, implementation, management and quality assurance of a qualification.
Phase A: The gathering of data for the design/revision of a programme and for future placements of students for prerequisite work integrated learning (WIL)

The data gathering involves a comprehensive context analysis of all factors that may influence the programme, which, among others, include the appropriate statutory, professional and/or vocational bodies. A clear statement of the desired Knowledge, Skills, Attitudes and Analysis (KSAA) of graduates is the aim of the needs analysis and/or survey of the authentic industry needs.

The following are taken into consideration:
The statutory context; e.g., legislation and regulations
Policies
Observation of the appropriate protocol and level/s of liaison
Day 1 competencies expected of graduates by the industry
Benchmarking against international and local best practices and standards
Identification of potential hosts employers of students that need to complete WIL.

Phase B: Programme design, including work integrated learning module/s design (or re-design)

1. Programme design
   - Project plan for the programme as a whole
   - Contextual Analysis, Skills and Knowledge (SKAA) / Day 1 competencies / overarching core ideas / main themes
   - Curriculum information – outcomes, assessment criteria, etc.
   - Coherent programme structure – “design down”
   - Identify which part/s are best learned through real-life work experience or service learning.
   - General assessment, learning and teaching, and a quality assurance approach.
   - Templates of standard documents used at the educational institution / in the country.

2. Module design
   - Project plan for each module of the programme
   - Contextual analysis – Day 1 module competency, etc.
   - Curriculum information – outcomes, assessment criteria, module form, etc.
   - Module assessment, learning and teaching including mentoring, quality assurance including monitoring
   - Industry / workplace mentors (assessment and training of mentors)
   - Develop formal agreements including commitment from mentors and training
• Detailed assessment plan (for example, portfolio of evidence requirements / WIL guide), learning and teaching resources (WIL guidelines for students, mentor materials / guidelines)
• Posing the appropriate questions that would unlock learning from experience
• Developing resources
• Develop manuals for industry assessors.

Phase C: Pre-registration and registration

The emphasis of this phase is on alerting students upfront about compulsory WIL; the nature thereof; enabling the recognition of prior learning (RPL), where appropriate or feasible; and identification of students in need of placements for WIL.

Phase D: Securing placements of students for compulsory WIL and finalising arrangements with hosting employers

This phase needs proper structure and a database, listing host organisations and the available placement opportunities. Identification of host employers and the building of partnerships should be driven by the academic department.

Phase E: Implementing the WIL module/s – learning and assessment in the workplace

Successful implementation comprises several elements:
• Criteria to be complied with in order to be a mentor; for example, appropriate registration with professional / statutory body
• Formalised mentorship agreement, including incentives; for example, points for mentoring new entrants and/or remuneration
• Training of mentors on, among others, assessment through video conferencing, online or workshops
• An assigned mentor (workplace supervisor) and orientation of students (house rules / code of conduct)
• Cost implications of preventative inoculations; for example, aspects of animal health WIL) and potential liabilities
• Professional guidance (spectrum of soft skills), mentor training and mentor guidelines
• Mentor involvement in assessments and student presentations of completed projects and/or portfolios of evidence
• Proper IT and administrative support in College for tracking of students
• One WIL co-ordinator per department
• Allocation of students to lecturers
• Monitoring of students and employers
• Conditions and criteria with regard to recognition of prior learning (RPL).

**Phase F: Quality assurance of WIL in the programme**

The sixth phase feeds back into the first phase, enabling continuous revision and improvement.

5.7.1.1 Important information taken from above model

• Develop formal agreements that involve the student, the institution or department and the industry. In this agreement, it is important to include all the commitments from mentors during the training sessions
• The re-development of a new extended WIL policy in TUT, that incorporates the Interior Design management model for the Interior Design qualification environment, and the planned collaboration with the interior design industry
• Developing resources, placements and workstations off- and on-campus, receive work from the industry and ensure the allocation of students to the projects, as well as have computer and technical appliances available to complete the assignments
• Proper IT and administrative support in the incubator and department for tracking of students
• Allocation of students to lecturers, in particular if there are more than eight students to monitor per person.

Identification of host employers and the building of partnerships should be driven by the academic department (Van Rensburg, Rheeder & Groenewald, 2011).
5.7.2 **MODEL 2 Three-prong implementation plan, workplace learning and/or simulations**

According to Learning In Vivo, (2011) the point of departure ought to be the institutional Team Approach Framework to Curriculum and Learning Development (TAFCLD). This framework specifies with regard to both; 
Step 1: Academic review and/or feasibility study; and 
Step 2: Curriculum planning.

The team involved ought to include the occupational field representation. The conclusion of the relevant industry which may include commerce, local, provincial and central government, relevant NGO’s, relevant professional and/or vocational bodies, and potential employers are of particular importance, should workplace learning (CHE, 2011) be agreed upon as a curriculum requirement. The initial representation serves as a catalyst for further networking in order to secure sufficient workplace learning hosting partnerships.
5.7.2.1 Important information derived from above model

- Procedures for finalising agreements to ensure all role players know what they have to do during the WIL process.

- Workplace mentor guidelines. This was one of the recognised weaknesses identified in the questionnaire, based on data obtained from the research questionnaire, namely that the student and the mentor (supervisor) do not understand each other’s job description. It is important that communication between the student and the supervisor is healthy and no misunderstandings in the workplace accrue.

- The main focus during WIL training must be focussed on essential workplace detail such as punctuality and work ethics.

- Reaction timing from the WIL co-ordinator, the supervisor, the study leader and lecturer as well as student peers must be clear, understandable and punctual. One cannot wait for four weeks before mistakes in drawings are identified as a problem.
• Pilot work as example. Show students examples of work they have to do and do not leave them to ask the questions or do work-based learning with their own knowledge.

5.7.3 *MODEL 3 Work integrated learning flowchart*

The South African Department of Education (DoE) 2012, and the Higher Education Quality Committee (HEQC) 2012, imperatives regarding work integrated learning (WIL) include:

- An *obligation* to *place students*
- Structured learning during WIL
- Learning *agreements* between institution and industry
- Communication between role players
- Mentoring system / supervision at the workplace
- Monitoring / assessment system (workplace and institution)
- Recording system at the university

An institutional flowchart can be illustrated as follows:

![Work integrated learning flowchart](image)

*Figure 5.3 Work integrated learning flowchart (DOE AND HEQC, 2012)*
5.7.3.1 Important information taken from above model

- An obligation to place students to comply with the new management WIL model for the Interior Design qualification. It was decided that the responsibility for placement lies with the student. This is the first task as part of their responsibility they have to carry out during the preparation stages of independence and maturity.

- Recording system. To keep up to date with the record-keeping, assessment records and data bases. A full-time administrator is needed to assist with this enormous task.

5.7.4 MODEL 4 Five-stage internship model

According to Oden (2009) the five-stage internship model has also contributed to the development of the suggested management model for WIL. Oden gave a presentation in 2009 about the role which the mentor or supervisor plays in the four movements of hospitality (Oden, 2001) in which he compared the five stages of internship postulated by Sweitzer and King (1999:59-65) in their *The successful internship, chapter 4: The stages of an Internship* with Oden’s five movements. This comparison is depicted below.

<table>
<thead>
<tr>
<th>An intern’s likely five stages of mind-set</th>
<th>A mentor’s supervisor’s four movements in hospitality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipation</td>
<td>Welcoming</td>
</tr>
<tr>
<td>Disillusionment</td>
<td>Restoring</td>
</tr>
<tr>
<td>Confrontation</td>
<td>Dwelling</td>
</tr>
<tr>
<td>Competence</td>
<td>Sending forth</td>
</tr>
<tr>
<td>Culmination</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5.4 COMPARISONS BETWEEN THE FIVE STAGES OF MIND-SET AND THE ROLE A MENTOR PLAYS IN HOSPITALITY (ODEN, 2009)**

Oden said that interns usually look forward in anticipation to their internship but are quickly disappointed when they have to start at a very low level of responsibility and have few opportunities to accomplish anything in the company where they do their internship.
He accentuated that the mentors or intern supervisors should be sensitive to the expectations of the interns. They should welcome the interns as if they were guests in the company. The interns become disillusioned because of the difference between the anticipation they had and the reality setting in. The mentors or intern supervisors should then in particular act hospitably and help restore the expectation of the interns by attending to their needs. This can be done by engaging the interns and putting them at ease, orientating them towards the setup of the company, and seeing to the interns’ safety.

He compares the journey which an intern has to travel along the way to become a full-fledged employee with someone who has travelled a long way in difficult conditions. The traveller is probably thirsty and hungry. Both the traveller and the intern should be treated with empathy and understanding.

Sweitzer and King (1999: 62) quote the saying, “The only way around is through”. It implies that the situation has to be confronted as it is. The mentor or intern supervisor’s willingness to help the intern, as Oden referred to it, _hospitality of presence_, is crucial. The mentor should demonstrate a willingness to share her/his work knowledge, experiences and expertise with the interns in his/her care. He/She should also involve the interns in the execution of day-to-day work and answer the interns’ questions. What is also important is that the mentors/supervisors should ask the interns’ for their opinions and listen to their suggestions in terms of their academic knowledge.

When the interns have completed their training phase, the supervisors are able to send the interns forth on their life journey and achieve success in their careers.

5.7.4.1 Important information taken from above model

- The mentor or (WIL) intern supervisor should be sensitive to the needs of the interns under their supervision and care, and should welcome the interns in their companies.
- The mentors should demonstrate a willingness to share their work knowledge, experiences and expertise with the inexperienced interns
• They should also involve the interns in the execution of day-to-day work and answer the interns’ questions.
• Finally, they should ask the intern’s for their opinions and listen to their suggestions in terms of their academic knowledge.

With the guidance of the models mentioned and discussed above, the author was encouraged to use the experience and proof of evidence from examples taken from departments at the TUT as well as research done by peers to develop a management model for WIL in the Interior Design qualification at the Faculty of Arts. The information that will be discussed hereafter is as follows:

• A macro WIL structure of co-operative education at TUT
• The role players of the abovementioned WIL structure
• A macro WIL learning model diagram.

The structure and description of the new management model for interior design is incorporated into the information.

5.8 MACRO WIL STRUCTURE AT TUT

The macro WIL structure that is used to support co-operative education at the TUT makes use of a hybrid system. According to TUT’s new Strategy for Co-operative Education (2012:3), WIL at the TUT includes a number of support entities and role players such as: offer co-operative assistance, get the role players involved for different programmes at the TUT, national and international WIL students and staff exchange and placement, partners of the TUT quality assurance team, curriculum development and many more support sections/entities that assist with the smooth functioning of co-operative education at the TUT.

It is of the utmost importance to understand the support system for the TUT, external and internal entities/role players to the university, and to make use of their physical and intellectual support and mentorship for the micro-structure that is proposed for the management model for WIL for the Interior Design qualification. If it presents a
workable solution for the TUT, how much more can the Interior department make use of the same partners to develop the micro-structure for the management model?

5.8.1 Macro-support structure used at the Tshwane University of Technology

The macro WIL support structure used at the TUT involves many different kinds of role players and partners, including companies, factories, suppliers and manufacturers as well as large industries such as ESCOM, SASOL, TRANSNET and VODACOM. Different support facets of co-operative education, such as research, guest lecturers, internal and external role players and others, such as community engagement, advisory committee involvement with each programme of the TUT, interlink with the abovementioned sections of the macro model for WIL at the TUT.

In future, work-based learning and simulation will form part of the micro Interior Design management model. Different learning methods have been researched nationally and internationally, and proved to be very popular methods of transferring design and technical skill learning and experience into practical design simulation for the students at the workplace during WIL.

The following diagram illustrates the different role payers and support structures at the TUT that work together to assist and support the macro-model at the TUT.
5.9 MICRO WIL MANAGEMENT MODEL FOR WIL

5.9.1 A layout of the micro management model for WIL for the Interior Design qualification at the TUT

According to the above macro-support structure (see diagram 5.3), a number of different WIL processes in the Visual Communication department are referred to as praxis. For co-operative education (2012:3), WIL, in the Faculty of Arts at the TUT, will fall under the heading: Work-integrated Learning (WIL): Simulation, Problem-
and Project-based Learning and Employability. According to this new strategy, simulation is when WIL (non-work-based) is performed in a simulated environment, either on- or off-campus. The problem-based and project-based learning sites are practically managed on the same basis as the simulation environment, most of the time off-campus. It is an established practice in interior design and architecture.

The workplace environment for problem-solving, project execution, and simulation of design projects and its applications is simulated successfully by students staying on campus and completing projects instead of visiting the industry. This may be particularly applied to qualifications in the health sciences, such as biomedical technology, or the sciences for arts and design, economics, information technology and engineering.

Learning takes place in an equipped environment, on- or off-campus. The proposed WIL management model (Diagramme 5.4) indicates how the new WIL management structure of the TUT will be integrated in the Interior Design WIL model and will look in future (Wessels, TUT Strategy, 2013).

The management model for WIL has been developed according to the programme contents for the subject Interior Design Practice III. The numbers that follow in brackets refer to the different sections in the model used in Diagram 5.4 below. The micro WIL model starts with the contents for work integrated learning (1) and works its way through the different diploma educational levels in the qualification (4). To understand and realistically import WIL, in the workplace as work-based learning and simulation, the WIL policy (2) will lead the way to the WIL co-ordinator duties (7), the training (9), assessment (9.4), reflection on learning (13) to quality assurance (15).

Role players, advisory committees (5), the incubator (17) and their contributions to the results and quality assurance will be discussed in detail.

The following section 5.9.2 forms the content of the development of the new proposed WIL management model for Interior Design:

5.9.2 Content and micro-model
**DIAGRAM 5.4 (CILLIERS, 2013)**

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>DESCRIPTION OF MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTERIOR DESIGN WORK INTEGRATED LEARNING (WIL) MODEL</td>
</tr>
<tr>
<td>2</td>
<td>WIL POLICY</td>
</tr>
<tr>
<td>3</td>
<td>WORKSTATION</td>
</tr>
<tr>
<td>4</td>
<td>OFF-CAMPUS/level 1, 2 and 3</td>
</tr>
<tr>
<td>5</td>
<td>ADVISORY COMMITTEE</td>
</tr>
<tr>
<td>6</td>
<td>INDUSTRY</td>
</tr>
<tr>
<td>7</td>
<td>WIL CO-ORDINATOR’S OFF-CAMPUS DUTIES</td>
</tr>
<tr>
<td>8</td>
<td>SUPPORT</td>
</tr>
<tr>
<td>8.1</td>
<td>Support</td>
</tr>
<tr>
<td>8.2</td>
<td>Education</td>
</tr>
<tr>
<td>8.3</td>
<td>Administration</td>
</tr>
<tr>
<td>8.4</td>
<td>Management</td>
</tr>
<tr>
<td>8.5</td>
<td>Guardian</td>
</tr>
<tr>
<td>8.6</td>
<td>Mentor</td>
</tr>
<tr>
<td>9</td>
<td>5 STAGES</td>
</tr>
<tr>
<td>9.1</td>
<td>Preparation</td>
</tr>
<tr>
<td>9.2</td>
<td>Placement</td>
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<tr>
<td>9.3</td>
<td>Monitoring</td>
</tr>
<tr>
<td>9.4</td>
<td>Assessment</td>
</tr>
<tr>
<td>9.5</td>
<td>Reflection on learning</td>
</tr>
<tr>
<td>10</td>
<td>RESEARCH OUTPUT OFF CAMPUS</td>
</tr>
<tr>
<td>11</td>
<td>STUDENT OUTCOMES ACHIEVED</td>
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<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>12</td>
<td>ACADEMIC ADMIN Informed that conditions have been met</td>
</tr>
<tr>
<td>13</td>
<td>REFLECTION ON LEARNING (debriefing)</td>
</tr>
<tr>
<td>14</td>
<td>YEAR-END FUNCTIONS</td>
</tr>
<tr>
<td></td>
<td>Members of interior design industry</td>
</tr>
<tr>
<td></td>
<td>Staff members of the TUT and other institutions</td>
</tr>
<tr>
<td></td>
<td>Students</td>
</tr>
<tr>
<td></td>
<td>Parents</td>
</tr>
<tr>
<td>15</td>
<td>DEBRIEFTING: QUALITY ASSURANCE</td>
</tr>
<tr>
<td>16</td>
<td>REMEDIAL ACTION Informed the conditions have not been met</td>
</tr>
<tr>
<td>17</td>
<td>INCUBATOR</td>
</tr>
<tr>
<td>18</td>
<td>ON-CAMPUS/ level 1, 2 and 3</td>
</tr>
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<td>19</td>
<td>RESEARCH OUTPUT ON-CAMPUS</td>
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<td>20</td>
<td>5 STAGES</td>
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<td>20.1</td>
<td>Preparation</td>
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<tr>
<td>20.2</td>
<td>Placement</td>
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<tr>
<td>20.3</td>
<td>Monitoring</td>
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<tr>
<td>20.4</td>
<td>Assessment</td>
</tr>
<tr>
<td>20.5</td>
<td>Reflection on learning (debriefing)</td>
</tr>
<tr>
<td>21</td>
<td>INTERIOR DESIGN MANAGEMENT OF INCUBATOR</td>
</tr>
<tr>
<td>22</td>
<td>WIL CO-ORDINATOR DUTIES</td>
</tr>
<tr>
<td>22.1</td>
<td>WIL co-ordinator manager: Incubator</td>
</tr>
<tr>
<td>22.2</td>
<td>Financial implications</td>
</tr>
<tr>
<td>22.3</td>
<td>Key control</td>
</tr>
<tr>
<td>22.4</td>
<td>Visiting times</td>
</tr>
<tr>
<td>22.5</td>
<td>Materials available</td>
</tr>
<tr>
<td>23</td>
<td>WIL CO-ORDINATOR’S DUTIES ON-CAMPUS</td>
</tr>
</tbody>
</table>
Diagram 5.4 is depicted on the next page.
A3

Diagram 5.4
In Diagram 5.4 two extra divisions (Diagram 5.7 and Diagram 5.8) are added into the micro-management model for work integrated learning for the Interior Design qualification

FIRST DIVISION (Diagram 5.7 – No. 25, page 287)
The micro-management model for WIL (diagramme 5.4), shows two additional divisions (one on each side of the diploma level). No (25) is integrated to the diagramme 5.4 namely Degree Level, with Problem-based learning (PBL) and Project-based learning (PJBL).

To complete an all-inclusive WIL management model for the Interior Design qualification, the proposed micro-management model will prove to the industry, the students and the institution that it is possible to integrate theory, practice and experience, and evolve into an excellent interior designer.

Problem-based learning (PBL)
This is learning, through the structured exploration of a research or practical-based problem. Work in teams to define, carry out and reflect upon what is the core of a real world-problem based on a life problem that have to be solved (CHE, 2011: 74).

Project-based learning (PJBL)
This aspect can be combined with PBL. In PJBL, real-world problems are used that do not have a predetermined solution. Intellectual inquiry is used with student engagement in relevant and meaningful work. Students have to understand concepts, have practical and essential skills, and demonstrate conceptual understanding of multiple disciplines to solve the problems (CHE, 2011:76).

SECOND DIVISION (Diagram 5.8, page 305)
The second division, the Incubator (17) and the Co-operative Education Information Centre, the central centre for general WIL and employability activities and information (34), are integrated to the diagramme 5.4 and accommodate both the simulation centre for Interior Design and the co-operative centre for the faculty, as one entity.
The merger of the Faculty Centre and the Incubator with the new name, WIL co-operative education information centre and interior design WIL incubator will be discussed later in this chapter (refer to chapter 5, no. 17, page 271).

5.10 DISCUSSION OF THE NEW MANAGEMENT MODEL FOR WORK INTEGRATED LEARNING FOR THE INTERIOR DESIGN QUALIFICATION

After negotiations with relevant role players, such as the Interior industry, vocational and professional bodies, research done in the interior design industry, students and WIL staff members at different universities, higher educational institutions and potential employers, it is important to take note that one of the outcomes of this research was that workplace learning off-campus must be a curriculum requirement.

The functioning and managing of the new Interior Design management model will be discussed in Chapter 6. page 318.

This model (see diagram 5.4, page 243) is designed to reach different additional areas than those currently encompassed in the representative student's knowledge, the industry needs, the curriculum contents for the WIL programme and the learning development that goes hand in hand with WIL.

The proposed model is based on an all-inclusive work integrated learning process regarding the planning of the WIL model in the Interior Design Qualification. Through the designed model, new developments in the Interior Design qualification are guaranteed and steps are taken to promote the WIL content.

In collaboration with the role players, certain divisions of the structured model will ensure implementation, management and third-stream income from the Incubator that will enhance the learning experience in support of improved student competence. As mentioned before in the HEQSF (2013), WIL may take various forms, including simulated learning, work-directed theoretical learning, problem-based learning, project-based learning and workplace-based learning. For all the abovementioned WIL methodologies, many students may be employed in this indispensable niche area.
The structured model is discussed in five different sections:

- Firstly, Diagram 5.5 indicates 1-24 that are discussed on page 247.
- Secondly, Diagram 5.7 indicates 25-33 that are discussed on page 287.
- Thirdly, Diagram 5.8 discusses 34 on page 305.
- Fourthly, Figure 5.5 on page 309 shows a schematic layout of the Incubator.
- Lastly, Diagram 5.9 indicates 35-48 on page 310.

**No. 1: THE INTERIOR DESIGN WORK INTEGRATED LEARNING (WIL) MODEL**

Diagram 5.5 following this discussion interprets the Interior Design WIL model as seen in Diagram 5.4. It has been divided up in sections to make it easier for the reader. Diagram 5.5 forms the main section of Diagram 5.4. The next diagram will discuss WIL introduced into first, second and third-year and how the preparation and different sections fit into one another. Each number and heading in the diagram will be explained under the same number and heading in the text.

The pathway to WIL is best described in the literature review mentioning the three processes, as explained in Chapter 1 (refer to chapter 1.2, page 13):

- **Development of logical thinking.** Assimilation is the integration of external elements into the internal structure of the student’s mind.
- **Accommodation.** The intake of external input, the way the student adjusts to this new stimulus and the transformation of thinking that take place to achieve equilibrium in the brain.
- **Set of processes.** These take place to maintain cognitive organisation during the transformation period.
Diagram 5.5 The Micro Management Model for Work Integrated Learning for the Interior Design Qualification (Cilliers, 2013)
In interior design, known as a vocational qualification where theory and practice comes together and training is done for the industry, where the thinking processes and reasoning are stimulated at the same time, the student is enabled to balance the organisation of the cognitive structure between practice and theory as well as between education and work more easily. It is for this reason that WIL students achieve the transition to work immediately, while students who did not do any form of WIL require a longer period to balance their thinking processes. They also remain in a state of disequilibrium longer, which explains why companies describe the different behaviour of students adjusting to the environment as “problematic” (Cates & Jones, 1999:19; Eames & Cates, 2004:40, as described by Wessels & Jacobsz, 2011:139).

According to Gagne (1970:1) and Eames and Cates (2004:41), in Wessels and Jacobsz, (2011:140), students who are exposed to the realities of the field for which they are preparing, may have a greater sense of purpose for classroom learning to guide the entire learning process.

According to Bandura (1977:16), WIL students experience social learning much simpler because of their observation in the workplace. Therefore, students learn from the successes and failures of other people as well as from their own experiences. Madudsley & Strivens, (2000:583), as quoted by Wessels and Jacobsz (2011:144) mention that Kolb’s theory of learning is “a process whereby knowledge is created through the transformation of experience”.

Work integrated learning (WIL) forms a crucial part of the curriculum of the Interior Design qualification programme and a distinctive part of the institutional co-operative education framework of the TUT. Although WIL forms the practical implementation section of the qualification in the programme, the direction from the institution is still the leading body that specifies academic and curriculum planning.

After negotiations with relevant role players as mentioned in chapter 4, on. 4.2, on page 112, it is of importance to note that an agreement has been reached that the workplace learning off-campus should be covered in the curriculum requirement (refer to chapter 6, page 318: Description of the functionality and proficiency to manage the new WIL model for the Interior Design qualification.)
No. 2 WIL POLICY FOR THE MANAGEMENT MODEL FOR WORK INTEGRATED LEARNING FOR THE INTERIOR DESIGN QUALIFICATION

Adapted by the author (refer to chapter 6, no. 2, page 319).

The HEQC of the South African Council for Higher Education (CHE, 2011/12) specifies important rules and regulations for practical learning as elements of the curriculum of the Interior Design programme. The WIL policy content for the Interior Design programme will support the statutory context with legislation and regulations, policies of the institution and department, as to ensure that the final quality assurance and evidence of the WIL management model for Interior Design WIL is on par with the faculty and institution’s regulations. The TUT policy states the following:

- Only accredited industries, companies and workstations will be allowed to undertake the WIL partnership with the department.
- Students have to show their registration forms for the WIL programme.
- Signed co-ordinated joint agreements with the industry (whether simulated or industry workstations) must be yearly updated and available on file.
- Clarification of roles for students, staff, the employer and his supervisor must be in place and understood by all parties concerned.
- Well-organised and updated databases for students and employers, evidence of adequate work environment and approval of the profile of the company and workstation where each student is trained for WIL must be on file.
- Adequate consultation to explain the purpose of WIL will have to take place between employer and employee before the final exchange between student and company commences.
- All workstations or workplaces must be approved for WIL purposes.
- Appointed knowledgeable supervisors from the company must be available at the workstations for the WIL employee.
- Students have to sign a code of conduct. Partners’ behaviour and levels of liaison with each other have to form part of the “approval of placement”.
- Observations of student behaviour at the workstation and mutual mannerisms during the WIL process will be monitored.
- WIL benchmarking against national and international practices and WIL standards have to be done on a regular basis.
• Arrangement with industries to support students during their remedial action must be made, because of failing WIL or because they did not complete WIL.
• Satisfaction must be the keyword for on- or off-campus staff, students and supervisors alike.
• Transport allowance and payment to students for working after hours must be made prior to their WIL period.

The TUT ensures quality assurance and the WIL policy is used with all policy rules and regulations disclosed and in place to guarantee that the curriculum contents are adhere to in all aspects of the management model.

No. 3 WORKSTATION AND WORKPLACE APPROVAL (refer to chapter 6, no. 3, page 320)

Under the function of “workstation” fall the duties of the WIL co-ordinator, the training and preparation of students as well as the research outputs that should occur off-campus.

The workstation (5) is the core business of WIL. For the approval of a workstation, significant data on the type of industry, practical work involvement for design projects and the selection of the supervisor for the workstation have to be analysed and projected in an industry database. This information is derived from a lengthy process of information gathering, site visits and communication with industry
members as well as liaison with the industry during project discussions, advisory board meetings and the sharing of industry expertise.

The final decision is made during the staff/student/industry visit during WIL when first-hand information and practical evidence on the workstation become available. It is also necessary to do an analysis, using the Interior Design programme, to determine the factors necessary for a WIL student to complete his/her WIL at a sensible workstation.

The implication of different work sections in industry will also determine choice of the type of workstation. Producing computer-aided (CAD) designs without a computer is impossible and a printing facility is of utmost importance. To interview clients and communicating design without a proper area to pitch the design project would also not be beneficial to either of the parties.

During interviews the following information should be established:

- Well-facilitated workplace or workstation
- Welcome notification and company policies/rules and regulations
- Office to share/open plan/closed facilities
- Computer, printers, telephone, fax, e-mail
- Boardroom, sample room, interlink with the rest of the company
- Part of the design team – visits and participation in projects
- Supervisor – to support student.

**Workstation approval**

The student applies for a workplace and submits his/her CV to the WIL co-ordinator lecturer. Subsequently, the institution approves the workstation; however, it is the industry that makes the final decision. The WIL co-ordinators have more responsibility than just submitting the CVs. Employers must be contacted and appointments made to view the workstation, to discuss work ethics and problems with the student. Keeping the visit simple and ensuring work contracts and injury documentation are in place are crucial. During site visits, additional requirements or changes to the learning programme can be defined and agreed to by the employer.
According to Forbes (2013), workplace approval is not a judgmental inspection, but an exploratory task.

For quality assurance, functional documents required during site visits and workstation approval includes:

- Policy documents of all stakeholders
- Learner guides and learner obligations
- Industry obligations
- Assessment documentation and explanation of assessment
- Proof and evidence of work delivered during WIL
- Learner contract
- WIL guide template.

No. 4 DEPARTMENTAL WORK INTEGRATED LEARNING (refer to chapter 6, no. 4, page 321)

First-year – observation
Career orientation and the career decision-making processes start in the early years of a prospective Interior Design student. There are those who cannot make a career decision and arrive at an academic institution inexperienced and clueless. Nervously at first, the student becomes more relaxed as the studies towards the Interior Design qualification materialises. The success of the interior study depends largely on both training and experience. During the first year, training is accomplished through observation (watching) and the self-confidence from observation is interrelated with experience.

The student's self-confidence, experience and understanding of technical terms, styles, design principles, computer literacy and career knowledge pave the way for in-depth skills development at a later stage. With the self-confidence experience still fresh in his/her mind, the student uses his/her precious time off-campus at a home warehouse, builders supply store or a hardware store as well as all types of hardware merchants and interior-orientated suppliers to observe new or available materials on the market. This observing process that occurs through listening to
technical specifications provided to customers and the process of observing the surroundings and environment, strengthen training and experience.

Second-year – development

Design skills
During the second year of study, the students, with thoughts still dominated by training and experience, rely on their capability to understand the processes of design. They feel more at ease with terminology, technology and the implementation thereof. They can also better combine different cognitive information from different subjects and modules to produce a complete design project.

It is during this crucial learning process when information from one module is combined with other knowledge that skills start to develop. For example, the technical drawing module, using different external elevations as well as internal elevations, finally forms part of the 3D presentation where the final picture of the design is seen for the first time.

Both these drawing techniques are comprehension skills and when combined, they form a final result. The use of a colour marker (in the beginning of the first year) to show line, rhythm, colour nuances, shadows and form (presentation drawing) is a well-worth presentation skill. When the students apply all these drawing skills in juxtaposition to computer-aided design, it becomes a skill that they can apply in any design process.

The following skills were part of the research done in: (refer to Appendix A, B and C, page 402; and chapter 4, page 112)

- Design skills
- Writing skills
- Oral skills
- Presentation skills
- Model-building skills
- Photography skills
- Technical skills
• Computer skills.

According to the research amongst the industries, students and staff all use the abovementioned skills, grouped under “skills”. These skills should be defined and explained well to the student before he/she can proceed with other skills. Most skills were highly rated during the research process, except the skills concerning model-building and photography. However, these skills could be replaced by the use of 3D computer-aided design modelling and technical application skills.

The cognitive skills (refer to chapter 1, no. 1.1, page 7 that are essential skills for any teaching-learning experience and practice needed to complete a qualification included the skills researched in Appendix A, B and C, page 402; and chapter 4, page 112. These were all grouped under “cognitive skills” and “social skills”, and the participants rated all of these as VERY IMPORTANT. Additional research information was obtained from the students’ WIL guides while debriefing sessions were acknowledged. They can be summarised as follows:

- **Knowledge** To know what is design and how to apply it; also how to use it in a work environment.
- **Comprehension** Some students still find it difficult to understand a design brief and course work – even working in groups.
- **Application** Students do not know how to apply the knowledge they understand.
- **Analysis** Where to focus in order to understand the most important and the less important information.
- **Synthesis** Students struggle to prioritise work given to them and it jeopardises production processes.
- **Evaluation** Assessing design, costing, and give opinions about design.

In the research on behaviourism (refer to Appendix C, page 418) and personal characteristics (refer to Appendix A, page 402) that can form part of skills, the most important qualities that had been rated as VERY IMPORTANT were:

Punctuality, trustworthiness, diligence and independence.
• Intelligence, confidence, creativity, helpfulness and leadership.

The negative characters with lesser ratings were:
• Unconcerned, over-friendly, talkative, anxious
• Busy-body, dependent, unsure, negative
• Quiet, lazy, deceitful

Social skills
Using their self-confidence and being in control of the self-trained design skills, the students’ social skills needed to be upgraded. Through the main research skills such as oral, writing, listening, answering, behavioural and personal skills, the students realise that the latter skills actually form the final details and finishing touches of the selling process of the design. It is, therefore, important to also teach the students the following important life skills:
• How to behave oneself during different office duties
• How to dress for different occasions (at the office/ outside the office/ on-campus/ off-campus)
• How to talk and act when spoken to
• How to listen to different kinds of information at different times or places
• How to sell a product or design concept.

It is through this development stage in the second-year that students are prepared for their final test during the third-year when they enter the world work in interior design.

Third-year - application
Theory and practice
Acceptance of students in the workplace is a recurrent theme in many different occupations, from engineering, nursing, art, design and teaching. It is with commiseration that we look and feel for these newly appointed employees having to test their own skills, knowledge and practical abilities in interior design and to also have to combine their social practices to determine whether three years of study
bear fruit or not. With their nerves highly strung and highly alert, the students act their finest. They listen, observe, analyse and react with real knowledge.

Off-campus application

With the theoretical knowledge of materials, technical services and design theory the students approach the workplace with ease. Nobody knows how well their theoretical knowledge for design is. With good social and life skills, and by thinking on their feet, they can work for a long time before they need to revert to referring to information to the theory. With their writing and oral skills they participate in conversations with peers or customers, and between thinking and talking, they work out a workable, practical design solution to the tasks at hand.

This process is called “application”

The students apply the theoretical, practical, teaching and learning skills with self-confidence during their WIL training period. Through positive feedback the students start absorbing information that is freely accessible around the workstation and that does not form part of the curriculum. They draw new inspiration from other workers and the co-operative work around them while the supervisor fills the final knowledge and technical gaps that are lacking.

During off-campus training the students engage in several practical problem-solving situations. Examples are paintwork that does not match the previous colour, carpet patterns that do not cross correctly, curtaining that is out of stock, measurements not correctly taken, furniture not fitting into the space, and many situations they can encounter. After several weeks of work integrated learning off-campus, the students emerge with a new understanding of being knowledgeable, have a total new approach towards interior design and are committed young designers.

No. 5 ADVISORY COMMITTEE (refer to chapter 6, no. 5, page 324)

Every experiment, investigation, design proposal and learning experience has an outcome. It is, therefore, important to revise or adapt these outcomes, where necessary. With time and as technology improves, outcomes change and it is for
this reason that quality control forms part of the development plan. Quality control is always linked to outcomes and is a continuing improvement process.

As explained by Forbes (2013:6), there are four important stages:

Outcome – what you want to achieve
Input – what you require to achieve the outcome
Process – criteria, summative and formative assessment and evaluation
Output – what you accept, receive and collect (returns to the outcome).

Different avenues can be explored, both in- and outside the industry, to establish an Advisory Committee to assist with academic standards (quality control) in the learning standards of the programme; for example, alumni students, manufacturers, architects and skilled workers.

The main function of the Interior Design Advisory Committee is to:

- Contribute to programme quality assurance and review
- Suggest changes in the curriculum in response to external input
- Advise on the vocational profile of graduates and market trends
- Support with professional development in the programme
- Provide support with new partnerships
- Monitor and advise availability of laboratories, computer labs, infrastructure and equipment for programmes and curriculum needs
- Advisory committees which can assist with staff placement in the industry to ensure well-trained and technological excellence.

Documentation and functional aspects

- Use the institution’s Advisory Committee policy during the selection of members.
• More than one meeting per annum can support problem areas during WIL.
• Use representation of senior staff members to ensure a decision-making outcome.
• Minutes of the Advisory Committee policy have to be tabled at Faculty board meetings.
• Urgent matters arising from advisory committees are referred to the Executive Management.
• Heads of departments, programme co-ordinators and WIL co-ordinators are responsible for implementing recommendations by the Advisory Committees.

No. 6 INDUSTRY (refer to chapter 6, no. 6, page 325)

As previously mentioned, the prospect student arrives at the institution with very little knowledge of the qualification he/she wants to obtain. In many cases the industry itself is to blame. The student does not ask enough questions and the industry does not reveal all the “behind the scenes” and emotional stress modes.

Most students watch Top Billing or read interior design magazines at Exclusive Books, and subsequently decide to become interior designers, not knowing what the career really entails.

The Interior Design industry is enormous and covers not only glamorous design, technical drafting and compilation of sample boards or pitching the new design to the client; it stretches far beyond these activities.

Included in the industry are the following:
• Manufacturers of cupboards, counters and bulkheads for retail
• Suppliers of furniture, finishes and materials, lighting and technical systems
• Contractors, builders, plumbers, electricians and painters.

Which of the above is called the interior design industry?
It is with this question in mind that WIL acknowledges that different partnerships among the institutions, the students (clients) and the industry are the only way to show, to experiment, to explain, to practice and to get all to participate in the interior designer’s career of the future.

The industry is one of the three links in the chain between the stakeholders and is also the catalyst for the qualification. Without the industry requirements, there will be no need for the programme, and without students there will be no industry and no programme. The WIL service, in co-operation with the industry, opens the world to different sections, departments and the urgent need for future development in areas such as sustainability, green building/living and global warming.

Looking at the new WIL management model for interior design, the industry lies between the off-campus (4) and on-campus (18) information blocks (refer to diagram 5.4). The industry and students rely on one another. The institution and industry maintain a healthy outlook, and they set new limitations and borders to develop the industry on campus (17).

The last important requirement is a properly selected supervisor to support the student in the workplace, not just physically but also mentally, and to teach, learn and support the WIL training period. This support is of utmost importance and forms the foundation of both the company and the student’s career. Equally important is the necessity of a well-equipped workstation. These two elements need to be in place and should also be inspected during visiting periods to the student and the industry.

With the management model in place for WIL, the well-equipped on-campus workstation will be furnished and equipped by the institution and industry. It will become a profitable and productive hub for the department.

**No. 7 WIL CO-ORDINATOR DUTIES OFF-CAMPUS** (refer to chapter 5, no 23, page 283 and chapter 6, no. 7, page 326)
The WIL co-ordinator (lecturer) is interconnected with the current Directorate: Co-operative Education (DCE). Also called a WIL lecturer, the staff member is employed to manage the new Interior Design programme management model for WIL for the same qualification at the TUT.

This person is employed at programme level. The key performance areas (KPAs) of each WIL co-ordinator are determined by the Directorate: Co-operative Education. According to the DCE and Higher Education Development and Support (HEDS) at TUT there has to be a Co-op Ed office on each campus to assist the WIL co-ordinator, students and industry with relevant WIL issues, and to assist students to become well-informed regarding employment after graduation.

The job description of the off-campus WIL co-ordinator (8) appears to be too taxing but with the help and co-operation of the industry, the students (who each has the responsibility towards his/her own placement) as well as institutional support, the position for the WIL co-ordinator could be rewarding, interesting and informative. The major responsibility of the WIL co-ordinator is to position the partnerships (industry) through external engagement with the community, industry liaison, and communication with professional bodies (IID), advisory bodies and alumni partners of the Interior Design Department. The mentioned sections and divisions supporting the industry should form part of the immediate responses the WIL co-ordinator needs to manage during the first-year WIL process.

**No. 8 WIL CO-ORDINATOR, DUTIES** (refer to chapter 5, no 24, page 283 and chapter 6, no. 8, page 327)

The following KPAs for the employed WIL co-ordinator place a number of the major tasks and responsibilities on his/her shoulders:

- Support
- Education
- Administration
- Management
- Guardian to students
8.1 Support
The WIL co-ordinator’s support starts from the day the student registers for WIL. Whether the student is on qualification level one, three or four, departmental support is required to enable the student to scrutinise the WIL industry’s information database, to read the company profile correctly and make a definite placement decision for the WIL period.

External contact with the company starts after the final decision. Telephone calls are made, emails and CVs sent, and a workbook of practical examples is forwarded to different companies to enable them to select students to do their WIL with them. The student chooses a company but it is the company that makes the final decision.

Some WIL co-ordinators and supervisors go even further by assisting in workplace decision-making. They all recognize the crucial role of promoting professional socialisation. According to Jackson & Mannix, 2001, emotional support may also be required in certain situations. It may involve assisting students to alleviate feelings of stress, anxiety and inadequacy. The support role entails a more collegial relationship; for instance, the WIL co-ordinator may share his/her own knowledge and skills as well as prior experiences to entice the students’ curiosity and to alleviate stress.

8.2 Education and external engagement
Education for WIL practice includes one-on-one interviews with students regarding their work preferences and dislikes pertaining to the content of interior design, while acknowledging the students’ successes and strengths (Beck & Kosnik, [2002]. Beck and Kosnik are professors with the Ontario Institute for the Study of Education of the University of Toronto, Canada.). Students who envisage doing model building as a career should work in the same environment for the six weeks to make sure whether
that is what they want to do for the rest of their lives as a career. Host supervisors may be required to formally assess student performance by providing information to the tertiary supervisor. He/She will draw inferences about the level of competence and alert the university if students are at risk of failing or have potential problems in future practice.

Work placement and the different types of work experiences that form part of WIL must be explained to all parties involved before starting the real process of work placement. According to Forbes (2013:10), it is also important to simulate interviews and presentation skills to ease the students into placement.

### 8.3 Administration

Administration includes the record-keeping of student registration, thereafter filing all documentation, such as CVs, personal preferences on career descriptions that form part of the psychological internal interviews with students to ensure that they make the best decision for their WIL placement.

### 8.4 Management

To manage WIL, the WIL co-ordinator should ensure that both student and supervisor understand that they have to work towards the specific learning outcome of interior design academic credits.

According to Forbes (2013:13), the management procedures mentioned below are necessary to provide extra information on students' application forms for WIL training, where necessary. Although this is not part of the credits, it forms a great part of the positive feedback the student will receive from the company approached. Students should be prepared for WIL placement in terms of policies, and the roles of the student, the institution and the employer. The WIL co-ordinator clarifies and explains contractual documentation and the signing thereof to the receiving company or receiving WIL supervisor. During the preparation phase the WIL co-ordinator and the student together work through different life skills, time management and ways of communication (between the student, the WIL co-ordinator and supervisor) when busy with WIL. The student and the WIL co-ordinator complete all forms on the
student’s preferences. This process teaches the student job seeking skills, and communication methods about application methods and procedures.

8.5 Guardian to students
As WIL co-ordinator of the WIL placement and WIL procedures, it is important for all stakeholders to know who is in charge of the students, and who will act as protector and watchman over the procedures for work integrated learning for the Interior Design programme. By acting as a gatekeeper, the host supervisor aims to maintain quality standards for the profession. According to Bailey (2004), the company and specially the contribution of the supervisor, during WIL training helps to improve and strengthen the future of the Interior Design profession. It is also important to ensure all contact details, office hours and availability of the WIL co-ordinator are readily available, should it be needed (Bailey 2004).

8.6 Mentoring
The WIL co-ordinator also acts as mentor and tutor for students during their time spent off or on campus. In many cases, students with low self-esteem may experience the work integrated learning period as stressful because they do not know how to handle certain assignments, procedures or make “realistic” decisions that could influence the WIL outcome.

The students must be put at ease with the WIL guide that forms the link between the WIL co-ordinator, the institution, the department and the supervisor. During debriefing which follows upon critical incidents or distressing situations the WIL co-ordinator/supervisors should be available and ready to provide full support. Such support may not be needed for every student or in every discipline, but will be required in special or unusual situations.

No. 9 FIVE STAGES (refer to chapter 2, no. 2.3.1.5, page 50; chapter 5, no. 20, page 278, and chapter 6, no. 9, page 331)

Preparation (also known as “ground work”) forms the foundation for further training, building and developing of design skills and practical knowledge. For the first-level students who know very little about design and skills development, WIL preparation
for their WIL period at the university will provide them with the basis and preceding knowledge they need to find means and ways of absorbing and filtering information during their practical period at companies.

Preparation for the second-level students for their WIL period consists of skills development in different groupings, namely design, cognitive and social skills. Research outcomes show that all of these skills are VERY IMPORTANT. Through WIL preparation in skills development, the simulation periods and role playing during their academic year will benefit the students’ development and readiness for workplace learning during the third academic year.

9.1 Preparation
All students will have different responsibilities, such as finding a company or firm for doing their WIL training period, delivering or sending CVs and portfolios to companies or booking appointments with these companies. Through the development of their behaviour and skills, and learning through their mistakes they will accomplish success and achieve success.

The WIL co-ordinator assists with making appointments, communication and liaison with the industry and companies that work as partners in the WIL programme. Preparation and practise for interviews, addressing interview questions and behaviour under stress, thinking on one’s feet and doing technical work, such as CAD and construction drawings to prove their expertise and proficiency, are all included in the pre-training sessions.

9.2 Placement
When students are approved as WIL candidates, a letter of acceptance is issued by the company and handed in at the Department. With the issuing of an acceptance letter, the placement of the students is finalised. The students then sign contracts with the TUT, confirming that they will not hold the TUT responsible for injuries, losses or damages that may occur during the work integrated learning period. A WIL guide is issued for the guidance of both student and mentor at a particular workplace.
9.3 Monitoring
The WIL guide with the weekly data is monitored by the supervisor at the workplace. Media such as the telephone calls, emails and SMS’s are used to correspond with the students and vice versa. In some cases, if funds are available, the WIL coordinator also visits the workplace and monitors the progress of the students.

9.4 Assessment
To assess the students’ capability for design, performance under supervision or lack thereof, submission of work in time, presentation of work to a group of people and the ability to associate with office practice, all students have to submit a WIL guide (marksheet and proof of supervised work delivered), technical report and proof of practical work done during WIL.

Once the students have proven that the above requirements have been met and all documentation have been submitted to the academic department, the WIL guides, together with all documentation, will be assessed and the final result will be published by the institution.

The following table introduces different methods that can be in use to assess student’s WIL period, their practical evidence of work and their behaviourism during the WIL period in the company under supervision of the supervisor.

<table>
<thead>
<tr>
<th>Method</th>
<th>Useful to...</th>
<th>Disadvantages</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct observation of the student at work</td>
<td>Assess competence and evidence of team work, etc.</td>
<td>Expensive and disruptive to workplace</td>
<td>Important to have a checklist of what to observe</td>
</tr>
<tr>
<td>Assessment of students’ WIL guides or work diaries</td>
<td>Encourage self-reflection as a student</td>
<td>Some doubt about validity</td>
<td>It needs to be combined with interviews to establish validity</td>
</tr>
<tr>
<td>Interviewing/interrogation at work</td>
<td>Obtain evidence for knowledge and understanding needed for workplace tasks</td>
<td>Oral assessment can be subjective and less reliable.</td>
<td>Sometimes a workplace may need to be simulated.</td>
</tr>
<tr>
<td>Surrogate</td>
<td>Cover all work-</td>
<td>Some doubt</td>
<td>Cheaper than trying</td>
</tr>
</tbody>
</table>

TABLE 5.1 Methods for assessing work-based learning (LITTLE AND NIXON, 1995)
9.5 Reflection of learning

All WIL guides, reports, portfolios and any other relevant information regarding work integrated learning should be submitted in person to the Department. Debriefing takes the form of a oral and practical presentation to the Department and peers. Should the work integrated learning be unsatisfactory, the student will be notified by the departmental secretary in order to rectify any mistakes (Cilliers, 2012).

No. 10 RESEARCH OUTPUT OFF-CAMPUS (refer to chapter 5, no 19, page 278 and chapter 6, no. 10, page 335)

Interior design is a vocational qualification and with the industry’s assistance, the qualification for interior design is planned with the integration of theory and practice to ensure a well-balanced instruction and maintaining the industry’s needs. Although the nature and purpose of the qualification type, the programme and outcomes depend on the different forms of WIL, including workplace-based learning, the notion still exists to select ideal forms of WIL that make it easier for students and the industry to link preferred parties together. In the qualification of interior design, the WIL is credit-bearing and students are placed in suitable workplaces.

Workplace-based learning areas present opportunities for additional knowledge outputs. If at all possible, research should form an integral part of WIL. Without
extra effort, research outputs such as research for design projects, off-campus international or various other companies are possible.

Research on topics for further study (B Tech) can commence during WIL, especially during the third year of WIL training. This will create possible opportunities for writing articles on work delivered during WIL, while the workplace and supervisors facilitate and support such work. If WIL can generate articles and research topics for the programme, it can always be altered for conference papers that will allow staff and students to stay in touch with environmental development.

From here-on the quality assurance of WIL, will be discussed.

**No. 11 LEARNING OUTCOMES ACHIEVED** (refer to chapter 5, no. 4, page 252; chapter 6, no. 11, page 335)

**Learning outcome**
The WIL outcome will determine the final result of the assessed students' portfolios of evidence, the report from the supervisors and technical report explaining the work delivered during the WIL period.

**YES  Learning success** (refer to chapter 5, no. 16, page 270)
Learning success is obvious after the WIL period. When the students return to the institution, they are unquestionably more mature, have diverse points of view towards work in general and their self-confidence helps them in the decision-making situations.

**NO  Not achieved** (refer to chapter 5, no. 16, page 270)
Those students who did not enjoy their WIL period, who either suffered a shocking experience in the industry or had a difficult time to adapt to work principles and the work environment, still have a few months to develop and mature before making final decisions. Those who failed their WIL training will be assisted with remedial action in conjunction with the Department of Interior Design, other academic staff members and the industry.
No. 12  ACADEMIC ADMINISTRATION (refer to chapter 6, no. 12, page 337)

Work integrated learning has been concluded and for some students life has just begun. These students may have been granted the opportunity to do relief work on a regular basis or they may have decided to apply for a position at a company after their third year of study. The final achievement with a pass percentage as evidence of successfully completing WIL is captured on the ITS system of the institution for publication purposes.

No. 13 REFLECTION OF LEARNING – INDUSTRY (refer to chapter 6, no. 13, page 337)

Debriefing
The achievement of being able to show design aptitude and talent to the industry, family and peers through delivered design work, either during or after WIL, can be a well-earned advertisement for all parties involved with work integrated learning at TUT. The best way of expressing gratitude to all parties involved is to invite them all to an industry gathering or work integrated learning function where the students have the opportunity to showcase their work done during the WIL period. At the same time, peers can exhibit their work. Different design possibilities and design types can be easily compared and discussed with the companies involved.

Staff from DCE, faculties, co-operative members, WIL co-ordinators from different departments and staff from the Interior Design department have the opportunity to meet and become acquainted with one another. Reflection on learning can take the form of an exhibition of work and/or a student presentation on the experience during WIL. The same exhibition can form part of a year-end function for family and friends as well as first- and second-level students who still have to do a formal WIL training in their third level.

No. 14 YEAR-END FUNCTION (refer to chapter 6, no. 14, page 338)
The WIL debriefing process in the form of an exhibition/function for the industry, staff and WIL students, including members of the Directorate: Co-operative Education of the TUT and invited guests can include showcased design work done during WIL.

This same WIL exhibition of third-level students, including extra work they have done during the year (privately as well) opens the unfamiliar career to new students and is an active advertisement for the qualification programme.

Although this is an interior design display first-, second- as well as fourth-year students can participate in the exhibition. Through this year-end function recognition is given to the candidates who have graduated, and their work done during the year can be presented to family, friends and invited guests.

Who will be invited?
1. Members of the interior design industry
2. Staff members of the TUT and other higher education institutions
3. Students and prospective students
4. Parents and friends.

No. 15 DEFINING QUALITY ASSURANCE (refer to chapter 6, no. 15, page 338)

The Interior Design programme will support the statutory framework with legislation and regulations, as well as policies of the institution and department to ensure that the final quality assurance and evidence of the WIL management model for Interior Design WIL are in accordance with the faculty and institution’s regulations.

Working closely with the Advisory Committee warrants quality assurance. The quality assurance for the WIL management model for Interior Design will focus attention on areas such as:

- Only accredited industries, companies and workstations allowed to enter into the WIL partnership with the department
- Registration of the student for WIL
- Preparation for WIL with emphasis on skills development
• Placement facilitation – liaison with the industry and presenting documentation of co-operation with the TUT
• Placement procedures, interviews and confirmation letters from the companies where students are going to work
• Workstation inspections, visits to supervisors and students as well as communication documentation, where necessary
• Approval letters that the workstation is approved for the WIL student
• Work programme and syllabus completely set out in the WIL guide and taken with the student to the industry
• Assessment criteria and tools to assess students off-campus
• Feedback mechanisms for students to communicate with the Department
• Submission of evidence of work done in the industry
• Quality reviews on the delivered work and, if necessary, improvement on aspects in certain areas
• Administration of WIL
• Classification of industries to support remedial action of students who did not complete WIL.

The institution is very focused on quality assurance and therefore the WIL policy will disclose all rules and regulations that must be in place to guarantee that the curriculum content is adhered to in all aspects of the management model.

No. 16 REMEDIAL ACTION (refer to chapter 5, no. 11, page 267; chapter 6, no. 16, page 339)

Often students may not be strong enough to do WIL or cannot pass the WIL training for various reasons, and it is in support of these students that a remedial action is being negotiated. The assessment process for these students is not different from the process followed for any other student. The same marking and debriefing processes are followed; however, should a student fail the outcome for WIL is recognised, but the practical work must be redone under supervision of another company in the industry. This company is part of the Advisory Committee and prepared to accept the student for a period of a month, supply a new project or two
and assist the student to complete the work successfully. Visits to this student and company will follow the same procedure as with other WIL visits, and monitoring and assessment will be the same as with any other assessment procedure. The only difference is that the affected student receives a second chance instead of repeating the whole year. Should the student still not show progress in workplace-based training he/she will fail the WIL training. This unsuccessful attempt is documented and the final percentage mark is captured on the IT system of the institution.

After the above remedial discussion, the new incubator as part of the model for the Interior Design qualification will be explained as a main part of the qualification.

**No. 17 INCUBATOR – SIMULATION OF WIL** (refer to chapter 6, no. 17, page 340)

According to the explanation of the CHE (2012:67), simulated learning takes place through an activity that involves imitating the real world in the academy and the act of simulating certain key characteristics of the selected workplace in the industry. Mock meetings with clients are set up, design projects are done and discussions with different industries take place, including costing, quotations and matching specification documentation.

These are all simulations but real-world projects from the industry. In the case of the absence of an industry for a specific education programme, for example jewellery, simulation can be very refreshing and stimulating for students and staff, with input from different sources to make use of. Well-simulated projects for different industries can be accomplished in the form of a managed incubator on campus.

This is just what the Interior Design department under the managerial guidance of Visual Communication has in mind. Visual Communication also manages the subjects of Graphic Design, Multimedia as well as Photography. With these futuristic design-oriented qualifications in partnership, the incubator can be a self-sustained on-campus company, managed by students and staff of the department and the WIL information centre.
Managing problem-based learning (PBL) as well as project-based learning (PJBL), the incubator centre will be the model for cognitive development, according to Piaget (1945), cognitive Development theory:

- Development of logical thinking; input into brain functions
- Accommodation and balance of input; behaviour
- Different processes to maintain cognitive balance, self-confidence and managing oneself.

The incubator will be managed as a company in an equipped building with the following content and functions:

- Building and equipment facilitator: fully equipped with design equipment like computers, Wi-Fi, Internet connection, printers (different sizes and types for different types of projects), air-conditioning, a kitchenette, water supply, toilet facilities, telephones and lighting. It will be functional to cater for all aspects of interior design.
- Facilitator, manager for the WIL programme, link and organiser between students and industry/clients. Setting of timetables, monitoring of students, awarded projects, visits to and from clients, meetings with clients, minutes and agendas during design discussions etc. (full administrative procedures)
- Office facilitation includes:
  - Boardroom (presentation equipment)
  - Discussion offices (cubicles for students to use or the computer laboratory with five computers for orientation purposes)
  - Reception counter, a receptionist performing all administrative tasks for the manager, reception waiting area
  - Exhibition area for advertising the different projects and possible work delivered by partners involved; for example, graphic design and multimedia
  - Printing facilities – different format and laminating facilities
  - Model-building area, mounting, airbrush and production area
  - Kitchen and toilets
  - Daily cleaning facilities.
If managed correctly and as a business, this centre can form part of the Faculty’s centre for WIL information and employability that has to be managed per faculty, as proposed by the Work Integrated Learning Directorate of the TUT.

As proposed by the Interior Design department, first- and second-level students will be able to illustrate their development in observation and skills development by doing duty in the proposed incubator on campus. Their development and skills, as observed in action in the incubator, can be monitored and assessed by the WIL co-ordinator on duty or staff from the Department doing duty for students working on design projects for clients and/or the industry.

**No. 18 ON-CAMPUS** (refer to chapter 5, no. 4, page 252 and chapter 6, no. 18, page 341)

**First-year – observation** (refer to chapter 5, no. 4, page 252)
Career orientation and the career decision-making processes start in the early years of a prospective Interior Design student’s life. There are those who cannot make a career decision and arrive at an academic institution still clueless and inexperienced. Nervously at first, the student becomes more relaxed as he studies towards the Interior Design qualification. The success of the studies depends largely on both learning and experience. During the first level, the learning is accomplished easier through observation and self-confidence gained from observing is interrelated with “experience”.

The students’ self-confidence, experience and understanding of technical terms, styles, design principles, computer literacy and career knowledge pave the way for in-depth skills development at a later stage. With the self-confidence experience still fresh in their minds, the students use their precious time at a home warehouse, builders supply store, major hardware merchants and interior-oriented suppliers to observe new or available materials on the market. This observation process that occurs through listening to technical specifications provided to customers and the process of observing the surroundings and environment all the way from beginning to end strengthen the students’ learning and experience.
Second-year – development (refer to chapter 5, no. 4, page 252)

Design skills
During the second year of study, the students who have acquired some learning and experience rely on their capability to understand the processes of design. The students feel more at ease with the terminology, technology and the implementation thereof. They can also combine different cognitive information from different subjects and modules to produce a complete design project. It is during this crucial learning and implementation of information from various modules that skills start to develop. The technical drawing module, using different external elevations as well as internal elevations, eventually forms part of the 3D presentation. Both these drawing techniques utilise comprehension skills and when combined they form the final result. Managing the use of the colour marker (in the beginning of the first year) to teach line, rhythm, colour nuances, shadows and form (presentation drawing) is a deserved skill. When they use this skill in conjunction with computer-aided design, it becomes a skill that can be applied in any design process.

The following skills form part of the research study: (refer to Appendix A, B and C, page 402; refer to chapter 4, page 112)

- Design skills
- Writing skills
- Oral skills
- Presentation skills
- Model-building skills
- Photography skills
- Technical skills
- Computer skills.

According to the skills research done in the industry, students and staff, all the above-mentioned skills are grouped under “design”, and should be well-defined and explained to the students before they progress any further. All the skills were rated HIGH, except skills in model-building and photography. These were replaced by
CAD programs and technical application skills (refer to Appendix A, B and C, page 402).

The cognitive skills (refer to chapter 1.1, page 8) that are essential to teaching, learning, experience and practice needed to complete a qualification, include the skills researched in Appendix A, B and C (refer to chapter 4, page 112; 4.3 C29i, page 152). The skills were all grouped under “cognitive skills” and “social skills”. They were all rated as VERY IMPORTANT. Additional research results were obtained from the students’ workbooks and debriefing sessions. These were acknowledged as follows:

- **Knowledge**: To know what is design and how to apply it; also how to use it in a work environment
- **Comprehension**: Some students still find it difficult to understand a design brief and course work – even working in groups
- **Application**: Students do not know how to apply the knowledge they understand
- **Analysis**: Where to focus in order to understand the most important and the less important information
- **Synthesis**: Students struggle to prioritise work given to them and it jeopardises production processes
- **Evaluation**: Assessing design, costing, and give opinions about design.

In the research on behaviourism and personal characteristics that can form part of skills, the most important qualities that had been rated as VERY IMPORTANT were:

- Punctuality, trustworthiness, diligence and independence
- Intelligence, confidence, creativity, helpfulness and leadership.

The negative characters with lesser ratings were:

- Unconcerned, over-friendly, talkative, anxious
- Busy-body, dependent, unsure, negative
- Quiet, lazy, deceitful.

**Social skills** (refer to chapter 5, no. 4, page 252)
Using their self-confidence and being in control of the self-trained design skills, the students’ social skills needed to be upgraded. Through the main research skills such as oral, writing, listening, answering, behavioural and personal skills, the students realise that the latter skills actually form the final details and finishing touches of the selling process of the design. It is, therefore, important to also teach the students the following important life skills:

- How to behave oneself during different office duties
- How to dress for different occasions (at the office/ outside the office/ on-campus/ off-campus)
- How to talk and act when spoken to
- How to listen to different kinds of information at different times or places
- How to sell a product or design concept to a client.

It is through this development stage in the second year that students are prepared for their final test during the third level when they enter the world work in interior design.

**Third-year – application on campus at incubator** (refer to chapter 5, no. 4, page 252)

**Theory and practice**

Students are accepted in the workplace in many occupations, such as graphic designer, textile designer and educator. It is also the time for Interior Design students to show how theoretical and practical knowledge are combined. This activity takes place on campus and not off campus.

The students can now work on campus in collaboration with the industry to find out if their three years of studying have actually paid off or not. In the Interior Design incubator, the third- and fourth-level students can know spend their time the same as in the case of off-campus students, but under supervision of the Interior Design staff of the Department. The students are less stressed out, know the environment and the functioning of the campus, but still have to listen, observe, analyse and react with real knowledge and insight. The customer remains the industry, the work is the
same and has to be completed as if the work-integrated learning has been done off-campus.

**On-campus application**
The students, known to the staff and under the supervision of the staff, enter the WIL period (in this case stretched over a year) on a regular basis and in accordance with a work schedule determined between the incubator WIL co-ordinator (manager) and the industry. The incubator operates on campus and the student applies for work (WIL) in the same way as if the workplace were off-campus. Using the theoretical knowledge of materials, technical services and design theory, the students approach the incubator workplace with confidence. Armed with knowledge on how to write properly and oral skills the students participate in industry meetings and discussions with clients, peers or customers at the incubator office. They practise their thinking and problem-solving abilities, answering telephones, operating printing machines and managing a workable, practical design solution to the design problem on the table.

The different types of industries provide the students with work. Discussions with the industry and clients/customers take place on campus at the incubator offices, in boardrooms and at workstations that are made available. The incubator workstation is situated on campus and functions accordingly.

**This process is called “application”**
During off-campus training the students engage in several practical problem-solving situations. Examples are paintwork that does not match the previous colour, carpet patterns that do not cross correctly, curtaining that is out of stock, measurements not correctly taken, furniture not fitting into the space, and many situations they can encounter.

The same problems will occur on campus, but the students will have to solve the problems themselves without waiting for the supervisor to address the problems. The students will never be left alone to handle problems, but will be assisted by the project supervisors from the industry or staff from campus.
The vast number of practical projects presented by the industry during the course of the year will provide the students with the opportunity to work on many different projects in the same time as stipulated by the original Interior Design programme. The only difference is that they do not have to leave campus. At the end of the year the students will emerge with a new impression of their being knowledgeable and this will be manifested in them delivering excellent design work to the public.

No. 19 RESEARCH OUTPUT ON CAMPUS (refer to chapter 5, no. 10, page 266)

WIL on-campus is not very different from off-campus. The on-campus workstation will be located in the new incubator building that replaces off-campus workplace learning. The learning and projects now emanate from the industry, and the students are remunerated by the client through the incubator centre. Workplace-based learning or the simulation of a workplace in the industry presents the opportunity for additional knowledge outputs.

If possible, research will form an integral part of WIL. Research for companies on different topics is possible and clients with specific problems that must be solved through problem-solving design create areas for further on-campus research. Research topics can develop through simulation-learning. It can develop to advanced degree studies or used for articles and possible conference papers. The benefit of being on campus, daily availability of staff for assistance with design as well as with support from the industry and companies that are not directly involved in the WIL training, all enable third-year students to achieve their research outputs. The opportunity provided to degree students to work in the incubator, while working on their dissertations and research design projects will also assist them financially in that they will receive remuneration for services rendered to the public. This experience by studying, working and earning a little salary prepares them to be independent before they start a permanent position.

No. 20 FIVE STAGES OF PREPARATION FOR WIL (refer to chapter 5, no. 9, page 263)
Although the manner and approach of work procedures on- or off campus may differ in terms of actions and dealings, the WIL outcomes and the student preparation and training for WIL on-campus and off-campus remain the same. Being off-campus may involve more experience, more excitement and more opportunities to demonstrate students’ capabilities to the company designers, supervisor and clients. However, the same opportunities exist for the students who stay on campus and have to perform all the duties to ensure a well-managed company by themselves or as part of a group with their peers and staff members of the Department. The on-campus WIL scenario can certainly produce more mature designers who will be able to start their own businesses without any difficulty. Hence, the practical experience is more intense and includes all aspects of overseeing the practical learning centre.

The **5 STAGES** discussed in chapter 5, no. 9, page 263, are also applicable to no. 20.1 to 20.5 below:

- 20.1 Preparation
- 20.2 Placement
- 20.3 Monitoring
- 20.4 Assessment
- 20.5 Reflection on learning

The following table introduces different methods that can be in use to assess student’s WIL period, their practical evidence of work and their behaviourism during the WIL period in the company under supervision of the supervisor.

<table>
<thead>
<tr>
<th>Positive ON campus</th>
<th>Negative ON campus</th>
<th>Positive OFF campus</th>
<th>Negative OFF campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students know the environment</td>
<td>Easy to follow own ideas</td>
<td>New environment to explore</td>
<td>Away from campus and unsure of themselves</td>
</tr>
<tr>
<td>Students know the supervisors and WIL co-ordinator</td>
<td>Students can manipulate peers and staff known to them</td>
<td>New design skills to acquire</td>
<td>Parking and travelling problems</td>
</tr>
</tbody>
</table>
The incubator is a section of the Interior Design department. The management and administration of the incubator on campus will be the responsibility of this department and the Faculty WIL co-ordinator (FC) is under the auspices of the Co-operative Education Information Centre of the TUT. The responsibility for cooperation and the joint planning and management of this centre will lie with the WIL co-ordinator of the Department, the FC as well as appointed student assistance from the WIL student body who are doing their WIL training.

The incubator will be available to all students who apply for WIL in the incubator and have prearranged projects from clients or companies from the interior design industry. The incubator will service the rest of the faculty in co-operation with each department’s WIL co-ordinator and an allotted company to supply the work or projects to the students.

As an incubator for the arts and for design, the income generated from the payment by companies for work delivered by the students, the incubator will meet the needs in terms of the facilities required to run a smooth on-campus WIL centre. The computers, printers, furniture in the offices, reception area and boardroom will be installed with the assistance from the interior design industry.

It is evident from the research (refer to Appendix A, page 402) that the industry and companies involved in this research are willing to support the centre with work projects, facilitation of infrastructure such as furniture, paper and ink, mounting of

<table>
<thead>
<tr>
<th>Easy to adjust to the circumstances</th>
<th>Dangerous campus site (early morning or late evening)</th>
<th>Boost students’ self-confidence</th>
<th>Difficult research possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library on campus</td>
<td>Students spend too much time in library</td>
<td>Earn a small salary</td>
<td>Far away from home</td>
</tr>
<tr>
<td>Adequate parking facilities</td>
<td>Enjoy campus life and friends instead of working on projects.</td>
<td>Introduced to more companies and design outlets in the industry</td>
<td>Students experience problems adapting to the world of work</td>
</tr>
</tbody>
</table>
work equipment, laminating machines, a laser cutter for model-building, a profile
cutter and equipment necessary to run the centre as a well-facilitated company.

The centre will serve as an information centre for all students on the Arts Campus as
well as for selected students to do their WIL training in the centre. They will work as
members of the incubator in the office, use the facilities available, see clients in the
boardroom during presentations, be assessed and complete their WIL training. On
completion, they will receive a percentage of the income.

No. 22 MANAGEMENT OF INCUBATOR (refer to chapter 6, no. 22, page 350)

22.1 WIL co-ordinator as the manager of the incubator
As the information centre belongs to the faculty and the incubator that forms part of
the information centre belongs to the Interior Design department, the Faculty WIL co-
ordinator, appointed by the faculty, and the departmental WIL co-ordinator,
appointed by the Interior Design department,) will have their specific duties to
perform. The WIL co-ordinator for Interior Design is in control of the students
working in the centre. His/Her duties include the supply of materials needed, time
management and time schedules for students who are on reception duty to answer
the telephone, help students with information, attend to clients (the public) who make
appointments with WIL students doing their projects, make copies of documents for
students in the Interior Design department and assist wherever else is necessary.
The financial income from companies, paying for projects designed and draughted
by students, will also form part of his/her duties.

The staff of the Visual Communication department will be appointed to assist with
the management of the incubator, where and when necessary, especially during the
examination periods or institutional holidays. Selected students will have the option
to work during holidays, on Saturdays and possibly on Sundays to ensure the
smooth running of the centre.

The students assisting in the centre will be assessed in terms of various skills,
punctuality, personal skills and helpfulness towards clients. The students will be
sourced from first- and second-level students studying Interior and Graphic Design respectively.

22.2 Financial implications for the Interior Design incubator/department

Although the financial income from the incubator is administered by the TUT, the Interior Design WIL co-ordinator will deal with the cost per client and per project as well as the cost to the selected students. The Interior Design WIL co-ordinator is also responsible for receiving and managing the income from the incubator. Income generated from each project, copy of plans or services rendered to a client, whether it be a student or person from the industry, will go to the centre.

22.3 Key control of the Incubator

The incubator will be available for service (student use) seven days a week or here and when staff is available to control the functioning of the centre. Students will work under supervision over weekends. Access control will be in the form of a card swiping system whereby students are pre-programmed to the server. The access to the building is monitored through a CCTV camera system and turn style that is operated by the students’ cards.

22.4 Consulting hours

Consulting hours (between students, company representatives and staff members) will strictly be from 08:00 to 16:00. Visits from clients and the industry will be monitored by the Interior Design WIL co-ordinator. Students doing duty at the reception desk will make appointments for them to meet with the appointed student working on the clients design and the Interior Design WIL co-ordinator.

22.5 Equipment and materials available in incubator

The incubator is a WIL information centre and workplace WIL centre on campus, remains the property of the TUT and is facilitated by the TUT. Although the industry is more than willing to assist with financial contributions for equipment in the form of printers and computers, the centre will be provided with equipment and material, where necessary, funded by the Interior Design department and the income generated from the incubator. The centre will have its own budget and entity number
to ensure the running cost of the centre is managed and controlled by the Finance Department of the institution.

**No. 23 DUTIES OF INTERIOR DESIGN WIL CO-ORDINATOR ON-CAMPUS** (refer to chapter 5, no. 7, page 259)

The duties of the Interior Design WIL co-ordinator off-campus are similar to the duties for working on-campus, with a daily visit and availability to the on-campus students. The Interior Design WIL co-ordinator is employed to manage the new management model (on- and off-campus) for the Interior Design programme for WIL for the same qualification at the TUT.

This person will be employed at programme level. The KPAs of all the WIL co-ordinators on the Arts Campus is set by the DCE. According to the DCE and HEDS (2012), there has to be a Co-operative Education office on each of the TUT campuses, to assist the Interior Design WIL co-ordinator, students and the industry with relevant WIL issues as well as to assist students to be well-informed regarding employment after graduation (refer to chapter 5, no. 7, page 259).

The job description of the on-campus Interior Design WIL co-ordinator (refer to chapter 5, no. 23, page 283; chapter 5, no. 7, page 259) appears to be quite complex but with the help and co-operation of the industry, the students (having to apply for incubator placement) as well as institutional support The major responsibilities of the on-campus WIL co-ordinator is to manage and secure the design work from the industry and clients, and to monitor the students, incubator and Interior Design staff, who has to ensure quality design work done by students.

**No. 24 INTERIOR DESIGN WIL CO-ORDINATOR DUTIES** (refer to chapter 5, no. 8, page 260)

The following KPA’s for the on-campus WIL co-ordinator outline a number of the major tasks and responsibilities he/she has to perform:

1. Support
2. Education and external engagement
24.3. Administration
24.4. Management
24.5. Guardian to students
24.6. Mentoring.

Based on the survey done amongst the interior design industry, students who have completed their WIL training and the WIL staff members at different national HEIs, the abovementioned list of duties was compiled. These duties are discussed below.

24.1 Support (refer to chapter 5, no. 8, page 260)
WIL co-ordinator support starts from the day the student registers for WIL. The student will apply to the WIL co-ordinator to work on campus, whether the student is doing his/her first, second, third or fourth-year. Other than WIL placement in the incubator, students have to perform certain administrative tasks. These include

- copying work;
- research support for master’s and doctoral students at the department;
- managing the reception desk;
- answering questions from the Arts Faculty students looking for placement outside the campus;
- supplying visitors and students with WIL documentation and advertising material; and
- supporting students during their search for suitable off-campus placement.

Support includes helping the WIL students with telephone calls, emails as well as sending CVs and a workbook of practical examples to different companies. The support role entails a more collegial relationship; for instance, the WIL co-ordinator may share his/her knowledge and skills as well as prior experiences to instil curiosity in students and to relieve stress, built up before starting a new design project or relieve stress picked up from excess workload.

24.2 Education and external engagement (refer to chapter 5, no. 8, page 260)
Education for WIL practice on campus does not differ from the off-campus education. To make the students’ selection process for on-campus WIL training easier for the
WIL co-ordinator, one-on-one interviews with students are scheduled to determine their work preferences and dislikes on the content of interior design.

During the interviews on campus the WIL co-ordinator already knows what type of design work, model building, sketch-up, Revit or AutoCad work is available. Students who match the profiles are selected to start with the projects at the incubator immediately. The timetable of each student is worked out according to the respective qualification programmes.

Although the students who work on campus do not search for placement as is the case with students who work off-campus, the education on work placement and different types of work experiences that form part of WIL is explained to all students involved.

24.3 Administration (refer to chapter 5, no. 8, page 260)
Administration duties for off- and on-campus is done by an administrator (secretary). The duties include record-keeping of student registration as well as filing out documentation such as CVs, personal preferences on career description that forms part of the psychological internal interviews with students to ensure that the students make the best decisions for their WIL placement.

24.4 Management (refer to chapter 5, no. 8, page 260)
To manage WIL on campus, the WIL co-ordinator should ensure that all students and supervisors understand their respective roles and duties, while working towards the specific learning outcome for academic credits in Interior Design.
All on-campus students will be supported in the following manner:

Students should be prepared for WIL placement in terms of policies, and the roles of the student, the institution and the employer.
Part of the preparation of the students prior to WIL includes:
  • The WIL co-ordinator clarifies and explains contractual documentation and the signing thereof to the company supervisors and students
• The WIL co-ordinator works through life skills, time management and ways to communication with the students that will be doing WIL.
• The students complete forms on their performances.
• The WIL co-ordinator and the students must have job seeking skills, and have knowledge about application methods and procedures.
• The work integrated learning supervisor organises, runs, manages, supervises and administers the students’ activities when leaving for the different sectors in which interior design is done.

24.5 Guardian to the student (refer to chapter 5, no. 8, page 260)
One of the primary tasks of the WIL co-ordinator is to know all procedures concerning the placement, needs and availability of each student. All role players should know the contact details of the WIL co-ordinator and familiarise themselves with the on-campus WIL concept. It is feasible and realistic to introduce the interior design industry to this new WIL concept well in advance and to explain how they as an industry and its clients could be included as role players with the department and the TUT.

24.6 Mentoring (refer to chapter 5, no. 8, page 260)
The WIL co-ordinator also acts as mentor and tutor for students during their time spent on campus. In many cases, students with low self-esteem may experience the WIL period as stressful and not know how to cope with certain assignments, procedures or make “realistic” decisions that could influence the WIL outcome. The student must be familiar with the WIL guide that forms the link between the WIL co-ordinator, the institution, the department and the supervisor. It is important for the WIL co-ordinator to listen and read the student’s debriefing process documentation. Critical or distressing incidents or positive and encouraging situations can motivate or discourage students for long periods during their careers. According to Pungur (2007) and Williams (2009) quoted in 8.6, the WIL co-ordinator should be available and ready with full support. Emotional support may not be required for every student or in every discipline, but in special or unusual circumstances.
The following diagram 5.7 refers to the Micro Management Model for work integrated learning for the Interior Design qualification for the Bachelor Degree in Technology: Interior Design. Attention is given to project-based learning and problem-based learning. These two learning procedures form the basis of the BTech: Interior Design.

The policy number (26) and BTech procedure from the letter of intent to the final writing of the dissertation (27) through to the debriefing (33) are discussed as from number 25.

**DIAGRAM 5.7 THE MICRO MANAGEMENT MODEL FOR WORK INTEGRATED LEARNING FOR THE INTERIOR DESIGN QUALIFICATION (CILLIERS, 2013)**
25.1 Project-based learning (PJBL) (refer to chapter 6, no. 25.1, page 355)

Project-based learning (PJBL) involves learning through practical projects. These projects are taken from the workplace as real-life projects with a real client. Such projects involve research and have to be supervised by a qualified interior designer or university lecturer as well as receive input from the client in order to solve the design problem, which will be followed by the practical application of the project.

PJBL usually supports the intensive integrative knowledge base to which students have access which they can apply to analyse and solve a problem (Turner, Keegan & Crawford, [2010] as quoted by the CHE WIL: Good Practice Guide, 2011). The problem is analysed in the PBL that is normally a simulated project worked on at the university with support from guest lecturers, visits to the industry or Internet research.

A typical example is solving the space planning of the City of Tshwane (COT) House in Pretoria. With PJBL the same real-life COT project is used to involve the students with real problem-solving tasks. They measure the floor space, remove panelling and do the re-fitment of new panels, apply paint techniques in the interior and install furniture. The PJBL project cannot be simulated, but involved learning through practise at the work site.

Not all students can be involved in PJBL, because they do not have the skills or knowledge to be part of a real-life project yet. To bridge the gaps of aspects not yet developed to participate in a PJBL activity, other teaching mechanisms can be used to achieve curriculum alignment. Smaller projects can be lined up for students through companies where they can participate in the practical application and implementation of real-life projects. They can implement and rig a show stand, paint stands and panels, and exhibit merchandise.
Other practical interior PJBL design examples are measuring surfaces, working out quotations, purchasing raw material, supervising the manufacturing of the item (table, desk, book shelves, curtaining), receiving the items, installing and implementing aspects to the satisfaction of the client. These PJBL projects are realistically supervised and assessed by the industry and university in collaboration with each other.

In most cases, the PJBL forms part of the BTech (level 7) qualification where a real-life project is allocated to a student by an interior design company, with no real time constraint, that allows the student to conduct proper research on materials, finishes, furniture and required manufacturing processes. The client is involved in the concept design development. Different inputs change the design and the presentation needs to be revised until the client is satisfied with the design. The working drawings with specifications, measurements, detail working drawings for the manufacturer to build the item and the final 3D Revit drawings for approval by the client are done. Thereafter, the specification and costing documents are finalised, contracts signed and the student can then start with supervising the project until handed over to the client.

Although the PJBL is handled as a research project and supervised by the university staff in collaboration with the industry, the final manufacturing and installation processes do not form part of the university's duties. Supervision is taken over by the student, the client and the company assisting the student to complete the qualification.

PJBL learning is recommended for levels 7 and 8 where a student can learn from more difficult situations and can contribute to problem-solving projects. This is applicable to the postgraduate diploma and honours degree (Level 7-8). Accreditation for PJBL will be 40 credits on HEQF level 8.

25.2 Problem-based learning (PBL)
In this case the wording can also change to problem-oriented learning (POL). Based or constructed problem solving refers to created problems but a more descriptive
word is oriented where design is focused on solving non-constructed daily living and working problems.

Problem-based learning includes real-world interior design situations for problem-based activities, assignments and projects with appropriate research to support the projects. Problem-based learning, if well-structured with the correct outcomes linked to the project, will teach the student different effective and efficient problem-solving skills. Solving design problems based on real-life scenarios will inspire new research, help with self-focused learning skills and can help students to work under pressure, communicate with peers, discuss problem areas in group sessions and develop the solution to the problem.

Interior design is one of the programmes where problem-solving projects can easily be produced or adopted from real-life problematic projects from the industry. Working with people for people teaches students to understand different life principles, design styles and different design attitudes perceived while working with people, or to solve living space problems through design. It teaches the students collaboration between academics, the industry (workplace) as well as the personal presence of the human factor that has to be considered during the problem-solving process.

According to the CHE’s Work Integrated Learning: Good Practice Guide, 2011, PBL is particularly appropriate in a career-focused advanced diploma and a bachelor’s degree (level 7).

PBL projects can incorporate different design mechanisms/subjects, for example interior design, design theory, design presentation techniques and 3D Revit, realistic presentations to sell and explain the design, concept development from start to finish showing progress, and thinking skills throughout the design.

With the use of different communication techniques to explain the design development, oral skills become part of the project and eventually culminate into other skills, namely:

**Personal qualities**
Such as self-confidence, initiative and a willingness to learn

**Core skills**
- Such as creativity, written communication, oral presentation, explaining and global awareness

**Process skills**
- Such as computer literacy, commercial awareness, prioritising, planning, applying subject understanding, coping with complexity, problem-solving, decision-making and negotiation.

All the above skills and development need to be incorporated into the PBL to ensure a well-developed and resolved design, and to provide an indication whether the student has the ability to develop other career opportunities.

**No. 26 WIL POLICY FOR BTECH** (refer to chapter 6, no. 26, page 359)

The HEQC of the South African Council for Higher Education (CHE, 2012) stipulates the policy for advanced practical learning as part of the curriculum of the Interior Design programme. The content of the WIL policy for the Interior Design programme will support the statutory framework with legislation and regulations as well as policies of the institution to ensure that the final quality assurance and evidence of the WIL management model is in line with the regulations of the faculty and institutions.

The WIL policy includes maintaining the contents of the WIL curriculum. This encompasses the following:

- Only accredited industries, companies and client assignments will be allowed to undertake the WIL partnership with the department
- Registration of the student for WIL in PBL and PJBL
- Co-ordinated joint agreement with the industry or simulated and vocational partners
- Clarification of roles of students, staff and employers
• Good administration and a well-updated database of students and employers, evidence of adequate work environment if WIL takes place off-campus, and well-structured and complex design assignments from clients and the industry
• Frequent and adequate consultation between employer and employee (student and institution) before the final exchange between student and company
• Approval of the company where the student is employed; the type of design assignment must be approved by the Interior Design department as a PBL or PJBL
• Appointed supervisors or professional interior designers to assist the student and design process during PBL or PJBL
• Signing the code of conduct by stakeholders
• Appointment of examiners and moderators from the industry to do assessments in collaboration with staff from the Interior Design department
• Assessment done on- or off–campus, panel discussion and marking of work
• Exhibition of practical work done by students exhibited during the year-end function for graduates or at the launch of the design project
• Observations of student behaviour at the workstation and monitoring common mannerisms during the WIL process
• WIL benchmarking against national and international practices, and WIL standards
• Identification of industries to support remedial action for students who did not complete WIL
• Satisfaction of on- or off-campus staff, student and supervisors.

Although the policy of the TUT forms the foundation from where the WIL policy is created, it is important to look at the content of the BTech WIL policy and add the important content to ensure a more successful WIL outcome and possible employability:

• Set graduate (degree) WIL outcomes which reflect the generic outcomes that every graduate of the University is expected to achieve.
• Outcomes on degree level should be used to provide a benchmark against which students will demonstrate the development of assignable skills.
According to Yorke and Knight (2004), embedding employability into the curriculum describes the following learning outcomes that form the core and generic outcomes for the BTech degree in the Interior Design programme:

**Knowledge, understanding and intellectual skills**

- Demonstrate a capacity for systematic, conceptual and critical thinking.
- Act in an ethical manner, demonstrating political, social and cultural awareness.
- Identify a major area of discipline-based learning and demonstrate expertise within it, including evaluation of aspects of scholarship.
- Demonstrate an awareness of the transferability of graduate learning to a future career or further study/training.

**Transferable and practical skills**

- Work with confidence both independently and as a member or leader of a group or team.
- Show flexible and creative approaches to problem solving.
- Communicate clearly and appropriately, demonstrating a sense of audience.
- Produce output that is literate, numerate and coherent.
- Manage information in a range of media.

TUT is very strict about quality assurance; therefore, the WIL policy will disclose all policy rules and regulations that must be in place to guarantee that the curriculum contents are in line with all aspects of the management model.

**No. 27 BTECH INTERIOR DESIGN STRATEGY FOR ASSESSMENT FOR PJBL AND PBL** (refer to chapter 6, no. 27, page 360)

The research projects of Interior Design students are planned and executed well. The students and the industry are ready for the assessment of the final design project.
Students are assessed by means of an oral presentation, exhibition and writing a full dissertation

During the course of the year the industry and external mentors are involved in developing and planning given assignments and/or private research projects of each graduate student. All of the projects are PBLs. It is an enormous task to assess each of these problem-based learning projects, not only for the institution, the examiners and moderators panel who will do the assessment, but also for the student who has to present the assignment to the client, industry and institutional staff.

The presentation of a research project includes a discussion of the research and the methodology used. This is followed by developing the design up to solving the (design) problem. It includes a comprehensive research document containing the specifications of materials and construction used for the solution. The final selling mechanisms are the 3D renderings of the interior spaces.

Together with a model and real-life samples of the materials used, it forms the exhibition that is presented orally with the aid of the recorded video of the design process or a PowerPoint presentation.

27.1 Oral presentation

Throughout the design process the student will have numerous discussions with the supervisor of the department and the self-selected client, in most cases a private client or an assignment from the industry. For any person on the panel of examiners and moderators (from the industry) the only way to understand the problem-based design project is for the student to discuss and explain the working of the design from the beginning of the project.

Presenting the proposed project starts off with the research methodology that includes the population and sampling, as well as collecting information by means of questionnaires, interviews, literature studies, field work and case studies. The research in general is discussed, and outcomes of the field work and questionnaire are presented in graph form to explain the way forward.
Explaining the final design and solution to the client’s design problem are captured on the working and construction drawings where the materials, specifications and costing eventually jointly show the solution to the problem. The discussion is concluded by answering a few questions from the assessment panel to test the knowledge of the students. It is at this stage that the students put their listening and answering skills to the test by thinking and reacting on their feet.

27.2 Exhibition (industry)
From the beginning of the discussion sessions with the supervisor/s, many concept sketches, design solutions and possible construction options were drawn before the final working drawings were drafted. The development of the concept design, from beginning to end, is captured in a CAD software program and needs to be viewed. The final 3D renderings and presentation drawings, all done on CAD, form the final exhibition.

The necessary information, case studies, concept development sketches and the final 3D renderings showing the final interior design solution are all laid out on two pull-up banners. The exhibition consists of these two banners, the working drawings, the dissertation, models explaining the design solution and a sample board for the panel to gain an understanding of the materials used. Additional design exhibits needed to complete the exhibition are allowed, but have to be part of the exhibition the day prior to the commencement of the assessment procedure.

27.3 Full dissertation
The research design problem is solved through drawings, sketches, research outcomes, pictures taken on site, the perusal of case studies similar to the research project, technical instructions, construction processes, and the working and implementation of materials and finishes. All this information and the documentation of the design project from start to finish are captured in the dissertation. The entire set of working drawings and the miniature example of the banners are attached as addendums at the back of the paper, completing the dissertation.

No. 28 INDUSTRY OUTCOMES (refer to chapter 6, no. 28, page 362)
All of the abovementioned criteria, subsections of the research study and the PBL project are assessed by a panel of judges. All members of the assessment panel must be fully qualified interior designers or architects, with the correct qualification level to mark BTech PBL projects.

The panel consists of:
- Professionally qualified lecturers from the Interior Design department
- Two members from the industry acting as employed moderators by the institution
- Visitors and observers who act in an advisory capacity (also from the industry), all of whom are specialists in different fields of interior design.

Each student's work is assessed, and the final marks for each section of the project are discussed and approved by the moderators. The results of the assessments are final and confirmed by a written report from the moderators and the examiners (supervisors).

**No. 29 INDUSTRY OUTCOMES: YES** (refer to chapter 6, no. 29, page 363)

As mentioned above, the marks and results of members of the industry acting as moderators and employed by the TUT institution are final. A legal written report on each mark awarded PBL is submitted to the Department of Interior Design as proof of assessment.

**No. 30 ACADEMIC ADMINISTRATION** (refer to chapter 6, no. 30, page 363)

If the student has met the minimum criteria and outcomes for PBL, the student receives a WIL pass rate for PBL. Subsequently, the administrator of the Department informs the institution that all the conditions with regard to PBL have been met, and he includes hard copies of all reports and IT mark sheets. Filing and the documentation of final marks are done by the WIL co-ordinator, supervisor and administrator of the Department of Interior Design.
No. 31 ACADEMIC ADMINISTRATION: NO (refer to chapter 6, no. 31, page 364)

Should there be any incomplete work, work not discussed or approved by the supervisors or the design problem has not been solved with a well-considered ground-breaking solution the student neither meets the minimum criteria nor achieves the outcomes for PBL. The student then fails.

No. 32 REMEDIAL ACTION (refer to chapter 6, no. 32, page 364)

The WIL co-ordinator and Interior Design staff member working in close contact with the student should be sensitive to problems that may arise during the PBL period. To assist a student who has failed the WIL or PBL assignment, the WIL co-ordinator and staff from the department, in association with a predetermined company who is willing to assist the student, meet to decide on the right approach to remedial action. The student is interviewed by staff members, the WIL co-ordinator and the company representative/s. Problems that have contributed to the failure of the PBL period and assignment are discussed to ensure that the problems do not recur during the remedial action process.

Once confirmation is received that the student is prepared and ready to repeat the PBL, the company determines the time and date for the remedial intervention to start. The student attends the remedial process, repeats the project, completes the failed areas and prepares a new exhibition as proof of remedial work accomplished. The WIL co-ordinator and Interior Design staff members visit the student and assess the work done, the technical report and working drawings as well as the debriefing and oral presentation in the presence of the company representative. Such remedial action periods should not be longer than two months following the final evaluation date in November. The dissertation, bound with all working drawings, 3D renderings and banner examples has to be submitted before the end of the same month of assessment.

This intervention to assist the student to repeat the PBL project is to prevent the student from having to repeat a full year of study if only a few remedial exercises can complete the project.
No. 33 DEBRIEFING (refer to chapter 6, no. 33, page 365)

It is important for the staff and supervisors of the BTech programme to have a debriefing group session with the students to highlight areas that need change or areas of the PBL that must be developed or expanded. This debriefing session takes place a week after the final assessment and evaluation of the BTech work and PBL project.

The session also provides the students time to reflect on a year of work, the time it took to get used to the tough work situation, to cope with technical problem areas and to interview clients and members of the industry about the project, and many more areas of observation that were either positive or negative. With this information available it is easy to make decisions on how to implement changes to the PBL project.

33.1 Quality assurance (refer to chapter 6, no. 33.1, page 366)

Quality assurance is one of the fundamental areas and ways to ensure that the way WIL is implemented in the Interior Design programme is in accordance with the curriculum content for each level, including the degree programme.

It is an ideal way of determining whether the new management model for WIL for the Interior Design qualification will adhere to the HEQF outcomes and the set curriculum for the programme. According to the research conducted (refer to chapter 4, no. 4.2, page 112), the following feedback was acknowledged and will be assessed in detail by the staff of the Interior Design programme to see where and how best practice can be improved in the industry:

33.1.1 Complaints that became evident from the research

- The WIL guide is very difficult to understand.
  The WIL guide will be redesigned and superfluous information will be deleted from the document.

- Supervisors in the industry do not read the WIL guide.
With the management WIL model, all companies will assist with the training of supervisors who will be responsible for students doing WIL. They will have to read and use the guide to assess the students.

- **The WIL guide must be more user-friendly.**

With the assistance from WIL students and understanding the content of the WIL guide, the information included in the document will be rewritten and be made more user-friendly.

- **Travelling fees are very high and companies should remunerate students for their time spent in training.**

The research shows that companies are willing to support the students financially towards travelling fees and other necessary expenditures.

- **Workstations are sometimes not fully equipped.**

One of the priorities of the management model for WIL is to approve workstations and work placements to ensure that it will benefit both the students and the industry.

- **Workstations and workplaces should be approved before students are allowed to work there.**

Each year the WIL co-ordinator will visit the students, the workstations and the supervisors to ensure that the latest technical equipment and software packages are installed in the facilities.

- **Industries want to interview students and examine their portfolio of work before selecting students.**

The new management model for WIL placement will ensure that all students be granted the opportunity to go for an interview and to present their portfolios to the companies.

- **Supervisors and design peers at the companies are sometimes unsupportive.**

Trained and appointed supervisors will provide help and support where necessary.

- **It is important for the sending institution to visit students during WIL.**

Visits will be managed by the WIL co-ordinator and Interior Design staff members on a regular basis to ensure all is well with WIL.
With student assistance and the assistance from other academics of the Faculty, the shortage of incubator staff members will be addressed in anticipation of the response from the institution for more staff. Utilising the services of Interior Design student assistants to service the incubator, proved that the institution should employ more staff members to work in the incubator and support the WIL co-ordinator in carrying out his/her duties effectively.

33.1.2 Positive feedback that became evident from the research

- The companies and supervisors involved with the WIL students are positive that WIL forms part of the curriculum of the programme.

Feedback after the WIL training period will be scrutinised by the academic staff, including areas where knowledge is lacking in the curriculum.

- The industry is willing to accommodate first- and second-level students for WIL training.

With this knowledge available it is necessary to draft well-planned structures for all level students in Interior Design to provide them with the opportunity to improve their skills and knowledge before working in the industry.

- The industry agrees that third-level students have sufficient technical and design skills to work in the industry.

Although the Department is confident that the programme is on the right track, it was refreshing to receive such positive feedback.

- The industry is prepared to interview different students and look at their portfolios of work before making a decision on which student to select for WIL.

In terms of the new management model, the WIL co-ordinator needs to ensure that companies are introduced to a number of students from whom a candidate can be selected for WIL training in their company.

- The companies are prepared to train and prepare the supervisor who will be allocated to a student to ensure that the correct type of supervisor is allocated to the right WIL student.

Preparation of supervisors is a very important service to the students and to the companies. All stakeholders will benefit from this important preparation.
• The positive attitude of the students is clearly visible from their answers in the questionnaire.

The students are of the opinion that WIL is an essential period of their study to have the opportunity to express their knowledge in a practical and theoretical way. This is very positive feedback and more emphasis will be placed on the preparation of the students prior to the WIL period.

• WIL makes the students feel positive about their studies.

Any student who is well-prepared, who has been brainwashed to be positive and encouraged to do his/her best, who is polite and makes use of all the skills needed to be employed, will be positive about a career and the work that will be done during the rest of his/her career life.

• WIL improves self-confidence and self-assurance.

When WIL participation shows the students that their knowledge and understanding of design is accepted and realised in the industry, they have self-confidence. Positive, stimulated and knowledgeable students will become good employees. And that is the main purpose of WIL.

• Financial support from companies helps those students with financial problems.

Companies help with transport fees and money to spend on meals. This feedback was received positively. Students feel more relaxed and do not have to fret about such matters. They can now concentrate on their studies.

• Interior Design staff members are all willing to support the WIL students.

Students who remain on campus will receive assistance from staff members in supervising the work done by the students. It is a privilege for any lecturer working with senior students, especially those chosen to work in the incubator on campus, to assist them with real-life projects that can be included in their CVs. This supervision of students and participation in the interior design industry presents an enormous chance to put the Interior Design qualification on the map and introduce students to the industry.

• The contribution of staff seems optimistic and confident.

During discussions on work and design done during WIL, industry visits and negotiations with companies all contribute to a positive attitude towards WIL training for students. This is an opportune time for staff and students to get
involved in interesting projects and to be part of competitions organised by the industry.

- **Staff members are willing to help and work in the incubator with remuneration from the institution.**

  This is perceived as a way in which the institution can express its gratitude towards the staff. The realisation thereof will be welcomed.

- **Staff and students feel that the debriefing sessions are of utmost importance.**

  The students, staff, members of the industry and the input from the debriefing sessions must be communicated to all persons involved in WIL. Quality assurance is one of the major customary ways of evaluating and assessing teaching and learning at the TUT. It is important that all feedback from students and supervisors be made known, and that positive and negative issues be discussed with the parties concerned.

The amount of positive feedback from the industry, the students and the staff from different sectors in the industry as well as from different higher institutions underlined the importance of WIL and how WIL can transform the once shy first-level student into a **well-qualified, knowledgeable** and **well-informed** interior designer, ready to step into the real world of providing a service to clients and solving problem design projects.

### 33.1.3 Readiness for employability as an aspect of quality assurance

The most important quality assurance aspect is the readiness for employability in the industry. To ensure that the students who graduate are trained properly, ready for work and ready to participate in the design industry, the following employability tools have to form part of the final self-development for students to become interior designers. These tools should form part of the WIL management model for the Interior Design programme.

The key to becoming a good employee is to apply one’s integrated knowledge from work experience, develop technical and interactive skills, and incorporate all of these into one’s personal development plan, namely lifelong learning.
According to the universities in the United Kingdom, there are three important areas that have to be developed:

1. Personal qualities
2. Core skills
3. Process skills

(cf. Integrated work-based learning in higher education. [Online] cwis.livjn.ac.uk/lid/lea support/17.htm Accessed 17 August [2013]).

1. Personal qualities
   - **Self-awareness**: awareness of own strengths and weaknesses, aims and values
   - **Self-confidence**: confidence in dealing with the challenges that employment and life “offer”
   - **Independence**: the ability to work without supervision
   - **Emotional intelligence**: sensitivity to the emotions of others and the effects that your actions can cause
   - **Adaptability**: the ability to respond positively to changing circumstances and new challenges
   - **Stress tolerance**: the ability to retain effectiveness notwithstanding the challenges of employment and life
   - **Reflectiveness**: the ability to reflect evaluatively on the performance of oneself and others

2. Core skills
   - **Reading effectiveness**: the recognition and retention of key points
   - **Numeracy**: the ability to use numbers at an appropriate level of accuracy
   - **Creativity**: the ability to be original or inventive and to apply lateral thinking
   - **Listening**: focused attention during which key points are recognised
   - **Written communication**: clear reports, letters, written specifications and costing schedules for the client, etc.
   - **Oral presentations**: clear and confident presentation of information to a group
   - **Explaining**: orally and in writing
• **Global awareness:** in terms of both culture and economics.

3. **Process skills**

• **Ability to work cross-culturally:** both in- and outside South Africa
• **Acting morally:** to have a moral code and act accordingly
• **Applying subject understanding:** using terminology and vocabulary from the Interior Design programme
• **Commercial awareness:** operating with an understanding of business issues and priorities
• **Computer literacy:** the ability to use a range of software
• **Coping with complexity:** the ability to handle unclear and difficult situations
• **Decision-making:** choice of the best option from a range of alternatives
• **Ethical sensitivity:** appreciate ethical aspects of employment and to act accordingly.
• **Influencing:** convincing others of the strength of one’s point of view
• **Negotiating:** discussions to achieve a mutually acceptable decision on debatable issues
• **Planning:** setting achievable goals and structuring action
• **Political sensitivity:** to appreciate how organisations actually function and to act accordingly
• **Prioritising:** the ability to rank tasks according to importance
• **Problem-solving:** selecting and using suitable methods to find solutions
• **Resolving conflict:** in relationships with others
• **Teamwork:** the ability to work constructively with others on a general task.

The abovementioned tools of development have to form part of the new management model for Interior Design WIL for the Interior Design programme on all levels of the programme. With these tools integrated into all aspects of the programme, the development of the students will lead to their being successful human beings.
The last section of the new WIL management model for Interior Design qualification refer to the information centre (34) and the incubator for the Interior Design department (35).

To ensure a well-managed and working of the WIL programme in the Interior Design model it is evident that there has to be a well-planned building and facilities. The following diagram 5.8 designed by Dr M Wessels (2012) Micro WIL Co-operative Educational information centre for Interior Design incubator and Faculty explains the working of the Information Centre with all the necessary sections to assist the students of the Faculty of Arts with employability and any other need that may surface.

No. 34 CO-OPERATIVE EDUCATION INFORMATION CENTRE (refer to chapter 6, no. 34, page 367)
It is the aim and aspiration of the Tshwane University of Technology to support work-integrated learning for all qualification programmes educated at the Institution through a WIL information centre at all faculties.

The function of the centre can easily be accommodated in the incubator that forms part of the management model for Interior Design WIL for the Interior Design programme at the TUT. The functions that are considered as necessary in each of the sections (refer to table 5.3, page 306) provide one with a good indication of how the two centres can be merged into one incubator centre for the Faculty and the Interior Design department.

As illustrated in the table below, it becomes clear how this information centre will be structured to function under supervision of the Director of Co-operative Education.

**TABLE 5.3 Department and Faculty requirements for an information centre**
(CILLIERS, 2013)

<table>
<thead>
<tr>
<th>INTERIOR DESIGN MANAGEMENT MODEL AND WORKPLACE INCUBATOR</th>
<th>CO-OPERATIVE EDUCATION INFORMATION CENTRE – FACULTY-ORIENTED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WIL SECTION</strong></td>
<td><strong>WIL SECTION</strong></td>
</tr>
<tr>
<td>- Faculty WIL co-ordinator: manage the incubator</td>
<td>- Faculty WIL co-ordinator</td>
</tr>
<tr>
<td>- Students assist with the management of the incubator</td>
<td>- WIL co-ordinator</td>
</tr>
<tr>
<td>- Interior design staff assist with WIL training and act as supervisors</td>
<td>- Administrator</td>
</tr>
<tr>
<td>- WIL co-ordinator acts as administrator if no administrator is appointed</td>
<td></td>
</tr>
<tr>
<td><strong>COMPUTER WORKSTATIONS FOR STUDENTS</strong></td>
<td><strong>COMPUTER WORKSTATIONS FOR STUDENTS</strong></td>
</tr>
<tr>
<td>- Office spaces with furniture for students to work and complete WIL</td>
<td>- Internet access</td>
</tr>
<tr>
<td>- Internet access</td>
<td></td>
</tr>
<tr>
<td>- Updated and cutting edge software to use for WIL</td>
<td></td>
</tr>
</tbody>
</table>
- Computer equipment with printers
- Computers to research companies

**RECEPTION AREA**
- Student assistant acts as administrator
- Telephones available to phone companies
- Waiting area
- Discussion area to talk to students
- Interviews in boardroom
- Exhibition on WIL work and advertising for companies
- Qualification information available
- Students assist with visitors and answering questions
- Printing and cutting facilities for projects

**RECEPTION AREA**
- Administrator
- Information to industry
- Contracts to industry

**EMPLOYABILITY SECTION**
- Office for faculty employability staff
- Student administrator to help with administration during the day
- Students assist staff members
- Telephones and computer available to do research and organise interviews
- Staff and WIL co-ordinator assist with visitors from companies and industries

**EMPLOYABILITY SECTION**
- Faculty employability
- Practitioners EP
- Administrator

**KITCHENETTE/TOILETS**
- Kitchenette fully equipped to cater for a meeting consisting of 20 people
- Unisex toilet facilities

**BOARDROOM**
- Boardroom seating 20 people
- Boardroom table can be divided for smaller group sessions
- Audio projectors and equipment for Skype with students
5.11 THE WIL CO-OPERATIVE EDUCATION INFORMATION CENTRE AND INTERIOR DESIGN WIL INCUBATOR (refer to chapter 6, no. 35, page 368)

No. 35 THE WIL INCUBATOR (refer to chapter 6, no. 35, page 368)

This proposed incubator is the focal point and most important division of the management model for WIL for the Interior Design qualification.

Throughout the implementation of the new strategy towards WIL in the Interior Design qualification (implemented on all the levels) the incubator will be an asset to the Interior Design and WIL programmes. The reason is that all the knowledgeable managers and administrators will be stationed centrally in one building/area to render assistance to all the art students to find a suitable industry for placement. An additional advantage is that there will be only one area for the Interior Design students to do their WIL training on campus, while others have to travel off-campus to do their WIL at a company in the industry.

To explain the real advantage of the Faculty’s WIL information centre and the Interior Design incubator in one central centre, the following schematic layout will explain the functioning and layout of the proposed centre:
As discussed in the *Faculty WIL Information Centre* by Dr Wessels (TUT, 2012), the Director of Co-operative Education of the Institution, it should be a centre where the art student can log into a database to retrieve information regarding accessible industries and company information for programmes taught on campus.

The amalgamation of the Interior Design incubator and the Faculty WIL Co-operative Education Information Centre will guarantee students access to services rendered, such as photocopying, lamination of projects and laser-cutting at all times.

The Interior Design student assistants will be available in all divisions of the incubator for the faculty. Workstations with access to the Internet to do searches on databases of available industries and work placement for students will simplify the process of finding a workstation. The employability section is also located in the centre with an Employability Practitioner (EP) available to assist the students with possible employment.

The discussion and explanation for the WIL co-operative Education information centre and Interior Design WIL incubator follows in diagram 5.9. The new centre number 37, with all the Interior Design facilities, offices and work-place for interior
students and WIL staff are discussed under numbers 38–44. The WIL Education information section of the incubator is discussed under numbers 45 – 47.

Also take note that the green shades are used for Interior Design and the Grey shades are used for the information and employment centre.

The Faculty WIL co-ordinator in the WIL section of the incubator will be in charge of the faculty WIL management and implementation, with knowledgeable assistants, for example, the administrator and another WIL co-ordinator.
Interior Design student assistants at the reception counter who are under the supervision of the administrator will assist the students, whether Interior Design WIL students, industry representatives visiting the Interior Design WIL students, other students such as the Graphic Design students or Performing art students seeking information or advice.

**No. 36 FACULTY WIL CO-ORDINATOR** (refer to chapter 6, no. 36, page 369)

The Interior Design WIL co-operator is also the head of the Interior Design incubator on-campus. The ID WIL co-ordinator as well as the Education Information centre for WIL is managed by the Faculty WIL co-ordinator who is fully responsible for the WIL facilitation on campus.

To ensure that the Faculty WIL co-ordinator has a central office, he/she is moved into the Interior Design WIL incubator with his/her proposed delegates to render a service to all the students of the arts campus and to manage the employability section that falls under his responsibilities.

**No. 37 INFORMATION CENTRE – ADMINISTRATORS** (refer to chapter 6, no. 37, page 369)

The information centre must be controlled and supervised eight hours a day. The appointed administrators (one for the Interior Design incubator and one for the Education Information centre) are in control of the Interior Design student assistants, the faculty students visiting the computer workstation searching for workplace and industry information, and the head assistant in control of the students. All information, contact with the industries and contracts will be their responsibility.

**No. 38 INTERIOR DESIGN WIL CO-ORDINATOR** (refer to chapter 6, no. 38, page 369)
The Interior Design WIL co-ordinator, also manager of the Incubator, will be responsible for the Interior Design students doing their WIL training on campus. This function includes the administration and the workstations.

Although the WIL co-ordinator is responsible for the respective student groups on- and off-campus, he/she is also responsible for any other type of WIL (different levels in the Interior Design programme) duties, such as preparation, placement, assessment and debriefing that form part of the curriculum of the Interior Design programme. These functions are shared with the Interior Design WIL staff members appointed to assist the ID WIL co-ordinator.

No. 39 INTERIOR DESIGN WIL STAFF MEMBERS (refer to chapter 6, no. 39, page 370)

Due to the WIL co-ordinator’s workload and responsibilities it is necessary to have another dedicated academic staff member on each level of the programme to assist the WIL co-ordinator in his/her duties. It is the duty of the Interior Design staff member to render assistance during assessments and visits to the students working off-campus. It is the duty of the staff member to be present during the debriefing sessions so he/she can be alerted to unprofessional conduct and inappropriate and improper service from the student or from the supervisor of the company. Such unfortunate events, should they occur, have to be reported to the head of the department whereafter an investigation is conducted and measures taken to resolve the problem.

No. 40 THE INTERIOR DESIGN WIL INCUBATOR FOR ON-CAMPUS TRAINING
(refer to chapter 6, no. 40, page 371)

The Interior Design WIL incubator is developed to be the hub where the industry, clients and government departments can come for help and/or design solutions done by students under the supervision of qualified Interior Design staff members.

The incubator is designed to be managed as an inclusive interior design company. The students working in the incubator can fill positions from administrative assistant,
copier, telephone assistant or even project leader and designer for a client. The
different administrative jobs and duties to ensure the smooth running of the incubator
will be rotated between the students doing WIL on campus to enable them to
become familiar with all the administrative training aspects.

All the duties necessary and of use to the incubator will be assessed by the industry
and external moderators and examiners for the final WIL mark. Students have to
master purchasing paper and ink for the printers, arrange interviews for students or
assist students and clients with WIL information.

There has to be at least ten workstations for students who prefer to do their WIL
training on campus at the incubator.

**No. 41 THE INTERIOR DESIGN STUDENT ASSISTANTS** (refer to chapter 6, no.
41, page 371)

Interior Design student assistants who are under the supervision of the administrator
will be on duty at the reception counter to assist all students and industry
representatives who visit the interior WIL students, do laminating, make photocopies
and supply information and advice, where needed.

Because administration and the running of a business form part of WIL, it was
decided that Interior Design students undertaking their WIL at the incubator have to
participate in all the duties necessary to uphold the incubator. The student
assistants can also be replaced by second-level students who are doing their WIL
training in skills development. The duties performed at the incubator can provide
such students with the necessary training.

**No. 42 INTERIOR DESIGN WIL STUDENTS** (refer to chapter 6, no. 42, page 372)

The main reasons for the management model for WIL for the Interior Design
qualification is to keep the students on campus and to ensure the industry follows the
students with small design projects or send clients to bring their projects to the
incubator.
Students work at the incubator on projects provided by the industry, clients and government departments that need a layout or presentation for a new interior design or office layout. The design consultation, the project and the final project presented to the client is done at a fee that will be paid into an institutional account. Upon completion of the project, the student receives a percentage of the fee. The student assistant who worked in conjunction with the project leader also receives her/her fee and the balance of the money remains in the incubator account.

No. 43 REPRESENTATIVES FROM THE INTERIOR DESIGN INDUSTRY (refer to chapter 6, no. 43, page 372)

In direct contrast with this new way of doing WIL where students have to look for a workstation and work placement, the incubator students stay on campus and the “work comes to them”. Although the latter scenario sounds simpler than the off-campus scenario where the students have to leave the campus, become acquainted with new work circumstances and people, and work harder to impress the employers at the companies where they are placed, the opposite is true.

The incubator WIL student does not have any choice regarding who to work for in the industry when a client or a company submits the design project to the incubator. The student who has applied to work at the incubator starts the consultation process, listens to the requirements of the client in the presence of the WIL co-ordinator and Interior Design staff, records the discussion in the form of minutes and files it for all parties as a reference document. These minutes are typed by the student assistants under the supervision of the administrators available. The student and the industry representative meet on a weekly basis and all discussions on the progress or changes that have to be made to the plans and design are monitored, typed and filed.

The visitors from the industry or any client that has a project in progress meet at the incubator boardroom with all parties concerned. Working processes are shared amongst the different students working in the incubator so that each of them can be subject to training in all facets of company management and administration. When
the project has been completed, presented to the client and approved by all stakeholders, the fees for this project are paid into the account of the institution.

No. 44 INTERIOR DESIGN AND INDUSTRY PANEL FOR ASSESSMENT (refer to chapter 6, no. 44, page 373)

The Interior Design staff and WIL co-ordinator imitate managerial functions of a company in a simulated business environment at the incubator regarding company rules and regulations in a working environment.

The final assessment of the WIL process has to be finalised before any payment is made to a student or WIL participant. The institution and Interior Design department decide in advance who will be the moderators, the examiners and persons working with the students, who will monitor the students during the working process and who the panel members for the WIL assessment will be. Marks given during the design process and the debriefing presentation to the industry will conclude the final assessment mark.

No. 45 EMPLOYABILITY PRACTITIONERS (refer to chapter 6, no. 45, page 374)
FACULTY COMPUTER DATABASE AND WORKSTATION FOR ART AND DESIGN STUDENTS (refer to chapter 6, no. 45, page 373)

With the division of employability, higher education entered a new phase by assisting the graduates and diplomandi who urgently seek employment at a company, institution, factory and client or somewhere in the industry where they can add value to benefit the economy of South Africa.

The fact that this division does not fall under the auspices of the Interior Design department it is difficult to be prescriptive. The great need amongst students who are qualified but do not know where to look for employment remains a perpetual problem. Students can now register on a database at the incubator in the employment division where the industry and potential clients can access information such as of the candidates’ names, telephone numbers, qualifications, art and design work, experience and other information to enable companies to make an informed
decision regarding which students to interview. With this approach by the institution, there is optimism that more students can be employed.

With the practical knowledge of the employability practitioner on campus, the art and design students with employability questions and needs will have access to a competent division to help unravel their inner turmoil. The competent practitioner can answer the questions easily and solutions to problems can be found effortlessly. This is the first step taken by the institution to satisfy the needs of qualified students.

**No. 46 COMPUTER WORKSTATION FOR ART AND DESIGN STUDENTS** (refer to chapter 6, no. 46, page 374)

Although there are a few computer laboratories available on the arts campus, they are not suitable to meet the needs of the students with regard to employability and the search for WIL placement. The computer workstation available in the incubator will be exclusively set up with industry information, data on registered companies available and willing to take WIL students as well as a database where students can complete all necessary information and submit it electronically directly to the company.

It is the duty of the institution and departmental WIL co-ordinators on campus to upload data such as names of companies and members of the industry, factories and manufacturers as well as career labs for students to search for placement for WIL.

**No. 47 INDUSTRIES LIAISON AND EMPLOYERS OFFICES** (refer to chapter 6, no. 47, page 375)

For the abovementioned computer laboratory to work well, full-time student assistants are employed to assist students in search of WIL placement to master the computer software and to ensure their applications are sent to the correct companies in the industry. These assistants will be trained and knowledgeable to support the WIL students.
5.12 CONCLUSION

The main concepts for the new management model for WIL for the Interior Design qualification are discussed in Chapter 5. The management model is discussed in detail according to Diagram 5.4, page 243.

In Chapter 6, the management and administration of the proposed management model for WIL for the Interior Design qualification will be dissected, and functions and tasks will be allocated to each division, as shown in Model .5.4, in Chapter 5 on page 243, thereby making it easier to manage and implement the WIL concepts.
6

DESCRIPTION OF THE FUNCTIONALITY AND PROFICIENCY TO MANAGE THE NEW WORK INTEGRATED LEARNING MODEL FOR THE INTERIOR DESIGN QUALIFICATION

6.1 INTRODUCTION

The management and administration of the new management model for WIL for the Interior Design qualification programme is based on the information contained in Chapter 2, taken from the comparative analysis, questionnaires and interviews, the new strategy for co-operative education for TUT, the viewpoint of the Department of Education (DoE) on WIL, the approach of SASCE to WIL, the growing influence of WILRU at national level and the comprehension on WIL in the new Quality Framework.

The WIL management model for the Interior Design qualification in the Faculty of the Arts falls under the simulation category according to the new strategy for co-operative education for WIL at TUT (2012:3), as described by Wessels (2012). In the same programme, the BTech programme will fit into the proposed categories of project-based learning and problem-based learning.

To ensure a well-defined management model for WIL for Interior Design, it is important for the management and administration of this model for WIL to abide by the set strategies and the model for co-operative education for the University of Technology (TUT).

During a Morning Live discussion in Fourways in Johannesburg in 2013, the Minister of Higher Education and Training urged companies and the industry to open their doors to all Further Education and Training (FET) colleges as well as universities for graduates from all walks of life and to teach them workplace skills with the intent of employing them at the end of their training period. With the support pledged by the minister, staff of the Interior Design department at the TUT and the interior design industry, the possibility can become a reality if all stakeholders work together.
6.2 DESCRIPTION OF THE MANAGEMENT OF THE NEW INTERIOR DESIGN WORK INTEGRATED LEARNING MODEL

This chapter has to be read in concurrence with Chapter 5 (the description of the new management model, chapter 5, page 216).

No. 1 MANAGE THE INTERIOR DESIGN WORK INTEGRATED LEARNING MODEL (refer to chapter 5, no. 1, page 246).

Although work integrated learning (WIL) is part of the curriculum of the Interior Design qualification programme, credit-bearing and implemented on three different qualification levels in the programme, it is and always will be an enormous responsibility to manage all the role players (industry, students and institution) to make an ongoing concerted effort to stay abreast of industrial development, design and technical advancement, manufacturing of new materials for the interior design market and the needs from industry for the qualification.

The management of the Interior Design model will be executed in a combined effort by Interior Design staff members, the alumni students and the active industry to stay in contact with one another to ensure that all parties stay informed of new developments.

These new developments and technical advances have to be incorporated into the curriculum annually. Prior to entering the industry, students have to be trained to keep abreast of the latest developments in computer software pertaining to interior design programs. The reason for this skill to be mastered is that employers in the industry demand that the student must be able to take measurements independently, visit clients, provide correct feedback to the employer and interior designers who will be working alongside him/her on the project, write specifications and truly act as interior designers who knows what to do to have a project go smoothly. No Interior Design student can be employed without the skills, knowledge and experience gained from WIL.

No. 2 MANAGE WIL POLICY (refer to chapter 5, no. 2, page 249)
The WIL policy for the Interior Design management model for WIL must be written in accordance with the curriculum contents of the Interior Design qualification programme to ensure that all sections of the qualification are covered in the WIL management model. If the policy is aligned with the curriculum and the quality assurance policies of the institution, it will be demonstrated that the students practise what they have learned, and that they have emerged from the WIL training programme as well-trained interior designers and alumni of the TUT.

In addition to the WIL policy, various rules and regulations have been added to include the regulations laid down by the Interior Design department. It is the WIL co-coordinator’s duty to see to it that students adhere to these rules and regulations by means of workplace visits during the WIL period.

In order to manage these model-specific areas, the following areas need attention and must be redesigned:

- The WIL guide must be more user-friendly.
- Companies must appoint specific supervisors for each student.
- Students must be registered for WIL.
- Policy documentation must be in place and signed by all role players.
- The company must organise financial assistance to cover transport costs of disadvantaged students.
- Visits from the sending institution are very important.
- Students must build self-confidence before the WIL period commences.
- Staff members must ensure that the WIL students understand the industry/what is required of them, how to deal with assignments and how to use the Revit program.

The following information will cover the departmental work integrated learning.

**No. 3 MANAGE WORKSTATIONS AND WORKPLACE APPROVAL** (refer to chapter 5, no. 3, page 250)
The approval of workstations for placement must form part of the negotiation process when partnering with different industries in the WIL programme for the Interior Design qualification.

The following documentation is necessary to ensure that the workplace and workstation facilities for the students are in accordance with the WIL certification guidelines of the TUT:

**Functions to be performed by the WIL co-ordinator**

WIL certification guidelines disseminated to all role players are:

- WIL guides and industry obligations handed over and understood;
- assessment documentation and explanation of assessment;
- proof and evidence of work delivered during WIL explained to all parties involved;
- the company which understands the procedures; and
- learner contracts which are signed by the student and the company.

**The WIL co-ordinator**

Under the auspices of the workstation falls the WIL co-ordinator duties and responsibilities, the preparation of students prior to WIL and the research (in PJBL and PBL) outputs that occur off-campus during WIL. All the duties mentioned must be managed and in place to ensure that the selected workstation supports the awareness and the interests of the student type. With the student intellectually and practically placed, a certain percentage of research output can be guaranteed during the WIL process of training (refer to chapter 5, no. 10, page 267).

**No. 4 MANAGE LEVEL PROGRAMMES OFF-CAMPUS** (refer to chapter 5, no. 4, page 252)

**Manage first year – observation with education and experience**

Observation and the self-confidence obtained from observation are interrelated to the experience students have obtained during their previous years of study. The students’ self-assurance, experience and understanding of technical terms, styles,
design principles, computer literacy and career knowledge pave the way for self-development of design skills.

Functions to be performed by WIL co-ordinator

- Modules for first-year WIL experience must be drafted and programmed.
- The WIL programme will form part of Theory of Materials 1.
- The WIL co-ordinator will liaise with different sectors in the interior design industry for participation in helping to develop first-year students.
- Students receive placement and proof of participation in a work situation.
- The WIL co-ordinator receives proof of the students’ participation.
- The WIL co-ordinator compiles documentation regarding WIL rules and regulations.
- A WIL guide for first-year WIL practice (25 days), normally during university holidays or Saturday will explain the work observation at a technical interior outlet.
- The WIL co-ordinator must send students for interviews and become friends with the companies.
- The WIL co-ordinator must document work experience of students
- The WIL co-ordinator must assess work experience through assignments and group workshops.
- The WIL co-ordinator must evaluate and exhibit final work submitted during year-end exhibition.

Manage second year - Development

Manage design skills

Design skills are needed for students to become competent employees. All the important design skills form part of the curriculum of the Interior Design qualification. Once placed in WIL, students and the placement company will each command their own levels of stress in association with skills needed for the design in progress.

The WIL co-ordinator and the Interior Design lecturer determine the following:
• **Cognitive skills:** (refer to chapter 1, no. 1.1, page 8, University TUT) associated with design contribution require attention as part of the curriculum for the Interior Design programme.

• **Knowledge:** Determine the knowledge of the students on different cognitive levels, show and make them aware of the design needs, explain and teach them to apply the knowledge in a work environment.

• **Comprehension:** More support and techniques need to be incorporated into the curriculum to help students to understand design briefs. Group work and “buddy assistance” to understand language is well-known techniques, and can be implemented. The students’ vocabulary and language skills must be improved to make comprehension of design problems and technical skills easier.

• **Application:** Many students do not know how to apply the knowledge they have already acquired. They must build self-confidence by means of tackling additional applicable design projects.

• **Analysis:** The WIL co-ordinator and staff of the programme have to place more emphasis on oral presentation to support students’ confidence to make their opinions known.

• **Synthesis:** Students struggle to prioritise work given to them. Many of them cannot produce neat, finalised or correct assignments. The WIL co-ordinator should support those students who manage to do so.

• **Evaluation:** Students must be able to assess designs, analyse costing and give their opinions on design matters.

Most of the problems associated with cognitive skills can be linked to problems with personal and social skills, such as self-confidence as well as language barriers and a lack of an extensive vocabulary. These skills will have to form part of a well-curriculated programme during the foundation period of Interior Design 1 and 2, and Communication Skills 1 and 2 to get the student on par with peers from other careers.

Students with problems related to attitude and behaviour, as mentioned in the research conducted for this model, should be sent for counselling and positive attitude training.
Functions to be performed by WIL co-ordinator

The WIL co-ordinator makes appointments with counsellors for students experiencing the following personal behavioural problems:

- Unconcerned, over-friendly, talkative, anxious
- Busy-body, dependent, unsure, negative
- Quiet, lazy, deceitful.

Manage third year - Application: Theory and practice

With the knowledge of each student’s placement, preparation for WIL, site visits and assessment of work done in the industry, management of the third-year WIL students will be more intensive. The students will be given more responsibility which will enhance alertness to appropriate work placement. WIL co-ordinator visits from the sending institution will have to be more frequent, and new avenues for placement and workstations will have to be pursued vigorously.

No. 5 MANAGE ADVISORY COMMITTEES (refer to chapter 5, no. 5, page 256)

Although the institutional policy insists that all qualifications have an advisory committee that supports each programme, it will be necessary to bring the interior design industry together on a regularly basis to discuss relevant issues, such as placement periods (time of the year and length of period), placement opportunities and supervisor appointments. Any problems arising during the previous WIL management periods must be discussed as soon as possible to find a viable solution (refer to chapter 5, no. 6, page 258).

Functions to be performed by WIL co-ordinator

- The WIL co-ordinator must ensure minutes of Advisory Committee meetings are tabled at Faculty Board meetings to avoid the same mistakes being repeated in WIL programmes in other departments.
- Urgent matters raised at Advisory Committee meetings are referred to the Executive Management.
Heads of Departments, staff of the programme, programme co-ordinators and WIL co-ordinators are responsible for implementing recommendations made by advisory committees.

**No. 6 MANAGE INDUSTRY** (refer to chapter 5, no. 6, page 258)

According to the research analysis, the following follow-up tasks have to form part of the work specifics of the WIL co-ordinator:

- To receive financial and emotional support for WIL to manage WIL for the Interior Design programme is of vital importance to introduce the real industry (refer to chapter 5, no. 6, page 258) to the programme, staff and students before WIL training and preparation commence.
- To understand the interior design industry better, it is good practice to participate in the different types of interior design industry to ensure the correct group of students is allocated to the correct interior design sector.

Different industry types involved in the Interior Design qualification can be grouped as follows:

**Design partnerships**
Design partnerships include companies that do space planning, retail design and layout, project planning and design, exhibition design, domestic design, home interior design and office design.

**Specialised interior design**
This kind of interior design includes hospital design, factory layouts and practical space planning, specialised public planning, caravan design, boat design and designs for sport facilities.

**Public interior design**
These interiors include hotel interiors, interiors of educational institutions, and interiors and layouts of government departments.
Supportive industries
For each of the abovementioned industry specialists, there must be an industry to support the implementation of the interior design. These supportive industries fall under manufacturers, suppliers, product designers, factories, contractors, skilled workers and interior design services outlets. To a large extent, several of these support industries fall under the private industry sector, and must be acknowledged as co-operative partners to train and educate Interior Design students. These students will at some time during their lifetime have to earn a living, using skills acquired through WIL participation.

Functions to be performed by WIL co-ordinator
- The WIL co-ordinator liaises with all of the abovementioned industries to participate in WIL training.
- The WIL co-ordinator has to lay down WIL policies for these industries by means of different WIL applications and workstations.
- The WIL co-ordinator keeps record of students working at factories or entering the private sector.
- Visitations by the WIL co-ordinator should be more frequent.
- The WIL co-ordinator must be on the alert regarding the exploitation of students as cheap labour.
- The WIL co-ordinator organises assessment to take place at the factories/manufacturers.
- Administration processes must be in place and up to date.

No. 7 MANAGE WIL CO-ORDINATOR DUTIES – OFF-CAMPUS (refer to chapter 5, no. 7, page 259)

The WIL co-ordinator can also be a staff member who has to manage the new management model for WIL for the Interior Design qualification at the TUT. Key performance areas (KPAs) have been identified by the DCE of the institution. The WIL co-ordinator will be responsible for managing the Interior Design WIL programme. He/She will be the key link between the three role players, namely the industry, the students and the institution.
It is also necessary that the manager of this management model for WIL is an academic trained and qualified in the Interior Design vocational programme. This will make the communication process between the industry and the institution, the evaluation of the workstation, as well as briefing students and industry supervisors more realistic and more reliable because they speak a common language.

The WIL co-ordinator must be part of the Interior Design department and available at all times with a designated office to assist, place and help employ students in the Interior Design programme.

Introducing off-campus WIL (refer to chapter 5, no. 4, page 252)
Industry liaison, communication with professional bodies (IID), advisory bodies and alumni partners of the Interior Design department will be the first and major communicators to start the WIL process. Suppliers and manufacturers for the first-year WIL process will come to the fore through a proper relationship with these companies. Companies have to understand the reason for their participation.

No. 8 MANAGE WIL CO-ORDINATOR DUTIES (refer to chapter 5, no. 8, page 260)

8.1 Manage support
The WIL co-ordinator supports the students during the finalisation of the external industry visit, in keeping record of calls to and from the industry, by sending electronic portfolios of work as well as their CVs via e-mail, and by arranging interviews for students with the different companies.

8.2 Manage education and external engagement
The fact that WIL forms part of off-campus or on-campus work experience, educational preparation about WIL as a practical component of the qualification should be done in the orientation week of the first-year qualification.

Students should be slowly introduced to the different industries, visits from and to suppliers and manufacturers of interior design equipment must be arranged, and the
rules and regulations (policy) of WIL explained to the students and the parents, where necessary.

Training at senior level is easier than that at lower levels, because the student is more matured and self-assured about the interior design field of design and the one-on-one interview with students can occur in group discussions in class, but record should be kept of students’ preferences to ensure the WIL choice of the students is selected and executed correctly.

**Functions to be performed by WIL co-ordinator**
- Market the institution and the programme for the Interior Design qualification
- Build partnerships with the interior design industry.
- Procure a point of work interaction between internal and external role players to get to know each other and to work together during WIL.
- Hold regular meetings with role players in the industry and keep records thereof.
- Adhere to needs expressed by all parties and act on them immediately.
- Sign a Memorandum of Understanding at management level and organise the process.

**8.3 Manage administration**
Record-keeping, filing of registrations and CVs, making appointments and sending students’ portfolio work to companies are primary tasks the WIL co-ordinator has to perform. All educational documentation must be filed for quality purposes.

According to Forbes (2013:5), the following general administration duties are stipulated:
- A database of participating companies for WIL must be compiled.
- Databases on student information, including CVs and examples of work, must be available.
- Records of student placement must be kept.
- Record-keeping of the WIL progress made in respect of individual students is crucial.
• Records of correspondence, communication and marketing materials have to be updated regularly.
• Visitation reports must be submitted to the relevant authorities.
• The transport logbook, the WIL guide and documentation received during the WIL period should be available for inspection.
• Student files must be kept updated along with feedback received from the industry.

8.4 Manage WIL
The management of WIL is necessary to provide companies with additional or important information on applications for work placement. To achieve this, filing of applications, registrations, procedures, policies and contractual documentation should be up to date. Assessment procedures and the outcome of the students after the debriefing session up to the conclusion of the assessment report of WIL and the capturing of the marks on the institution’s IT system are vital.

8.5 Manage guardian duties
The WIL co-ordinator must ensure and manage the following guardian duties:
• Communicate information to students and company supervisors.
• Communicate contact details of WIL co-ordinator, office hours and the availability of the WIL co-ordinator.
• Ensure there is a pre-selected guardian for the students and company supervisors during WIL.
• Act as the link between the different parties involved.
• Visit students and communicate with all WIL parties involved during the WIL period, where necessary.
• He/She must be available at all times to solve questions that may arise.

8.6 Manage mentoring
As WIL co-ordinator, he/she must ensure and manage the following mentoring duties:
• Both on- and off-campus, he/she must manage students and the process for work placement as well as finalising the documentation.
• He/She must answer all questions and address reservations expressed by students, supervisors or parents.

• During simulation on campus, he/she engages with the acting company to ensure the delivery of a first-rate standard of work at the incubator.

• He/She has to stay in contact with IID, the industry and alumni students to enlarge the industry information database.

• He/She should ensure the correct functioning of the WIL guide.

According to the structure of co-operative education at the TUT (2012), the duties of the respective role players include WIL co-ordinators who have to:

• Prepare students for work integrated learning;
• prepare a curriculum vitae/portfolio;
• apply for placements for students;
• brief students on work ethics, interview skills and on what is expected of them during work integrated learning;
• place students for work integrated learning; and
• conduct personal interviews with students, understand their expectations and refer them on an individual basis to companies with suitable training positions

WIL co-ordinators' managerial tasks include the following:

• Monitoring (visits to industry) by:
  o Visiting students at companies to monitor their progress, and to give guidance and assistance
  o Developing documentation and other promotional materials
  o Arranging appointments with mentors
  o Mentoring training and arrangements
• Assessment
  o The formative, summative, continuous/frequent assessment of the students’ progress
  o The evaluation of projects, assignments and oral presentations
  o Recording and communicating inputs that companies want to make towards syllabus outcomes (curriculum development) to ensure relevance and a competitive edge
• Debriefing
  o Conducting group sessions to facilitate reflection on work integrated learning
  o Identifying experienced people from the industry (mentors, middle and senior management) and inviting them to serve on the Advisory Committee
  o Establishing student records for counselling and placement purposes
• Other
  o Research and development, partnerships/contracts, skills development and marketing.

**No. 9 MANAGE THE FIVE STAGES** (refer to chapter 2, no. 2.3.1.5, page 50; chapter 5, no. 9, page 264)

It is compulsory for all first- to third-year students in Interior Design who intend doing work integrated learning at a workplace, supplier, manufacturer or elsewhere to be registered at the Tshwane University of Technology. For all students involved in WIL or before placement can commence, the schedule below is followed in the curriculum for Interior Design Practice III:

**9.1 Manage preparation and placement for WIL**

During the 12 weeks before the students depart for the workplace a preparation schedule is followed where each student is trained, prepared and tutored in behavioural skills, office and technical skills, conducting themselves, labour law, conflict management and sexual harassment issues. During these 12 weeks the institution and the students have to prepare and forward the CVs of the students to different companies, alumni students and partners of the university. The students have to draft a profile of the proposed company that will be used to either approve or reject the company (Cilliers, 2012).

During the preparation period students draft their CVs and cover letters while the WIL co-ordinators:
  • Determine the students’ strengths and weaknesses.
• Define the abilities and knowledge required for the workplace.
• Complete student registration forms, including a picture for every student.
• Prepare student portfolios for appointments.
• Refine students’ presentation skills for portfolio work.
• Arrange appointments for students with companies.
• Prepare students for interviews.

9.2 Manage WIL placement
• If the outcome of the interview is positive, the WIL co-ordinator obtains a letter of acceptance.
• He/She signs the work contract, indemnity letter and contract for off-campus training.
• Placement of each student is finalised.
• He/She receives a signed work contract from the placement company.
• The WIL guide contents are discussion and explanation to the supervisors and the students to ensure both understand the reason for working together.

9.3 Manage WIL mentorship
• WIL co-ordinators visit the company supervisor to explain the learning outcomes and assessment criteria.
• He/She determines the communication method per student (not all students have access to email facilities).
• The co-ordinator compiles visitation timetables and a list of addresses of companies in order to plan site visits and schedule appointments with the supervisors.
• The WIL co-ordinator studies the data submitted on a weekly basis and provides feedback to the sender of the data.
• Formative assessments may be conducted through visits to workplaces.
• The WIL co-ordinator also visits the workplace, the student and the supervisor.
• He/she must ensure that the work environment meets the learning needs of the student.
- The WIL co-ordinator discusses problem areas or advantages with both the student and the supervisor to ensure clarity on any uncertainty between the two role players.
- He/she must assess the workstation and the students’ work in progress.
- The WIL co-ordinator ensures company policies are adhered to.
- He/she hands over a gift as a gesture of thanks from the institution.

9.4 Manage WIL assessment

In order to maintain a high standard of training each student has to compile a technical report and portfolio of his/her WIL period. This must include descriptions of all work done during the WIL period in weekly reports, and detail drawings, concept designs and descriptions of all projects. Pictures and drawings must also be included, where necessary. Contained in the WIL guide is an industry evaluation sheet that has to be completed and signed by the mentor of the WIL training. This document has to be returned as part of the technical report. The placement company will email a similar report to the Department after the training session.

Functions to be performed by the WIL co-ordinator during the assessment period

- The WIL co-ordinator receives the completed WIL guide with assessment from the supervisor.
- The work programme during the WIL period is contained in the WIL guide and will be assessed by the WIL co-ordinator.
- The technical report and explanation of work assignments form part of the evidence submitted by the student for assessment.
- Proof of practical work delivered during WIL must be submitted to the WIL co-ordinator for assessment.
- The supervisor’s report is assessed and clarifies the practical work delivered by the student during WIL.
- The WIL co-ordinator assesses the work and technical report while the supervisor reports on student performance. Interior Design staff assist with this task.
• Recommendations on improving or changing the WIL process are minuted. These form part of the implementation process for the coming year.
• Finalising the assessment is done during the debriefing session where students and Interior Design staff can communicate freely over the students’ experience during WIL.

Final marks and the outcome of the WIL assessment are captured on the IT system and the Institution publishes the results.


As highlighted by Weisz and Smith, work integrated learning programmes or similar programmes are often underpinned pedagogically by the work of educationalists such as Dewey who expressed the belief that “all genuine education comes through experience” (Dewey, 1938:25 in Weisz & Smith, 2005:606). Informed by Kolb (1984), Weisz and Smith qualify their position arguing that experience alone is not sufficient to guarantee a deep level of learning. They propose that, for this to occur, students “need to be able to receive feedback and to reflect on the outcomes of their work” (Weisz & Smith, 2005:606). This, they say, is currently jeopardised by academic staff who defer the main responsibility for workplace learning to the students and the employers, and that where academics do get involved, it achieves surface- rather than deep-level learning (Weisz & Smith, 2005:605).

Functions to be performed by WIL students:

• Students must do a PowerPoint presentation in which they must provide oral and practical evidence of their experience during WIL.
• Students must keep their files with records, track records, visit reports and correspondence updated.
• The student who did not achieve the desired outcome must arrange for remedial action if he/she is prepared to do remedial work with the Interior Design staff, WIL co-ordinator and the company that agreed to assist him/her in repeating the WIL period.
No. 10 MANAGE RESEARCH OUTPUT OFF-CAMPUS (refer to chapter 5, no. 10, page 266)

With additional outputs that can emanate from WIL placement in the industry, these opportunities have to be utilised to boost research outputs, enhance learning for further studies, specifically amongst students and the industry. The WIL co-ordinator and the students have to make the industry aware of the possibilities of giving research topics to students to do, instead of the industry doing the research themselves. Research done by students instead of the company designer on materials and finishes during WIL and thereafter can save costly time for the company.

Functions to be performed by supervisors and WIL co-ordinators:

- Explore and identify research possibilities in industries.
- Educate and orientate industries on possible topics.
- Show examples of research outputs and articles already done (building of models, 3D presentations).
- Invite the industry to visit the Department.
- Demonstrate facilities available for research outputs (written or practical).
- Ensure positive feedback from the industry, developers, suppliers and manufacturers (all role players and partners).

The information in the following discussion numbers will cover the quality assurance of WIL

No. 11 MANAGE STUDENT OUTCOMES ACHIEVED (refer to chapter 5, no. 11, page 267)

After receiving assessment from their peers, Interior Design staff and the WIL co-ordinator as well as the supervisor's report students will have an idea of what people think about their delivered work, attitude and handling of work situations during WIL.

Functions to be performed by the WIL co-ordinator:
• Ensure a proper assessment of the student’s work delivered during WIL.
• Receive reports from students.
• Receive reports from supervisors.
• Read the students’ assessments of their WIL period.
• Acknowledge student dissatisfaction with and disapproval of issues pertaining to WIL.
• Assess students’ work accordingly (in the case of a negative report).
• Contact the industry and supervisor to elucidate on problems that arose.
• Clarify and resolve all unsatisfactory matters.
• Certify that outcomes have been met and a final assessment pass has been achieved.

Student learning success is observable after the WIL period. Whether it is a positive or negative reaction from the student, it becomes visible through attitude and personality. It is the duty of all Interior Design staff members to be receptive towards any student changes noticed from work delivered after the WIL period.

**Functions to be performed by the WIL co-ordinator:**

• Gather the WIL students and discuss the success of WIL.
• Be alert to any difference in students’ attitude after the WIL period.
• Assess work according to the student assessment of the industry.
• Read the supervisor’s report in detail.
• Communicate WIL issues with students before and after debriefing.
• Determine the debriefing process.
• Support the students with presenting their work.
• Ensure that the final decision on outcomes is achieved.
• Reflect on the five stages of preparation before WIL for any shortcomings.

**Functions to be performed by the WIL co-ordinator if learning is not achieved:**

• Assess the student’s work delivered during WIL.
• Establish problem areas that have resulted in negative achievements.
• Communicate concerns to the appropriate people involved.
• Resolve problems that may arise.
• Organise remedial action with the agreed industry.

No. 12 MANAGE ACADEMIC ADMINISTRATION (refer to chapter 5, no. 12, page 268)

Functions to be performed by the WIL co-ordinator:
• Ensure all administrative documentation is up to date.
• Keep a record of the progress of individual students.
• Keep record of correspondence and ITS mark sheets.

No. 13 MANAGE THE STUDENT LEARNING REFLECTION (DEBRIEFING) (refer to chapter 5, no. 13, page 268)

The ability to showcase the work of students to all the partners involved with WIL at TUT is manifested in an industrial function at the Interior Design department. It presents an opportunity to the students to showcase their design work done during the WIL period.

Functions to be performed by the WIL co-ordinator:
• Discuss the possibility of an exhibition and function for all parties involved with WIL at TUT (possible dates, times and venues).
• Ensure funds are available for the printing of banners for practical student work and for the industrial function.
• Compile a guest list containing names, addresses and contact details.
• Prepare student work for printing on banners.
• Print banners for the exhibition
• Approve exhibiting additional work done.
• Design invitations and organise the venue, time and date.
• Distribute invitations and invite members of the industry.
• Receive responses (RSVPs) from guests.
• Install the exhibition at the venue. Students are responsible for setting up and dismantling the exhibitions.
• Present the industry with a token of appreciation during the function.
• Determine the next year's availability of workplaces at companies.

No. 14 MANAGE YEAR-END FUNCTION (refer to chapter 5, no. 14, page 268)

The year-end function offers the opportunity to give recognition and acknowledgement to the graduation candidates, and for work done during the year. This function is hosted for family members, friends and invited industrial guests.

Functions to be performed by the WIL co-ordinator and Interior Design staff:
• Determine the date and venue for the year-end function.
• Book the venue.
• Select first- and second-year work for exhibition purposes.
• Invite the fourth-year students to exhibit their practical work.
• Advertise/promote the exhibition.
• Organise the function for which the money is provided by the Department or donated funds.
• Do multimedia/PowerPoint presentations of students' work.
• Present the winning/best candidates with book prizes.

No. 15 MANAGE QUALITY ASSURANCE (refer to chapter 5, no. 15, page 269)

The quality assurance of the WIL management model for the Interior Design qualification will focus on areas and duties performed by the WIL co-ordinator and Interior Design staff members, such as preparation of students for WIL, selection of proper and workable workstations at companies, placement of all students for WIL, visiting of students and supervisors during WIL, communication processes between students and the WIL co-ordinator, receiving of student assessment material, assessment of work, debriefing of the WIL student and the publication of the outcome for WIL.

Functions to be performed by the WIL co-ordinator and interior design:
• Proof of accredited industries, companies and workstations
• Proof of registration of the students for WIL
• Preparation of WIL students with the emphasis on skills development
• Placement facilitation - proof of liaison with the industry with legal documentation and work contracts for each student in place
• Placement procedures, interviews and confirmation letters from the companies
• Workstation inspection, visits and approval of workstations
• WIL guide with all relevant information for both students and supervisors
• Assessment criteria and assessment tools to assess students off campus
• Feedback mechanisms for students to communicate with the department
• Evidence of work done in the industry
• Quality reviews on the delivered work and improvement in certain areas if necessary
• Administration of WIL
• Classification of remedial action in respect of students that did not complete WIL.

The WIL policy of TUT will specify ALL policy rules and regulations that should be in place to ensure that the curriculum content is adhered to in all aspects of the management model.

No. 16 MANAGE REMEDIAL ACTION (refer to chapter 5, no. 16, page 270)

Not all students are successful during their WIL training. To present these students with another chance to pass and complete WIL, a preselected company that is a member of the Advisory Committee offers to take in a student and supply him/her with projects to repeat the work, but under its supervision.

Functions to be performed by the WIL Co-ordinator and Interior Design staff:
• Select and approve the company to assist with remediation.
• Provide the company with a WIL guide to conduct evaluations of the students’ progress and actions.
• Visit the company supervisor and the student to assess the work and work situation.
• Assess the work handed in by students for the second time.
• Results of debriefing and proof of pass or fail rates are documented.
• Final percentage mark is captured on the IT system of the Institution.
• Publication of WIL outcomes is done.

The following discussions will explain how to manage the incubator of work integrated learning.

No. 17 MANAGE THE INCUBATOR – SIMULATION OF WIL (refer to chapter 5, no. 17, page 271)

The focus in this section is on the managerial functioning of the incubator. According to the CHE (2012), managing work integrated learning responsibilities for planning, the nature of engagement as well as the implementation of progress monitoring, assessing work and evaluation of WIL lies with the staff of the Department and the WIL co-ordinator of the ID qualification programme. It should be noted that different WIL activities and processes can form the WIL programme in one qualification, each with its own content and management style.

Manage work-based learning – WBL: “learning for work” – doing the work for the company as trained by the university, and apply knowledge, theory and practice in combination to facilitating the assignment. The supervisor at the company will attend to the student working off-campus (refer to chapter 5, no. 4, page 253).

Manage workplace learning – WPL: “practical experience at a professional practice”. This is determined by the Interior Design curriculum and may be for only a few weeks. The aim of a work placement is to develop the students to become professional interior designers through observation, participation and practical design projects for the company’s clients; thereby demonstrating their competencies.

Manage problem-based learning – PBL: This aspect demands more administrative work; for example, organising students and the industry, searching for venues,
convening meetings, preparing timetables, arranging consultations between students, clients and industries, etc. This process will take place on campus in the incubator and will be managed by the WIL co-ordinator.

**Manage project-based learning – PJBL:** This simulation demands planning, relationship-building with industries and interior design companies, signing of MOUs, grouping and managing students working together to complete a project for a company, presenting the final design and managing the project in collaboration with the industry until completion and handover.

Should there be no industry or workplace available, simulation can be created in the form of real-life, problem-based projects from a company whilst managed by the staff of the Department, mentors, senior students or designated representatives from the company. In situations where departments have many students who have to complete WIL, this is the ideal solution, although more effort to complete the project (different sections of the project to different groups). Closer monitoring of the students is required. Assessment and evaluation can be done till a final mark is calculated.

**Functions to be performed by the WIL co-ordinator and Interior Design staff:**

- The WIL co-ordinator is in charge of the WIL programme in the incubator and therefore, he/she has to manage students, staff, clients and industries.
- The functions of the WIL co-ordinator are discussed in Chapter 6, no. 21 and no. 22 on page 351.

**No. 18 MANAGE WIL ON-CAMPUS** (refer to chapter 5, no. 18, page 273)

**Manage first year - observation by means of education and experiences** (refer to chapter 6, no. 4, page 321)

Observing and the self-confidence gained from observation are interrelated to “experience”. The students’ self-confidence, experience and understanding of
technical terms, styles, design principles, computer literacy and career knowledge pave the way for skills development.

**Functions to be performed by the WIL co-ordinator and Interior Design staff:**

- Design work experience modules for first-year students through WIL experience and programmes.
- Liaise with different divisions/sectors in the interior design industry to gain their support and participation to develop the first-year students.
- Invite supportive companies from the industry to send guest speakers to lecture and bring certain materials to campus (both on- and off-campus training can benefit from this arrangement).
- Obtain proof of participation, and confirm guest lecturing dates and times.
- Draw up documentation containing WIL rules and regulations.
- Compile a WIL guide for first-year WIL practice – a period of 25 days during holidays or on Saturdays, involving off-campus work observation.
- Send students for interviews to get to know the company.
- Document student work experience – assess work experience through assignments and group workshops.
- Evaluate the final work submitted prior to the year-end exhibition.

**Manage the second year – students’ personal development** (refer to chapter 5, no. 18, page 273)

**Manage students’ design skills**
The following skills were researched: Appendix A, no. 26, page 406; Appendix B, no. 24, page 413 and Appendix C, no. 15, page 421. Also refer to chapter 4 for outcomes of research, page 112)

- Design skills
- Writing skills
- Oral skills
- Presentation skills
- Model-building skills
- Photography skills
- Technical skills
- Computer skills.

The cognitive skills are essential skills as part of any teaching, learning, experience and practice required to complete a qualification. These skills were all grouped under cognitive and social skills, indicated as “very important”. Additional research information was obtained from the students’ WIL guide and debriefing sessions.

This information has been acknowledged as follows: (Refer to chapter 5, page 323)

- **Knowledge** Students should know what is design and how to apply it; also how to use it in a work environment.
- **Comprehension** Some students still find it difficult to understand a design brief and course work – even when working in groups.
- **Application** Students do not always know how to apply the knowledge they have gained.
- **Analysis** Students have to place more emphasis on investigation skills.
- **Synthesis** Students have a problem to prioritise work given to them which results in major production problems.
- **Evaluation** The WIL co-ordinator and Interior Design staff appointed to work with the WIL students, assess design, costing and give opinions about design during evaluation.

In the research on behaviourism and personal characteristics (refer to chapter 4, page 112) that can form part of skills, the most important qualities were rated high, namely punctuality, trustworthiness, diligence, independence, intelligence, confidence, creativity, helpfulness and leadership.

The negative characteristics with lesser ratings were unconcerned, over-friendliness, being talkative, anxiousness, dependence, and being a busy-body, unsure and negative as well as quiet, lazy and deceitful.

**Manage social skills** (refer to chapter 6, no. 4, page 321)
Using their self-confidence and being in control of the self-taught design skills, the social skills of students need to be upgraded. Through the main research skills such as oral, writing, listening, answering, behavioural and personal skills, the students realise that the latter skills actually form the final details and finishing touches of the selling process of the design. It is therefore important to also teach the students the following important life skills:

- How to behave oneself during different office duties
- How to dress for different occasions (at the office/outside the office/on campus/off campus
- How to talk and act when spoken to
- How to listen to different types of information at different times or places
- How to sell a product or design concept.

It is through these developmental stages in the second year that students are prepared for their final test during the third year when they enter the world of design as employees.

**Manage the third-year students – application on campus at incubator** (refer to chapter 5, no. 17, page 271)

The students apply for work at the on-campus incubator in the same way as for off-campus work. All documentation and processes remain the same, namely preparation, training, visitation and monitoring as well as assessment, but with a difference. Now they remain on campus and fall under the supervision of the Interior Design staff. The industry and interior design clients of the industry or customers with design needs approach the incubator and present the design project to the supervisor appointed to the incubator who will manage the student(s) assigned to the project. Meetings and discussions follow, and the supervisor provides weekly feedback to the client. The same procedures apply when accepting a project from the industry. The funds generated from projects received from the industry and clients are utilised towards the running costs of the incubator as well as student remuneration costs.
Functions to be performed by the WIL co-ordinator and Interior design staff:

- Liaise with the interior design industry to participate in the incubator for WIL training.
- Lay down policies for the industry with different WIL approaches.
- The industry or clients submit the work directly to the incubator on campus.
- The fee structure is explained to all parties concerned (industry, institution and students).
- The manager of the incubator keeps a record of students who have applied for work at the incubator.
- The manager monitors the work in progress, meetings, general time management and quality assurance of the work done for the clients or the industry.
- Visitations to oversee work progress and discussions of problems that might arise are done on a daily basis.
- The Occupational Health and Safety documentation should be in place and adhered to.
- Alertness to the exploitation of students as cheap labour is vital.
- Simulated interior design work-based learning done in the incubator has to be assessed.
- The administrators working in the incubator administrate all work done by students, for which company or client and monitor the progress of the practical work.
- Records of who has managed the production of the design, when and how, meetings, interviews and discussions with clients were conducted must be monitored by the administrators.
- Manage reception, answer telephones, print and do administrative work.

No. 19  MANAGE RESEARCH OUTPUT: ON-CAMPUS (refer to chapter 6, no. 10, page 335)

Research outputs for the Department and Faculty can increase by using the WIL student who is placed in the on-campus incubator, as described in Chapter 5, no. 19, page 278). Students can research a variety of topics during their WIL training on
campus with the financial support of the industry. The industry can also make use of this opportunity by providing the Department with research topics of interest or importance and by appointing a group of students to research the topics.

Furthermore, useful articles can stem from this research. The research outlook project can materialise through the appointment of WIL students on campus. The Faculty co-ordinator or incubator manager, WIL co-ordinator and Interior Design staff have to explore and exploit the industry, and make it aware of the opportunities that exist for students to do research instead of having to do the research themselves. This can be beneficial to the industry as well as the Department.

Functions to be performed by the WIL co-ordinator and Interior Design staff:

- Explore and identify research possibilities in the interior design industry.
- Educate and orientate the interior design industry regarding possible topics that could form part of interior design research in the department.
- Show examples of research outputs and articles already done (building of models, 3D presentations).
- Invite the industry to visit the Department and the incubator.
- Explain the possibilities of using the incubator, students and staff to assist companies with projects, 3D designs, research and presentations.
- Demonstrate facilities available for research outputs (written or practical).
- Ensure positive feedback from the industry, developers, suppliers and manufacturers who are all stakeholders and partners.

No. 20 ON-CAMPUS – MANAGE THE FIVE STAGES OF WIL (refer to chapter 6, no. 9, page 331)

All students, whether doing their WIL training on- or off-campus, will have to go through a preparation and training process to ensure that they understand the outcomes and reason for work integrated learning as part of their Interior Design qualification programme.
20.1 and 20.2 Manage the preparation and placement for students working on campus

Students, who have to do their WIL training, schedule appointments during the first month of the new academic year. The students selected to stay on campus for their WIL training period follow the same preparation sessions and procedures as those doing WIL training off-campus where each student is trained, prepared and tutored in behavioural skills, office and technical skills, conducting themselves, labour law, conflict management and sexual harassment issues.

The preparation schedule for on- or off-campus training is the same, although the students who stay on campus complete their application form in collaboration with the WIL co-ordinator in order to determine how many students prefer to stay at the incubator and how many will have to be placed off campus (Cilliers, 2012).

The following managerial processes are followed after the preparation period:

- The WIL co-ordinator receives the names of students who will remain on campus for WIL.
- The WIL co-ordinator receives CVs and motivations for doing WIL on campus.
- The WIL co-ordinator determines the strengths and weaknesses of students.
- The WIL co-ordinator ascertains the requirements of workplaces in terms of students’ abilities and knowledge.
- The WIL co-ordinator completes registration forms including pictures of the students.
- The WIL co-ordinator schedules appointments with companies to collect their design projects.
- The WIL co-ordinator prepares students for interviews with companies and potential clients.

The staff and WIL co-ordinator of the Interior Design department will determine which students may remain on campus for their WIL period. The students selected will depend on the type of work that is received from companies and clients, and will largely be based on the strengths of students.
The following procedure will be followed in respect of on-campus students:

- The WIL co-ordinator schedules an interview with the staff, student and client.
- The WIL co-ordinator presents the student’s portfolio of work to the client.
- If the client is satisfied with the student, the project letter for the service is signed.
- Documentation between stakeholders is completed and signed.
- The WIL co-ordinator finalises placement.
- The WIL co-ordinator obtains a work contract from the placement company.
- During the visit from the company supervisor the WIL co-ordinator discusses and explains the WIL guide to all involved.
- The student immediately commences with the new WIL project.
- The training and preparation procedure must still be followed by the student although he/she is working on the project.
- Students fall under supervision of the Interior Design staff and the WIL co-ordinator.
- One project is assigned to each student.

During the design process the student is involved in the operation and management of the incubator, and functions in accordance with his/her daily classroom timetable.

Before the design ideas can be presented to the client the student has to complete the following:

- Presentation of the design done for the client or company.

### 20.3 Manage mentoring the student working in the incubator

- The WIL co-ordinator and staff members are assigned to specific students, act in a supervisory capacity, and explain learning outcomes and assessment criteria to their assigned students.
- The WIL co-ordinator determines the communication method per student (not all students have access to email facilities).
- The WIL co-ordinator compile timetables for daily feedback and design discussions.
• The WIL co-ordinator must work through weekly written feedback received from students, and must subsequently provide feedback to the students and supervisors.
• Formative assessments may occur during the daily visits to the students.
• The work environment must meet the learning needs of the students.
• The WIL co-ordinator discusses problem areas or benefits and advantages with the student as well as the supervisor.
• The WIL co-ordinator assesses the workstation and the students’ work in progress.
• The WIL co-ordinator keeps a complete progress report on each assignment and student working on a specific project.

20.4 Manage assessment of students working on-campus
In order to maintain a high standard of training, each student has to compile a technical report and portfolio of his/her WIL period. This report includes descriptions of all work done during the WIL period in the form of weekly reports, detail drawings, concept designs and descriptions of all projects, including pictures, where necessary.

Contained in the WIL guide is a supervisor's evaluation sheet that has to be completed and signed by the mentor of the WIL training. This evaluation sheet must be included in the technical report. After completing the design project, the client completes a similar report and returns it to the Department via e-mail. Students also provide feedback on their WIL experience. The technical report explaining students’ work already assessed must be made available. Proof of students’ practical work delivered during WIL must be submitted. The WIL co-ordinator and supervisor reports are considered evidence of experience gained by students during the WIL period. The WIL co-ordinator assesses the work, the technical report and the supervisor reports on students’ performance whereafter he/she prepares a recommendation regarding improvement or changes to the WIL process. Then the assessment is finalised during the debriefing session. Marks are captured on the IT system and published by the Institution.
20.5 Manage reflection of learning for the WIL period by means of debriefing and assessing on-campus students

- Students must do a PowerPoint presentation in which they must provide oral and practical evidence of their experience during WIL.
- Final assessments are done by peers, Interior Design staff and the WIL co-ordinator in which they acknowledge the supervisor's report.
- The final results are published.
- Remedial action needs are based on unsatisfactory results identified during debriefing and completed in the same year as the WIL training.
- Student files containing records, meeting reports and correspondence are available electronically and on file at the WIL co-ordinator’s office.

No. 21 and 22 MANAGE THE INCUBATOR (refer to chapter 5, no. 21, page 280; chapter 5, no 22, page 281)

The proposed incubator is a section of the Interior Design department as well as the Faculty of the Arts. It is managed by the WIL co-ordinator, irrespective of the financial control exercised by the Institution. The WIL co-ordinator will be replaced by an incubator co-ordinator when duties assigned to the WIL co-ordinator has to be repeated to other departments on the campus. In this situation it would be easier to appoint an incubator co-ordinator to assists the WIL co-ordinator and to relieve repetition of duties.

The WIL co-ordinator carries out important duties and tasks to ensure a well-administrated incubator. He/She ensures that financial matters run smoothly, key control is secure and regular visitation times are determined. Over and above managing the centre, the daily duties of the WIL co-ordinator for on- and off-campus WIL students have to be executed in such a way that all parties involved in WIL are satisfied and content.

Functions to be performed by the incubator co-ordinator (or appointed Interior Design staff member):
- The incubator co-ordinator (IC) supervises the subject Interior Design Practice III.
- The incubator co-ordinator sees to it that the equipment in the incubator is looked after and that materials are available when needed.
- The IC assists with designing the WIL programme for first- and second-year students with the support of departmental staff, the HoD and the Department of Curriculum Development.
- The IC has to compile timetables for first- to fourth-year students to ensure proper management during the year.
- The IC has to accommodate WIL participants, for example the industry, clients and companies, and book time with the correct student with the required design talent to work on the proposed design project.
- The IC has to correlate and manage the project and its expected workload in relation to student class attendance of the qualification programme.
- Because client projects, plans, designs, 3D designs (Revit drawings) are time-consuming the IC has to administer such activities in relation to other subjects to ensure cost-effectiveness.
- The IC performs costing of projects for a third-stream income for the Department and students.
- The IC and the Finance Department of the TUT must follow set policies.
- The income generated from the incubator will be ploughed back into the running cost of the information centre and incubator to ensure smooth working conditions.
- He/She discusses the services to be rendered in the centre with the students who have been appointed to perform duties during different weeks of the year.

No. 23 DUTIES OF THE WIL CO-ORDINATOR ON-CAMPUS (refer to chapter 5, no 23, page 283)

The WIL co-ordinator, employed to manage the new Interior Design programme management model for WIL for the same qualification at TUT, needs to be fully aware of his/her key performance areas (KPAs), as defined by the DCE of the Institution. This person will be responsible for managing the Interior Design WIL
management model for the Interior Design programme. He/She will be the key contact person amongst the three stakeholders, namely the industry, the students and the Institution.

**Functions to be performed by the WIL co-ordinator**

- The WIL co-ordinator and manager of the incubator must be a qualified academic staff member in the Interior Design department.
- The WIL co-ordinator must be available at all times.
- The WIL co-ordinator presents and explains this new way of addressing WIL on campus to the students, staff and industry.
- Industry liaison, communication with professional bodies (IID), advisory bodies and alumni partners of the Interior Design department will be the primary responsibility of the WIL co-ordinator to start the WIL process.
- The WIL co-ordinator administer all types of WIL for the Department.

**No. 24 MANAGE WIL CO-ORDINATOR DUTIES** (refer to chapter 5, no. 24, page 283 and chapter 6, no. 8, page 327)

**24.1 Manage support on-campus**

**Functions to be performed by the WIL co-ordinator**

- The WIL co-ordinator supports the student during his/her WIL training on campus.
- The WIL co-ordinator explains the student’s way of working and duties when doing a project for a client at the incubator.
- The WIL co-ordinator keeps records of calls, visits from the industry, meetings and work presented to the client.
- The WIL co-ordinator facilitates the incubator so that work done on equipment is available and in working condition.

**24.2 Manage education and external engagement for WIL on-campus**

Educational discussions and explanations about WIL as a practical component of the Interior Design qualification as a new WIL structure that will be executed on campus should be done during the orientation week for newly enrolled students as well as for
second- and third-year students. The students are introduced to the different industries.

The WIL co-ordinator arranges visits for the students to and from suppliers and factories in collaboration with Interior Design staff members. He/She explains the rules and regulations (policy) of WIL to the students. The WIL co-ordinator conducts one-on-one interviews with senior students to ensure the correct students are selected for WIL training at the incubator and that those students who prefer to do WIL off-campus start looking for placement. He/She keeps record of student preferences to ensure that all the WIL options of the students are correctly implemented.

Functions to be performed by the WIL co-ordinator

- The WIL co-ordinator forges partnerships with industry and potential clients when marketing the institution and the Interior Design qualification.
- The WIL co-ordinator networks the importance of student development, whether it is for first- or fourth-year students.
- He/She creates the interface between internal and external role players to ensure proper work distribution amongst all parties.
- Educate the industry in the necessity for students doing WIL.
- The WIL co-ordinator keeps records of meetings to give feedback in the annual report to the Dean of the Faculty.
- The WIL co-ordinator monitors positive and negative information.
- The WIL co-ordinator ensures sufficient assignments and projects are sourced for WIL students well in advance of the arrival of the students at the incubator.
- He/she ensures the signing of Memoranda of Understanding on management level.

24.3 Manage administrative duties

Students apply directly to the WIL co-ordinator to work in the incubator. Records such as registration documentation, CVs and appointments with clients should be kept on file. All educational documentation must be filed for quality purposes.
Forbes (2013:6) stipulates the following general administrative duties to be performed by the WIL co-ordinator:

- Compile a database of participating companies.
- Compile a database on student information.
- Keep records of projects allocated to students.
- Keep a record of the WIL progress in respect of individual students.
- File and monitor records of correspondence and communication with clients and the industry.
- File and monitor assessment reports during presentations and meetings with clients.
- The WIL co-ordinator must see to it that the transport logbook/WIL guide, documentation on expenditure and purchases are done in accordance with the policies of the Institution.
- Student files must be kept up to date for quality purposes.

24.4 Manage administration on-campus

To ensure that management of the on-campus incubator is done properly the following administrative tasks have to be performed by the administrative staff:

- Filing of applications
- Registration of students
- Updating WIL procedures, policies and contractual documentation
- Recording and filing assessment procedures and the outcome of the practical work delivered by the students
- Keeping record on the client (industry and/or company) report and on the completed work received from the incubator
- Organising the debriefing and assessment of the work done by the students at the incubator
- Compiling and minute the conclusion of the assessment report for WIL
- Capturing the final marks on the ITS system of the Institution.

24.5 Manage the students on-campus
This is the sole responsibility of the WIL co-ordinator to manage the students on campus during WIL.

Functions to be performed by the WIL co-ordinator

- Managing and ensures that all the students are aware of his/her contact details and availability, and that office hours are maintained.
- The WIL co-ordinator acts as protector of students’ work ethics during WIL.
- The WIL co-ordinator acts as the link between the different parties involved.
- The WIL co-ordinator communicates all rules, regulations and daily information to students necessary during the WIL period at the incubator.
- The WIL co-ordinator is available at all times to resolve problems that arise.

24.6 and 24.7 Manage mentoring the student on-campus

The WIL co-ordinator must manage the following aspects:

- On- and off-campus, it is the responsibility of the WIL co-ordinator to manage students, the process for work placement and the finalisation of documentation.
- He/she should answer all questions and uncertainties raised by students, supervisors or parents.
- During simulation on-campus, the WIL co-ordinator interacts with the acting company and student to ensure that a good standard of work is delivered at the incubator.
- The WIL co-ordinator stays in contact with IID, the industry and alumni students to expand the industry information database and promote participation at the incubator.
- The WIL co-ordinator ensures the correct functioning of the WIL guide.
- The WIL co-ordinator explains uncertainties in the WIL guide to all stakeholders involved.

No. 25 MANAGE THE BACCALAUREUS TECHNOLOGIAE: INTERIOR DESIGN

25.1 Project-based learning (PJBL) (refer to chapter 5, no. 25.1, page 288)
Work integrated learning is primarily directed towards preparing students who are not yet employed for employment in the industry or as a sole interior designer. Students need to be trained and should develop themselves to remain employed and to engage in a lifelong learning process. Project-based learning (PJBL) encompasses real-life projects provided by the industry or planned by a client. It involves the student in real-life WIL practical projects.

Functions to be performed by WIL co-ordinator

- The WIL co-ordinator uses the recommended curriculum information for Interior Design WIL and negotiates changes the industry has recommended for new WIL students visiting their companies.

The Interior Design curriculum is demarcated through external standards set by the Department of Education and SAQA, or professional bodies (IID). Each industry company determines its goals and objectives for its employees, and the WIL students will have to follow suit. The curriculum for the BTech programme includes project-based learning as a major part of this qualification because it entails research. Therefore, the WIL co-ordinator must ensure that sufficient databases are available for research purposes.

Furthermore, the WIL co-ordinator has to liaise with the interior design industry regarding participation in fourth-year students’ research and practical projects, placement and supervision.

Other duties include:

- The WIL co-ordinator needs to obtain proof of participation from all the stakeholders.
- The WIL co-ordinator needs to draw up documentation for the WIL programme, stipulating rules and regulations to which all role players have to adhere.
- The WIL co-ordinator and his appointed staff need to design and compile the WIL guide for fourth-year WIL practice.
- The WIL co-ordinator should verify whether students are registered for BTech.
• He/She needs to collect the students’ letters of intent and, in co-operation with the Interior Design staff involved with BTech research, accept or reject the proposed project from the students.

• After the outcome of the letter of intent the WIL co-ordinator assists the students to transform the letter of intent into a proposal that explains the research project and how the research will be manifested in the practical project.

• The WIL co-ordinator and staff of the Interior Design department determine dates for preliminary oral examinations, and notify students that they have to report on the progress of their projects.

• The WIL co-ordinator will perform regular assessment processes to determine the students’ research progress, write progress reports and submit the reports to the staff of the BTech team.

• The WIL co-ordinator organises the time management of the real-life practical component with the students and supervisors from the industry.

• He/She also documents the time the students spend off-campus and monitors practical experience of students during WIL practice off-campus.

• The WIL co-ordinator documents each student’s progress before and after WIL by means of a video to be used as teaching and research material.

• The WIL co-ordinator assists with evaluation and the exhibition of the final research projects at the year-end exhibition. The videos are showcased to the industry and visitors during the launch of the projects.

25.2 Problem-based learning (PBL) (refer to chapter 5, no. 25.2, page 289)
Problem-based learning (PBL) is interior design consisting of real-world problem-solving scenarios sourced from the industry, clients and retail developers. PBL is the realistic, practical and functional solving of a problem in a living space, a private space, a public space or the solving of office space planning through design.

The solution to a design problem has to be innovative and original. It should, therefore, include cutting edge finishes, colours and textures. The project should also demonstrate flexible and creative approaches to problem-solving and
incorporate a higher design ability than what is learned through general life experience.

PBL must enhance chances for employability, which form a crucial part of the WIL experience.

**Functions to be performed by the WIL co-ordinator and Interior Design staff**

- Staff must monitor letters of intent received from students.
- The WIL co-ordinator, students and industry representatives meet to discuss proposals, titles and themes for projects as well as the potential feasibility of the project.
- Interior Design staff members involved with the BTech qualification, monitors the ongoing research projects done by students, on a weekly basis.
- The WIL co-ordinator and Interior Design staff, supervise the preliminary oral examinations once a month.
- They minite the discussions regarding progress between students, staff and the industry.
- In cases where students decide to work on projects at companies, the staff and WIL co-ordinators pay visits to these companies.
- The WIL co-ordinator and Interior Design staff writes visit reports, approve workstations and report on progress students have made with projects.
- The WIL co-ordinator and Interior Design staff supervises year-end assessments at the industry sites.
- The WIL co-ordinator and Interior Design staff supervises the year-end exhibition for graduates whereafter they show the video to the invited industry.
- The WIL co-ordinator supports the assessment process for PBL.
- They administer the assessment marks and final PBL outcomes achieved.
- The administrator and the WIL co-ordinator get these marks ready for publication.
- The WIL co-ordinator supervises all the articles being written for publication purposes.
• The WIL co-ordinator and the Interior Design research staff members (employed as researchers) monitor and assist students with the publication of articles.
• The WIL co-ordinator prepares the students for employment.

**No. 26 MANAGE THE WIL POLICY FOR BTECH PROGRAMME** (refer to chapter 5, no. 26, page 291)

The WIL policy for the Interior Design BTech management model must be written in accordance with the curriculum contents of the Interior Design BTech qualification programme to ensure that the WIL outcomes for this qualification are covered in the WIL management model. If the BTech WIL policy is in line with the curriculum and the quality assurance policies of the Institution, it will guarantee that the students are service-ready.

It will also ensure that the students work with confidence, both independently and as team members or group leaders, show flexible and creative approaches to problem-solving, communicate clearly and appropriately, produce output that is literate, numerate and coherent and finally, manage information in a range of media.

In addition to the policies of the Institution and the Department, the curriculum description must be followed. Specific areas, as mentioned in the research questionnaires, have to be redesigned.

**Functions to be performed by the WIL co-ordinator and Interior Design staff:**
- The WIL co-ordinator has to set new policy guidelines for the BTech qualification.
- He/She must link the WIL guide to the practical project-based learning modules.
- He/She must determine the credits for PJBL and PBL for the BTech qualification.
The WIL co-ordinator also appoints specific supervisors for each student to make it easier on the staff and students to work on an one-on-one basis throughout the research project.

The WIL co-ordinator arranges for remuneration for students who do their WIL in PBL in the incubator on campus and also arranges for payment of transport fees by the industry for disadvantaged students if they work in the industry.

The WIL co-ordinator has to visit students doing WIL in the incubator or off-campus in the industry.

The WIL co-ordinator works on students’ self-confidence during WIL in the PBL period.

The WIL co-ordinator establishes a work session with the students to discuss outcomes.

He/She identifies the core business of the employment sector and establishes how their roles or functions as employees relate to the WIL in PBL.

The WIL co-ordinator outlines the selected role in order to illustrate how the experience of this role or function may contribute to the students’ personal development and considers how learning at university makes a positive contribution towards employment.

He/She identifies learning opportunities presented by the period of employment and how this learning will benefit current or future studies.

No. 27 MANAGE THE BTECH INTERIOR DESIGN STRATEGY FOR ASSESSMENT FOR PJBL AND PBL (refer to chapter 5, no. 27, page 293)

Managing the PJBL and PBL for the Interior Design programme is quite a demanding job. The problem based design projects of the students have now been completed and are ready for assessment.

27.1 Oral presentation
During the BTech year the students have many discussions with their supervisors and monthly preliminary oral examinations with the invited industry and their peers. They also have numerous opportunities to discuss their design problems with the clients and Interior Design staff members. The WIL co-ordinators, moderators
appointed by the Institution, invited members of the industry, observers and supervisors form the panel that does the assessment of the PBL.

**Functions to be performed by the WIL co-ordinator**

- The WIL co-ordinator confirms the appointment of moderators and the invited interior design industry.
- He/She explains the assessment of the oral presentation to the students and assessment panel.
- The WIL co-ordinator ensures the students present their PBL projects to the assessors.
- The WIL co-ordinator monitors the process and proposed changes, where necessary, to be implemented during the following year.
- After the final discussion of the panel members on the outcomes achieved, the WIL co-ordinator writes a report on the outcomes and submits it to the Department.
- The WIL co-ordinator submits the final marks to the administrator of the Department who ensures the outcomes and marks are captured on the IT system of the Institution.

**27.2 Exhibition (industry)**

To do an oral presentation for assessment on a design project, the student needs practical work to exhibit. The banners designed by the student incorporate all the different design materials necessary for a successful project discussion.

**Functions to be performed by the WIL co-ordinator**

- The WIL co-ordinator needs to ensure the exhibition is well executed and ready for the assessment panel to assess the PBL.
- The oral presentation and exhibition of the BTech design project is the final stage in the assessment of the practical work.
- The WIL co-ordinator, supervisors and students take responsibility for making the exhibition available to friends, family members and invited guests from the interior design industry.
• This graduation ceremony is a great opportunity for the WIL co-ordinator to liaise with the industry and to get acquainted with new partners who may wish to become involved in the PBL projects.

• The WIL co-ordinator captures names and contact details of all people present at the exhibition.

• The WIL co-ordinator invites a few industry members (old and new) to a function at the Department to express gratitude towards those companies that have participated in any form of work integrated learning.

27.3 Full dissertation

The problem-based learning project that is assigned to a student by the industry is documented through a written dissertation. The dissertation documents the design process from start to finish of the project. It is a simple way to analyse, sketch and discuss the development of the design process. By means of illustrations the research is explained through final three dimensional (3D) renderings, a budget/costing sheet and full specifications of the completed PBL design.

Functions to be performed by the WIL co-ordinator

• Although the WIL co-ordinator is not directly involved in the writing of the dissertation, it is evident that the dissertation can be used as a sales tool to recruit new partners for PBL projects.

• The WIL co-ordinator needs to convince industry partners to participate in research and design projects.

• He/She must teach the students to solve design problems through well-planned and considered innovative solutions.

• The WIL co-ordinator monitors research outputs by selecting different possibilities for articles and topics for students and staff members as well as master’s research or topics for papers at conferences.

No. 28 MANAGE THE INDUSTRY OUTCOMES (refer to chapter 5, no 28, page 295)
The panel of assessors consists of moderators from the industry with appropriate qualifications and adequate years of work experience, qualified Interior Design staff members who act as supervisors, invited industry representatives and practising interior designers who act as observers during the assessment of students.

Functions to be performed by the WIL co-ordinator and Interior Design staff

- The WIL co-ordinator ensures that all members are familiar with the duties of being an assessor, a moderator and an observer.
- The WIL co-ordinator should take part in the discussion of PBL and note changes to be implemented during the following year.
- The WIL co-ordinator, in collaboration with the assessment panel, makes the final decision on the outcomes of PBL.
- The marks awarded by the panel of assessors are final and the WIL co-ordinator confirms the PBL outcomes with the panel.
- The WIL co-ordinator informs the administrator of the final outcome by means of a written report and mark sheet.

No. 29 MANAGE THE “YES” OPTION (refer to chapter 5, no 29, page 296)

The WIL co-ordinator confirms the final marks on a mark sheet and a legal written report to the Head of the Department. He/She also reports on the number of students who have passed the PBL instruction to the central co-operative education office.

No. 30 MANAGE ACADEMIC ADMINISTRATION (refer to chapter 5, no 30, page 296)

- The WIL co-ordinator verifies the names and student numbers of students who have met the minimum criteria and outcomes of their PBL.
- The WIL co-ordinator also informs the Department that the conditions for PBL have been complied with.
• The WIL co-ordinator submits the final marks to the administrator of the Department who ensures the outcomes and marks are captured on the IT system of the Institution.

No. 31 MANAGE THE “NO” OPTION (refer to chapter 5, no 31, page 297)

• The WIL co-ordinator verifies the names and numbers of the students who have not met the minimum criteria and outcomes for PBL.
• The WIL co-ordinator confirms the final marks (failed PBL) on a mark sheet and submits a legal written report to the Head of the Department.
• The WIL co-ordinator also reports the number of students who have failed the PBL instruction to the central co-operative education office.
• The reasons for failure are discussed during a departmental meeting to ascertain what form of remedial action is required.

No. 32 MANAGE THE REMEDIAL ACTION (refer to chapter 5, no 32, page 297)

Many problematic issues can contribute to the failure of PBL. In many cases, personal factors could influence the student failure rate of PBL. To assist a student who has failed his/her PBL period, but is able to provide a reasonable explanation and apology, a decision can be made that the student repeats the PBL. However, the commitment from all stakeholders involved in PBL is required.

Functions to be performed by the WIL co-ordinator

• The WIL co-ordinator determines the reasons for failure of WIL in PBL.
• He/She interviews students in collaboration with staff from the Department and the predetermined company representatives.
• The WIL co-ordinator decides on the type of remedial action required, determines the commencement dates of the remedial action periods, and communicates this information to students and staff members.
• The WIL co-ordinator prepares a contract or contracts that must be signed by all the role players. All assigned work that must be redone is stipulated and explained in detail in the contract.
• The WIL co-ordinator ensures the students understand all the decisions that have been taken at the meeting and conveys the decisions taken in a written document to the students.

• The WIL co-ordinator visits the students frequently and keeps the Department informed of the progress made.

• He/She schedules a date for the exhibition and work to be exhibited at the Institution not later than the third week of January of the ensuing year.

• The WIL co-ordinator and supervisors of the Department arrange that the moderators from the industry assist with the assessment. Thereafter, under the supervision of the WIL co-ordinator, marks must be submitted to the administrator of the Department to capture the final marks on the ITS system of the Institution.

During the exhibition of re-submitted work for assessment, the student discusses the design solution and execution of each section of the BTech practical work by means of an oral presentation. The student is allocated time for answering questions to test his/her knowledge on the project. The assessment includes time to mark the working drawings, the technical applications of construction and the use of materials.

The new rewritten dissertation must be in the final stages of remediation and proofreading, and ready for binding. Bound dissertations have to be submitted at the Department and subsequently marks will be published.

No. 33 MANAGE DEBRIEFING (refer to chapter 5, no 33, page 298)

Managing the debriefing session with the students occurs a week after the assessment and during the oral presentation of the project and the exhibition of the practical work. The WIL co-ordinator is present during the debriefing of the students where each student provides input on the BTech, PBL research project, duration and difficult issues that might have strenuous consequences and impact negatively on the study period.
The WIL co-ordinator records problem issues that require attention and changes during the following year. He/she discusses changes with supervisors and the Head of the Interior Design department. The Interior Design staff of the Department incorporates the changes to the curriculum for the following year. The WIL co-ordinator reports difficult situations at the year-end departmental meeting for other WIL co-ordinators to take note of changes that have been made for the following year. The WIL co-ordinator uses the information gained from the debriefing sessions as part of quality assurance.

33.1 Manage quality assurance (refer to chapter 5, no 33.1, page 298)
Based on the research results obtained from the work integrated study for the development of a new management model for the Interior Design qualification programme, it appears that the research outcomes and feedback can be used to improve and complete the new model.

A great deal of information obtained from previous years’ WIL guides, including industry and student assessments of the WIL period, is used as a quality assurance element which forms part of the new WIL management model for the Interior Design programme.

Comments from the industry and students are summarised as follows:

<table>
<thead>
<tr>
<th>Positive input</th>
<th>Negative input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include more exhibition design in the curriculum.</td>
<td>More attention to technical detail in Interior Design is needed.</td>
</tr>
<tr>
<td>Gratitude is expressed for training candidates for the work environment and the love of design.</td>
<td>Measurements from real-life projects must be included in the curriculum to ensure accurate drawing standards.</td>
</tr>
<tr>
<td>The software programs, namely Photoshop, Corel Draw and technical CAD, were used very successfully.</td>
<td>Specifications of real-life projects on materials must be correctly specified in all PJBL projects.</td>
</tr>
<tr>
<td>Students must be able to work out budgets from their design projects.</td>
<td></td>
</tr>
<tr>
<td>The supervisors and the industry involved with WIL enjoyed the students’ fresh ideas for designs.</td>
<td>The WIL co-ordinators must teach students telephone answering skills.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>The WIL co-ordinators must teach students telephone answering skills.</td>
<td>More information and specification details are needed to understand design projects and solutions to the problems.</td>
</tr>
<tr>
<td>The curriculum of Interior Design must include more cabinetry construction for the students to incorporate into their designs.</td>
<td>More information and specification details are needed to understand design projects and solutions to the problems.</td>
</tr>
<tr>
<td>Students show interest in learning from the supervisor.</td>
<td>Rules and regulations on the use of windows, doors and roofs must form part of the design specification, and students should show knowledge in these fields.</td>
</tr>
<tr>
<td>Rules and regulations on the use of windows, doors and roofs must form part of the design specification, and students should show knowledge in these fields.</td>
<td>More shop-fitting lectures on drawing techniques are needed to complete projects to professional standard.</td>
</tr>
<tr>
<td>3D work is excellent.</td>
<td>3D work is excellent.</td>
</tr>
<tr>
<td>3D work is excellent.</td>
<td>More shop-fitting lectures on drawing techniques are needed to complete projects to professional standard.</td>
</tr>
<tr>
<td>The industry, supervisors and interior design clients perceive the students as well-mannered employees.</td>
<td>Lecturers should place more emphasis on accuracy in students’ writing skills.</td>
</tr>
<tr>
<td>Lecturers should place more emphasis on accuracy in students’ writing skills.</td>
<td>Lecturers should place more emphasis on accuracy in students’ writing skills.</td>
</tr>
<tr>
<td>The industry would like to extend the WIL period with a few more weeks.</td>
<td>The students must be trained to put more emphasis on design thinking skills.</td>
</tr>
<tr>
<td>The students must be trained to put more emphasis on design thinking skills.</td>
<td>The students must be trained to put more emphasis on design thinking skills.</td>
</tr>
</tbody>
</table>

The above WIL findings and results are obtained by means of oral and written comments from members of the industry after the WIL students’ departure. The feedback depicts ordinary comments on areas that can be improved and considered for new WIL strategies or incorporated into the new management model. Although some of the above comments stem from past years, most of the highlighted problem areas have already been addressed.

**No. 34 MANAGE THE CO-OPERATIVE EDUCATION INFORMATION CENTRE**

(refer to chapter 5, no 34, page 305)
The Institution strives to have co-operative education information centres in each faculty with the following working divisions active in this centre:

**THE WIL SECTION**
- Faculty WIL co-ordinator
- Administrator

**COMPUTER WORKSTATION FOR STUDENTS**
- Internet access

**RECEPTION AREA**
- Administrator for information, contracts with the industry

**EMPLOYABILITY SECTION**
- Faculty employability practitioners (EPs)
- Administrator.

It is evident that the new management model for the Interior Design qualification programme contains everything needed to support the faculty co-operative education information centre under one roof.

**THE INCUBATOR CENTRE**

6.3. MANAGEMENT OF THE CO-OPERATIVE EDUCATION INFORMATION CENTRE AND INTERIOR DESIGN WIL INCUBATOR

**No. 35 THE WIL INCUBATOR** (refer to chapter 5, no. 35, page 308)

The proposed incubator is the focal point and most important division of the management model for WIL for the Interior Design qualification. The amalgamation of the Interior Design incubator and the Faculty WIL co-operative education information centre guarantees the students that services such as photocopies, lamination of projects and laser-cutting will be available at all times.

The Interior Design student assistants will be available in all divisions of the incubator including in the Faculty. As discussed in the Faculty WIL Information Centre by Dr Wessels (TUT 2012), Director Co-operative Education of the Institution,
it should be a centre where the art student and academic staff can go online and retrieve information about accessible industries and companies for programmes offered on campus from the databases.

**No. 36 MANAGE THE FACULTY – WIL CO-ORDINATOR** (refer to chapter 5, no. 36, page 311)

The Faculty WIL co-ordinator will be the general manager for the incubator and will represent the students of the Faculty of Arts and Design. He/She will be responsible for the employability division. The employability practitioner (EP) will manage the employment centre for all students studying Art and Design. These Faculty WIL co-ordinators will each have an administrator who will be in command of the Interior Design student assistants who do their WIL at the reception counter.

**No. 37 MANAGE THE INFORMATION CENTRE – ADMINISTRATIVE SUPPORT STAFF** (refer to chapter 5, no. 37, page 311)

The administrative support staff will control the working of the incubator centre, including the key control to the centre. They will also supervise the Interior Design student assistants who perform their Interior Design on-campus WIL duties. The staff members supervise the Faculty student assistants who work in the computer workstation for the art students. Some of the main duties of the administrative staff are to ensure that they stay in contact with the industry, conclude the student contracts between the stakeholders, render assistance to the Faculty WIL co-ordinators, and provide information to students and the industry. They are responsible for ensuring that all students who depart for WIL are registered and there are contracts on their files.

**No. 38 MANAGE THE INTERIOR DESIGN WIL CO-ORDINATOR** (refer to chapter 5, no. 28, page 311)

The WIL co-ordinator is responsible for registering students doing their WIL on campus. He/she must ensure the smooth functioning of the workstations where the students work on projects obtained from clients and the industry. He/She is also
responsible for the administration of the incubator to ensure it remains in a working condition.

Being in control of the Interior Design WIL on campus, it is his/her responsibility to ensure that students attend their weekly work sessions with the industry or clients. The WIL co-ordinator must ensure that sufficient design progress is made with the projects to be completed on time and in accordance with the stipulations of the contract signed between the student (TUT) and the industry.

Over and above the incubator responsibilities, the duties set out in no. 21. and no. 22 above are included here. These will be partially fulfilled by Interior Design WIL staff members.

**No. 39 MANAGE THE INTERIOR DESIGN WIL STAFF MEMBERS** (refer to chapter 5, no. 39, page 312)

Functions to be performed by the Interior Design WIL staff members include that designated WIL staff members render assistance to the WIL co-ordinator during the WIL training period. Each level in the programme should have a designated staff member to aid students before their preparation training starts. Staff members can assist students with work placement. They also assist the WIL co-ordinator in accomplishing his goal to prepare, place, visit, assess and debrief students during WIL.

The WIL co-ordinator has to visit off-campus students to ascertain if they are satisfied and looked after well. The staff members also accompany the WIL co-ordinator on his/her visits when assessments are done. During debriefing, the Interior Design staff members are present when the student discusses his/her training period off-campus. Where questionable issues are raised, the staff members and the WIL co-ordinator will launch an inquiry.

During the WIL period for students on campus, a staff member has to be available at all times to assist the students with interior design problems or unfamiliar situations that take up the valuable time needed to complete the project. Other responsibilities
of WIL staff members are to assess the practical work received from off-campus students, and to submit final assessment marks to the administrator of the Department for capturing on the ITS system and publication at a later stage.

**No. 40 MANAGE THE INTERIOR DESIGN WIL INCUBATOR FOR ON-CAMPUS TRAINING** (refer to chapter 5, no. 40, page 312)

Although the WIL co-ordinator for the Interior Design WIL incubator is responsible for the content, working and administration of the incubator that go hand in hand with the daily problems, mistakes, shortage of paper or ink, or computers and printers that do not work properly, he/she has a number of keen and caring staff members and students to assist with this enormous task.

Each staff member, student assistant, Faculty co-ordinator, employability practitioner and student doing their WIL training are all aware of their responsibilities to ensure the smooth running of the incubator.

The persons responsible for scheduling appointments with students, staff and the industry play a very important role; hence, this task should be performed with dedication and commitment to ensure that none of the partners involved in the project are inconvenienced.

Other functions of the Faculty co-ordinator at the incubator include providing WIL information, drafting contracts and assisting the students in finding work placement. If everybody involved in the incubator does their part to ensure the smooth running of the centre, the incubator can generate income for the Interior Design department and the Faculty of the Arts.

**No. 41 MANAGE THE INTERIOR DESIGN STUDENT ASSISTANTS** (refer to chapter 5, no. 41, page 313)

The Interior Design student assistants are responsible for the administration of the incubator, telephone duties, scheduling appointments, the day to day orders, rendering assistance to the computer workstation (general workstation) for students
who require assistance, attending to visitors waiting for assistance and accompanying the industry representatives to their appointments. The Interior Design student assistants also have to arrange for refreshments for presentations or boardroom meetings between the stakeholders.

With the new WIL strategy for the Interior Design qualification, all duties mentioned above will be implemented on all levels of the programme.

**No. 42 MANAGE THE INTERIOR DESIGN WIL STUDENTS** (refer to chapter 5, no. 42, page 313)

All Interior Design WIL students doing their WIL at the incubator fall under the direct supervision of the WIL co-ordinator and Faculty WIL co-ordinator of the incubator. The Interior Design WIL students work on industry projects or projects that have been submitted for the students to design. These students consult with members of the industry on a weekly basis. The consultations are arranged by their peers at the front desk. Peers schedule appointments and assist with the presentation of projects during the consultation and briefing sessions.

Interior Design staff members and the WIL co-ordinator are in daily contact with students to ensure that the design problem is solved and that the design takes shape.

The students doing WIL are supervised, assessed and debriefed just like any other student working off-campus.

**No. 43 THE INTERIOR DESIGN INDUSTRY REPRESENTATIVE** (refer to chapter 5, no. 43, page 314)

Students who have applied to work at the incubator receive the different projects from the industry and clients visiting the incubator. The time span and design requirements are discussed with all the parties involved. All discussions are minuted and can be accessed for reference purposes by the designers and industry representatives.
Interior Design staff members, the Faculty WIL co-ordinator and WIL co-ordinator are always available to help and assist with the design projects. The visits to the incubator are arranged by the WIL students themselves, while the meetings, discussions, presentations and sharing the final design solutions and ideas with outside clients are all arranged by the WIL students of the Interior Design department.

No. 44 INTERIOR DESIGN AND INDUSTRY PANEL FOR ASSESSMENT (refer to chapter 5, no. 44, page 315)

The WIL co-ordinator and Interior Design staff members compile a list with the names of examiners and moderators to be approved by the Faculty board members and Senate of the Institution. The WIL co-ordinator, Interior Design staff members and incubator staff who have monitored the WIL students during the design project process will all be members of the assessment panel.

The WIL co-ordinator liaises with the industry and panel members to determine a time and date for the WIL students to present their design projects to the panel, debrief the students and assess the final work before it is handed over to the client. Final marks are awarded for design work done, technical duties executed, assistance rendered to other students, calls logged and purchases made for materials needed. The marks are then submitted to the administrator of the Department for capturing on the ITS system and for publication.

No. 45 MANAGE THE EMPLOYABILITY PRACTITIONER (EP) AND REPORTING STUDENT WORKSTATIONS ON-CAMPUS (refer to chapter 5, no. 45, page 315)

As the EP of the incubator, it is important to make his/her presence known on campus. The EP is to introduce himself/herself to the students, especially to those who will be graduating soon. These students experience the most stress about their future. The EP needs to explain his/her duties and how he/she can be of assistance.
The employability practitioner, assisted by the WIL co-ordinator, drafts a pamphlet listing everything the students need to bring to the appointment. In the incubator the student assistant provides a diary for students to book appointments, while assisting the students with the needs and problems tabled. The WIL co-ordinator arranges counselling sessions in student development support (SDS) for those students who may need such therapy.

The employability practitioner spends time and effort to get to know the industry for all departments and career qualifications taught on campus. He/She also explains the unemployment situation of the Art and Design students in an attempt to employ at least 30% of the unemployed students after graduation. Therefore, he/she provides career advice to students to prepare them for the workplace, supporting those students who have to prepare CVs and go for interviews.

He/She organises career fairs and recruitment drives for the Faculty by engaging with SETAS and companies in the interior design industry, while also drafting Memoranda of Understanding for partnerships with companies. He/she has to keep record of company needs and the type of employment companies require. He/She then conveys this information to the Department.

In addition to these records, he/she has to keep record of students' needs, students employed as well as the names and contact details of alumni. In this way, he/she is able to establish a database containing the details of employers, WIL students and graduates.

**No. 46 COMPUTER WORKSTATIONS** (refer to chapter 5, no. 46, page 316)

With a well-equipped workstation available to students, it is necessary to have someone supervising the information. Therefore, the student assistants have to monitor students entering and leaving the workstation/IC. No handbags and shopping bags are allowed in the IC and because of vandalism and theft the assistant must be alert to any type of criminality. The students have to see to it that no eating and drinking as well as no gathering or chatting takes place in the IC. In so doing, the IC is kept tidy and neat.
The student assistants have to switch off computers to ensure that all the unnecessary and unimportant files that have been saved by students are deleted from the hard drives before the next morning. They also assist students with using software that is unfamiliar to them as well as with printing documentation and company profiles.

**No. 47 INDUSTRIES LIAISON AND EMPLOYERS OFFICES** (refer to chapter 5, no. 47, page 316)

The administrative support staff assists students who work on campus. For the EP who has to execute his/her functions properly, a well-equipped computer studio is required. The computer workstation is available to all students looking for work placement and a workstation for WIL, or searching for employment after graduation. The workstation/design laboratory should be functional during all hours of the day; in other words, fully functional computers and printers should be available to all students all the time. The administrative staff should therefore ensure that office material is available at all times. Office hours should also be communicated to students to make the workstations accessible and fully functional.

### 6.4 CONCLUSION

The main duties and responsibilities for the narrative covered in chapter 5 of the new management model for WIL in the Interior Design qualification have been discussed in chapter 6.

The management of and recommendations discussed under each division of the WIL management model provide only a guideline and many more suggestions can be added to the possible duties of the persons working in WIL.

In the following chapter, recommendations for executing the work integrated learning incubator and co-operative education information centre are proposed.
CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

In this study, conceptual diagrams and proposals (refer to Diagrams 1.1, 1.2, 1.3, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, and Appendix A, B, and C, and Figure 5.1-5.5) as well as instructive and inventive answers from universities abroad and local universities helped to formalise the research for this study. A vast amount of research information from the active interior design industry, academic staff and students from different UOT’s, and one comprehensive university from KwaZulu-Natal, Gauteng, the Western Cape was compiled to arrive at this proposed new WIL management model for the Interior Design qualification, the incubator and the Faculty’s Co-operative Education Information Centre for employability (refer to chapter 1, no. 1.1, page 1, and chapter 4, page 112.)

7.2 SUMMARY OF CHAPTERS

The information in Chapter 1 was a formulation from literature studies and practical experiences used as examples to write the chapter for the DTech research. The title and information for the research project were accepted. In this chapter the need for a new management model for WIL in Interior Design qualification at the TUT was the main purpose. The research questions, sub-questions, objectives of the study, the research procedures and methodology were all included in the first chapter.

In Chapter 2 the literature study was based on a one-on-one discussion and conversations with participants on WIL. Questions were sent to all the universities that present Interior Design in their programmes to ensure that the information received was tested and used by different universities that could be built into the new WIL management model. Literature on work integrated learning in general has not yet been tested in all UOT’s in South Africa or Interior Design institutions abroad and therefore information could not be verified as workable WIL practice. The authentic feedback from WIL colleagues was the motivation for working with persons from
Australasia, Canada, USA, Europe and South Africa. After explaining the process, everybody who participated in the research discussion was issued with close-ended questions to which they responded with innovative ideas and useful information. This precious information is filed for further utilisation. Interesting data received was from friends and colleagues abroad. A comparison between the national and international universities was done as well as a comparison between universities in South Africa (refer to Table 2.1, page 69; Table 2.2, page 72; Table 2.3, page 75).

Chapter 3 was based on the methodology for this research. For the population groups and sampling groups a decision was made to use the known companies, industries, universities and known partners of the TUT, namely in KwaZulu-Natal, Gauteng and the Western Cape. Sampling was limited to the active interior industry, students who have completed WIL and academic staff members involved in WIL.

The motivation for using close-ended questionnaires for an empirical (experimental) study was to collect work integrated learning information from different people, industries and institutions, by asking the same questions and to analyse the results. The with five-point Likert scale was sent to the participants to make it easier for students, staff or members of the industry who did not understand the questions.

Chapter 4 was the empirical investigation with regard to biographical and demographical data, and as to how WIL was working in the different environments mentioned above. The analysis was done with the aid of the Statistics Department of the TUT, Pretoria. All questionnaires were analysed and converted into percentage form. All questionnaires were described and discussed according to the outcome of the analysis (refer to Appendix A, page 402; Appendix B, page 410; Appendix C, page 418).

In Chapter 5 the new managing model for WIL for the Interior Design qualification was investigated and depicted by using diagrams (organograms). These indicate the steps that were taken, and how one section of the Department and the DCE slotted into each other to form the different divisions of the model. With the aid of Diagram 5.1 to 5.9 the information was conveyed to the reader. Diagram 5.4 explained the WIL managing model and was divided into three categories.
The departmental diagram (diagram 5.4, page 243), indicated all the students and processes that the department has to manage. These included the BTech programme with all the industry partners, the approval of practical work projects and the incubator with its luxury and contributions from outside the Faculty.

In **Chapter 6** the empirical study, discussions and references from Chapter 5 and the policy work that still has to be done, were explained in detail. References on each WIL section are entered under the person’s position for which he/she will be responsible.

**Chapter 7** provides a brief summary of the standardisation and implementation of the WIL management model below.

1. The intention of the suggested new management model for WIL in Interior Design is to promote a policy for the curriculum of the subject Interior Design Practice III. It should integrate academic learning with theoretical learning, problem-based learning, and project-based learning within the interior design industry. It should be structured, assessed and monitored to achieve the outcomes of the learning programme for Interior Design.

2. The main purpose of the new management model for Interior Design is to contribute towards the background knowledge and understanding of students in Interior Design by enabling them to participate in an organised interior design industry that conforms to the predetermined needs of the interior design community. It should furthermore enhance the students’ understanding of the course content of Interior Design and broaden their appreciation of the discipline. In addition, it should give them an heightened sense of civic responsibility and a broader knowledge of the interior design work environment.

3. The aim of the new management model for Interior Design is to promote opportunities in relation to both teaching and learning strategies linked to the curriculum for Interior Design. This will ensure the delivery of high-quality graduates
with the necessary theoretical and practical in whom skills in interior design have already been established to the interior design industry.

4. The implementation of the new management model for Interior Design requires adequate planning of the learning environment in Interior Design to promote flexibility, innovation and opportunities for assessing the students’ critical cognitive skills as part of their WIL assessment.

5. The new management model for Interior Design will contribute to opportunities and options for the placement of students within the industry and also in the incubator by applying the following skills:
   - Preparedness for working on interior design projects and in the interior field
   - Preparedness and knowledge of design skills
   - Understanding the workplace and the working thereof
   - Life, work and study orientation for students before and after completion of WIL
   - Successful placement due to the focus on a combination of the outcomes for Interior Design
   - Workplace learning that is always relative to the Interior Design programme and outcomes stipulated by SAQA
   - Interim continuous assessments throughout the Interior Design WIL period
   - Promoting the students’ integrity, dedication, knowledge, team co-operation and work skills.

6. The new management model for Interior Design contributes to the key issues in awarding credits for work placement. Successful placements have a great deal to do with factors that lie outside the competence of the student, such as the effectiveness of the WIL incubator and Interior Design staff members. Therefore, the incubator and employment must be student-friendly.

7. The new management model for Interior Design contributes to the establishment of an Interior Design incubator, and a vibrant interactive relationship among government, higher education, universities, students and the interior design industry.
Therefore, strategic and vibrant partnerships between all role players and communities at regional, national and international levels are promoted and established. This includes innovative networks and joint academic development initiatives as well as joint WIL projects in interior design with local and international partners.

8. The new management model for Interior Design will establish an Interior Design incubator that is relevant to the needs of the interior design environment and its communities through teaching and learning. Research and development fulfill the needs of the interior design society by means of the appropriate transfer of interior design skills to the interior design community and students.

9. The new management model for Interior Design contributes to students who will be able to simultaneously study and engage in the interior design community via the establishment of an Interior Design incubator, which focuses on relevance, the latest technology and valuable applicable WIL skills.

10. The new management model for Interior Design addresses problems in an engaged, two-way, practice-oriented, real-world, focused and multi-disciplinary manner via the establishment of an Interior Design incubator. This model will assist in monitoring the social impact of interior design technology, give advice on technology, and changes in style and design. Researching and applying the most productive uses of interior design technology enable learning as part of a broader approach. During WIL in the incubator, the students are committed to access knowledge and skills of interior design, and make available alternative pathways into the interior design education. Students will lead the way in ensuring that their applied research in interior design benefits the community in South Africa.
7.3 RECOMMENDATIONS FOR THE WIL MANAGEMENT MODEL

The following recommendations for the WIL management model for the Interior Design qualification is based on the information and feedback taken from the different participations for this research. The mentioned arguments can contribute to a successful model for the Interior Design programme. With a well-designed incubator, a well written WIL policy and adequate infrastructure and space to do simulation will provide the students in future with a successful work experience.

7.3.1 Departmental recommendations
- Departments and sections in departments must appoint a responsible WIL co-ordinator to manage their WIL- to simulate the process of the incubator.
- Simulation processes per department must be in writing and assessment must be defined.
- New WIL guides must be written for each level in the Interior Design department. All students, staff members, supervisors as well as the WIL co-ordinator in charge of the WIL incubator for Interior Design must know about every guide that contains information about WIL.
- The WIL co-ordinator must liaise with the industry on practical projects for interior design where students can form part of the teams.
- The WIL co-ordinator convenes an exhibition at the end of the year that forms part of the departmental farewell.
- The boardroom for visitors from the industry should always be in an immaculate condition.
- Insufficient locations or areas for students to do their simulation processes have to be referred back to their departments.

7.3.2 BTech recommendations
- Each student in BTech must be employed in the industry, must work for a client or assist in a practical problem-solving project.

7.3.3 Incubator and information centre
7.4 RECOMMENDATIONS FOR FURTHER RESEARCH

According to the outcomes and analysis of this research, the following research areas are suggested for further research:

- The value of such an incubator to the university and industry
- The implementation of PJBL and PBL projects in interior design
- How such projects support the design process and learning method of the students
- An in-depth research study on recommendations and conclusions for industry projects for completion at the incubator
- Allocation of rules, responsibilities and workload for WIL co-ordinators working in the incubator
- From a spectators’ point of view, research how PBL improves students’ involvement in the industry.

7.5 CONCLUSION

It is with pride and satisfaction that these recommendations and conclusions are listed. Even if only a few of these suggestions can be implemented, a wonderful work integrated learning period would lie ahead; not just for the students, but also for
the industry. All stakeholders mentioned in this thesis can gain by taking part in a cheerful, blessed and knowledgeable work integrated learning period.
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STAFF ........................................................................................................ 419
Dear Research participant,

You are invited to participate in a research study that forms part of my formal DTech-studies.

Before you agree to take part, you should fully understand what is involved. You should not agree to take part unless you are completely satisfied with all aspects of the study. This information leaflet will help you to decide whether you would want to participate in the research study.

WHAT IS THE STUDY ALL ABOUT?
The aim of this study is to develop and implement an alternative program management model to improve WIL (work integrated learning) for the Interior Design qualification.

The mere placement of a student in the workplace in the industry does not necessarily ensure employability and it must not be assumed that every single student that took part in WIL will be employed.

It is for this reason that this survey is necessary to, based on information obtained from this survey questionnaire, formulate a new management model for the qualification, to ensure that students that leave the institution and enter the industry have the knowledge, courage and confidence to cope with any design challenge and to use their acquired knowledge to solve any given problem.
WHAT WILL YOU BE REQUIRED TO DO IN THE STUDY?
Your participation in this Work Integrated Learning survey is a once-off session and it will take approximately 10 minutes to complete.

WILL YOU RECEIVE ANY FINANCIAL COMPENSATION OR INCENTIVES FOR PARTICIPATING IN THE STUDY?
Please note that participation in completely voluntary and you will not be remunerated to participate in the study.

ARE THERE ANY CONDITIONS THAT MAY EXCLUDE YOU FROM THE STUDY?
There are no conditions that may exclude you from the study.

CAN ANY OF THE STUDY PROCEDURES RESULT IN PERSONAL RISK, DISCOMFORT OF INCONVENIENCE?
There are no foreseeable risks associated with this project.

WHAT ARE THE POTENTIAL BENEFITS THAT MAY COME FROM THE STUDY?
To ensure the success of the survey, it is important to understand your opinion and to learn from your experiences, even if you do not consider yourself to be knowledgeable about WIL technologies and design.

Participation in this study will contribute towards establishing a management model for the Interior Design qualification, and data collected will be used to formulate a new set of rules and regulations as part of the program management model for all the stakeholders by implementing, managing, monitoring and assessing WIL.

WHAT ARE YOUR RIGHTS AS A PARTICIPANT IN THIS STUDY?
Should you feel uncomfortable answering any questions, you can withdraw from the survey at any point.

HOW WILL CONFIDENTIALITY AND ANONYMITY BE ENSURED IN THE STUDY?
All survey responses will be strictly confidential. Your information will be coded and will remain confidential. The original questionnaires will be stored in a safe place for three years, and will subsequently be destroyed.

IS THE RESEARCHER QUALIFIED TO CARRY OUT THE STUDY?
The researcher is an adequately trained and qualified researcher in the field covered by the research project, specifically in Interior Design and Work Integrated Learning (WIL).

HAS THE STUDY RECEIVED ETHICAL APPROVAL?
Yes. The Faculty Higher Degrees Committee and the Research Ethics Committee of the Tshwane University of Technology have approved the formal study proposal.

WHO CAN YOU CONTACT FOR ADDITIONAL INFORMATION REGARDING THE STUDY?
If you have questions at any time about the survey or the procedures, you may contact Rita Cilliers on 27 12 382 6163 during office hours or via e-mail at cilliersr@tut.ac.za.

Your cooperation and participation in the study will be greatly appreciated.

RESEARCHER
Dear Research Participant,

You are invited to complete a survey questionnaire that forms part of my formal DTech-studies.

The aim of this study is to develop and implement an alternative program management model to improve WIL (Work Integrated Learning) for the Interior Design qualification.

The mere placement of a student in the workplace in the Industry does not necessarily ensure employability and it must not be assumed that every single student that participated in WIL, will be employed.

Based on information obtained from this survey questionnaire, a new management model for the qualification will be formulated, to ensure that the Industry receives students from the Tertiary Institution with the necessary knowledge, courage and confidence to cope with any design challenge and to utilise their acquired knowledge and skills to solve any given problem.

Should you decide to participate in the study, you will be required to complete the paper-based questionnaire, which should not take more than 10 minutes to complete. You will be asked to respond to questions regarding supervision of WIL candidates placed at your Company.
All Employers/Supervisors or Human Resources Staff are eligible to complete the questionnaire.

Your participation in this study is completely voluntary. Completion of the questionnaire involves no foreseeable risks, you will only be asked to share your thoughts and experience regarding your involvement with WIL.

Should you feel uncomfortable answering any questions, you can withdraw from the survey at any point. To ensure the success of the survey, it is important to understand your opinion and to learn from your experiences, even if you do not consider yourself to be knowledgeable about WIL technologies and design.

The results of the questionnaire will have no direct personal benefit to you, but you will make a contribution towards a better understanding of your and your Company’s expectations of WIL.

All data provided in the questionnaire will be dealt with in strict confidentially and will only be disclosed with your permission or if required by law. This means that access to your data will be strictly limited to the Researcher, Supervisors of the study and Designated Examiners (appointed by Tshwane University of Technology). The results of this study could be published in a scientific journal and/or presented at scientific meetings; however, the identity of a research participant will not be disclosed. The original questionnaires will be stored in a safe place for three years, where after it will be destroyed.

The Faculty Higher Degrees Committee and the Research Ethics Committee of the Tshwane University of Technology have approved the formal study proposal. The ethics clearance number is Ref#: REC2012/05/002(2). The study will be conducted in accordance with internationally accepted ethical principles.

_The Primary Investigator, Mrs R Cilliers, can be contacted during office hours on (012) 382-6163, or 082 8250159. The Study Leader, Dr PEJ Smit, can be contacted during office hours on (012) 382-6187._

_Should you have any questions regarding the ethical aspects of the study, you can contact the Chairperson of the TUT Research Ethics Committee, Dr WA Hoffmann, during office hours on (012) 382-6265/46 or via e-mail at hoffmannwa@tut.ac.za. Alternatively, you can report any serious unethical behaviour by dialling the University’s Toll Free Hotline Number 0800 21 23 41._

Your participation in the study will be greatly appreciated.

Thank You
APPENDIX A
Employer/Supervisor/ Human Resources

QUESTIONNAIRE
Please do not provide your name, as this information is only used for research purposes. All information will be treated as strictly confidential

SECTION A
BIOGRAPHICAL INFORMATION

*Please answer the following questions by encircling the applicable number.*

<table>
<thead>
<tr>
<th>1. Your highest qualification obtained</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No qualification</td>
<td>1</td>
</tr>
<tr>
<td>Grade 12</td>
<td>2</td>
</tr>
<tr>
<td>Degree or National Diploma</td>
<td>3</td>
</tr>
<tr>
<td>Honours Degree or equivalent</td>
<td>4</td>
</tr>
<tr>
<td>Master’s Degree</td>
<td>5</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>6</td>
</tr>
</tbody>
</table>

| 2. What position do you hold where you are presently employed? (Select only one) |
|-----------------------------------------------|-------|
| Supervisor/Design Co-ordinator                | 1     |
| Human Resource Manager                        | 2     |
| Company Manager                               | 3     |
| Section Head                                  | 4     |
| Other                                         | 5     |

| 3. Total years of work experience in your current position as indicated under point 2 above |
|-----------------------------------------------|-------|
| 0 – 3 years                                   | 1     |
| 4 – 9 years                                   | 2     |
| 10 and more years                             | 3     |
SECTION B:
DEMOGRAPHIC INFORMATION

Please answer the following questions by encircling the applicable number.

1. In which province is your company situated?

<table>
<thead>
<tr>
<th>Province</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>1</td>
</tr>
<tr>
<td>Eastern Cape</td>
<td>2</td>
</tr>
<tr>
<td>KwaZulu-Natal</td>
<td>3</td>
</tr>
<tr>
<td>Northern Cape</td>
<td>4</td>
</tr>
<tr>
<td>Free State</td>
<td>5</td>
</tr>
<tr>
<td>North West</td>
<td>6</td>
</tr>
<tr>
<td>Gauteng</td>
<td>7</td>
</tr>
<tr>
<td>Mpumalanga</td>
<td>8</td>
</tr>
<tr>
<td>Limpopo</td>
<td>9</td>
</tr>
</tbody>
</table>

2. In which city is your company situated?

<table>
<thead>
<tr>
<th>City</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretoria</td>
<td>1</td>
</tr>
<tr>
<td>Johannesburg</td>
<td>2</td>
</tr>
<tr>
<td>Durban</td>
<td>3</td>
</tr>
<tr>
<td>Cape Town</td>
<td>4</td>
</tr>
<tr>
<td>Port Elizabeth</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
</tbody>
</table>

3. Number of employees in your design company?

<table>
<thead>
<tr>
<th>Number of Employees</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 5</td>
<td>1</td>
</tr>
<tr>
<td>6 - 10</td>
<td>2</td>
</tr>
<tr>
<td>11 - 20</td>
<td>3</td>
</tr>
<tr>
<td>21 - 30</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>

4. Which of the following best describes the sector your company operates in?

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Design</td>
<td>1</td>
</tr>
<tr>
<td>Exhibition Design</td>
<td>2</td>
</tr>
<tr>
<td>Graphic design</td>
<td>3</td>
</tr>
<tr>
<td>Photography</td>
<td>4</td>
</tr>
<tr>
<td>Retail Design</td>
<td>5</td>
</tr>
<tr>
<td>Office design</td>
<td>6</td>
</tr>
<tr>
<td>Model building</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
</tr>
</tbody>
</table>

5. In which sector does your company conduct its business?

<table>
<thead>
<tr>
<th>Sector</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>1</td>
</tr>
<tr>
<td>Personnel/Human Recourses</td>
<td>2</td>
</tr>
<tr>
<td>Staff involved in supervising students</td>
<td>3</td>
</tr>
<tr>
<td>A consensus of the above</td>
<td>4</td>
</tr>
</tbody>
</table>
**SECTION C:**
**Work Integrated Learning (WIL) ACTIVITIES IN YOUR COMPANY**

Listed below are a number of statements about Work Integrated Learning (WIL).
Please indicate to which extent you agree or disagree with each statement by using the following scale

1 = strongly agree;  2 = agree;  3 = do not know;  4 = disagree;  5 = strongly disagree. Mark the appropriate block with a cross (X).

**Company:**  Used synonymously with commerce, industry and companies/organisations.
**Supervisor:**  Assigned person supervising students during their WIL period.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1 Strongly agree</th>
<th>2 Agree</th>
<th>3 Do not know</th>
<th>4 Disagree</th>
<th>5 Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A website is necessary where students can read the company’s profile before making decisions for WIL placement?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Your company feel positive about WIL as part of your contribution towards educating Interior Design students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>It is a pre-requisite for a student to be knowledgeable about the latest Interior Design computer software, before starting his/her WIL period at your company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Your company wants to interview different students for WIL placements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The responsibility to monitor students during WIL lies with the supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The responsibility to monitor the student during WIL lies with the institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>It is necessary for the University to assess the learner during WIL</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>8</td>
<td>University staff should visit and assess a student during WIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>The exchange of knowledge and technology only happens through guest lecturers by the industry for the university</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The assessment of WIL is the responsibility of the supervisor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Strongly agree</td>
<td>2 Agree</td>
<td>3 Do not know</td>
<td>4 Disagree</td>
<td>5 Strongly disagree</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>------------------</td>
<td>---------</td>
<td>---------------</td>
<td>------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>11</td>
<td>The WIL guide (WIL guide) provides enough clarification, assessment and information to the supervisor?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>The WIL guide (WIL guide) provides enough clarification, assessment and information to the Student?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Your company prefers feedback on the debriefing process of WIL students to use as information for further participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>An Interior Design WIL student has enough design skills to be utilise in your company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Design skill is a necessity for good company practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Your company is willing to take in a first year Interior Design student for WIL observation purposes only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Your company would like to participate in the advisory committee for Interior Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Your company prefers to make use of WIL students for work related projects on an ad-hoc basis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Your company perceives WIL as a waste of time and money</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>20</td>
<td>WIL forms an integral part of curriculum development and implementation and conveys the teaching and learning strategy of the university</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>21</td>
<td>Your company prefers to make use of WIL during weekends</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>22</td>
<td>WIL is beneficial to students</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>23</td>
<td>A supervisor should be assigned by your company to supervise and coach students during the WIL period</td>
<td></td>
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<tr>
<td>24</td>
<td>Universities should only offer programmes that are in line with industry requirements</td>
<td></td>
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</tr>
<tr>
<td>25</td>
<td>Students must be remunerated by companies during WIL.</td>
<td></td>
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</tr>
</tbody>
</table>
26. The following skills form part of the Interior Design program
   Please rate the skills
   **Scale:** (1 = not very important; 5 = very important)

<table>
<thead>
<tr>
<th>Skills</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design skills</td>
<td></td>
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<tr>
<td>Written skills</td>
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<tr>
<td>Oral skills</td>
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<tr>
<td>Presentation skills</td>
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<tr>
<td>Model building skills</td>
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<td></td>
</tr>
<tr>
<td>Photography skills</td>
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<td></td>
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<tr>
<td>Technical skills</td>
<td></td>
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<td></td>
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<tr>
<td>Computer skills</td>
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</tr>
</tbody>
</table>

27. Which of the following student employee characteristics are important to your company?
   Please rate the characteristics
   **Scale:** (1 = not very important; 5 = very important)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Punctual</td>
<td></td>
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<tr>
<td>Hard worker</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Diligent</td>
<td></td>
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</tr>
<tr>
<td>Trustworthy</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td></td>
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</tr>
<tr>
<td>Intelligent</td>
<td></td>
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<tr>
<td>Helpful</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Quiet</td>
<td></td>
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</tr>
<tr>
<td>Unconcerned</td>
<td></td>
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</tr>
<tr>
<td>Independent</td>
<td></td>
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<tr>
<td>Calm</td>
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<tr>
<td>Talkative</td>
<td></td>
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<tr>
<td>Anxious</td>
<td></td>
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<td></td>
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<tr>
<td>Confident</td>
<td></td>
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<td></td>
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<tr>
<td>Creative</td>
<td></td>
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<tr>
<td>Leadership</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Busy Body</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Lazy</td>
<td></td>
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<tr>
<td>Liar</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Dependent</td>
<td></td>
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<tr>
<td>Unsure</td>
<td></td>
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<tr>
<td>Negative</td>
<td></td>
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</tbody>
</table>

28. Which of the following higher thinking skills of the WIL student are important to your company?
   Please rate the higher thinking skills
   **Scale:** (1 = not very important; 5 = very important)
Higher Thinking Skills

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Application</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Analysis</td>
<td></td>
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<tr>
<td>Synthesis</td>
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<tr>
<td>Evaluation</td>
<td></td>
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</tr>
</tbody>
</table>

29. Which of the following three domains in respect of the WIL student are important to your company? Please rate the three domains
Scale: (1 = not very important; 5 = very important)

<table>
<thead>
<tr>
<th>Domain</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive: recall or recognition of knowledge or the development of knowledge and intellect</td>
<td></td>
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<tr>
<td>Affective: including objectives describing changes in interest, attitudes and values</td>
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<tr>
<td>Psychomotor: including the development of manipulative or motor skills</td>
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</tr>
</tbody>
</table>

30. Which of the following motivations of the WIL student are important to your company? Please rate the motivations
Scale: (1 = not very important; 5 = very important)

<table>
<thead>
<tr>
<th>Motivations</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The expectancy of success</td>
<td></td>
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<tr>
<td>The value of the practical task</td>
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<tr>
<td>Task involvement</td>
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<td></td>
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<tr>
<td>Subsequent achievement</td>
<td></td>
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</tr>
</tbody>
</table>

Thank you for your time.
Dear Research Participant,

You are invited to complete a survey questionnaire that forms part of my formal DTech-studies. The aim of this study is to develop and implement an alternative program management model to improve WIL (Work Integrated Learning) for the Interior Design qualification.

The mere placement of a student in a job setting in an industry does not necessarily ensure employability and it must not be assumed that every single student that participated in WIL will be employed.

Based on the information obtained from this survey questionnaire, a new management model will be formulated, to ensure that the Industry that receives the student from the Tertiary Institution, has the knowledge (practical and theoretical), courage and confidence, as well as a well and prepared WIL foundation to cope with any design challenge and to use their acquired knowledge to solve any given problem.

Should you decide to take part in the study, you will be required to complete the paper-based questionnaire that should not take more than 10 minutes to complete. You will further be required to respond to questions regarding your WIL training, preparation, placement etc.

All students that complete WIL are eligible to complete the questionnaire.
Your participation in this study is completely voluntary. Completion of the questionnaire involves no foreseeable risks.

Decision not to participate in the survey will not influence any assessment of your work.

Should you feel uncomfortable answering any questions, you can withdraw from the survey at any point. To ensure the success of this survey, it is important to understand your opinion and to learn from your experiences, even if you do not consider yourself to be knowledgeable about WIL technologies and design.

The results of the questionnaire will have no direct personal benefit to you, but you will make a contribution towards a better understanding of the cognitive, hands-on and emotional needs required to ensure that students that still have to complete WIL and those that complete WIL, will be well-trained and prepared on an emotional and mental level and have the necessary practical experience and confidence to deal with the new WIL, ultimately leading to a promising career.

All data provided in the questionnaire will be dealt with in strict confidentiality and will only be disclosed with your permission or if required by law. This means that access to your data will be strictly limited to the Researcher, Supervisors of the study and Designated Examiners (appointed by Tshwane University of Technology). The results of this study could be published in a scientific journal and/or presented at scientific meetings; however, the identity of a research participant will not be disclosed. The original questionnaires will be stored in a safe place for three years, where after it will be destroyed.

The Faculty Higher Degrees Committee and the Research Ethics Committee of the Tshwane University of Technology have approved the formal study proposal. The ethics clearance number is Ref#: REC2012/05/002(2). The study will be conducted in accordance to internationally accepted ethical principles.

The Primary Investigator, Mrs R Cilliers, can be contacted during office hours on (012) 382-6163, or 082 8250159. The Study Leader, Dr PEJ Smit, can be contacted during office hours on (012) 382-6187.

Should you have any questions regarding the ethical aspects of the study, you can contact the Chairperson of the TUT Research Ethics Committee, Dr WA Hoffmann, during office hours on (012) 382-6265/46, or via E-mail at hoffmannwa@tut.ac.za. Alternatively, you can report any serious unethical behaviour by dialling the University’s Toll Free Hotline Number 0800 21 23 41.

Your participation in the study will be greatly appreciated.

Thank You
APPENDIX B
Students that completed WIL

QUESTIONNAIRE
Please do not provide your name, as this information is only used for research purposes. All information will be treated as strictly confidential.

SECTION A
BIOGRAPHICAL INFORMATION

Please answer the following question by encircling the applicable number.

1. Your highest qualification obtained
   - Grade 12 and completed first year of undergraduate qualification [1]
   - Grade 12 and completed second year of undergraduate qualification [2]
   - Grade 12 and busy with third year of undergraduate qualification [3]

SECTION B:
DEMOGRAPHIC INFORMATION

Please answer the following questions by encircling the applicable number.

1. Which is your Home Province?
   - Western Cape [1]
   - Eastern Cape [2]
   - KwaZulu-Natal [3]
   - Northern Cape [4]
   - Free State [5]
   - North West [6]
   - Gauteng [7]
   - Mpumalanga [8]
   - Limpopo [9]

2. Which is your Home City? (When you are home with your parents)
   - Pretoria [1]
   - Johannesburg [2]
   - Durban [3]
   - Cape Town [4]
   - Port Elizabeth [5]
   - Other [6]
3. At which institution are you currently studying?

<table>
<thead>
<tr>
<th>Institution</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tshwane University of Technology</td>
<td>1</td>
</tr>
<tr>
<td>University of Johannesburg</td>
<td>2</td>
</tr>
<tr>
<td>Durban University of Technology</td>
<td>3</td>
</tr>
<tr>
<td>Cape University of Technology</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
</tbody>
</table>

4. In which City were you placed for your Work Integrated Learning (WIL) period?

<table>
<thead>
<tr>
<th>City</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johannesburg</td>
<td>1</td>
</tr>
<tr>
<td>Pretoria (Tshwane)</td>
<td>2</td>
</tr>
<tr>
<td>Durban</td>
<td>3</td>
</tr>
<tr>
<td>Port Elizabeth</td>
<td>4</td>
</tr>
<tr>
<td>Cape Town</td>
<td>5</td>
</tr>
<tr>
<td>Was not placed</td>
<td>6</td>
</tr>
</tbody>
</table>

5. Which of the following best represents the company where you did your Work Integrated Learning (WIL) training?

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Design</td>
<td>1</td>
</tr>
<tr>
<td>Office design</td>
<td>2</td>
</tr>
<tr>
<td>Space planning</td>
<td>3</td>
</tr>
<tr>
<td>Model Building</td>
<td>4</td>
</tr>
<tr>
<td>Photography</td>
<td>5</td>
</tr>
<tr>
<td>Technical drawing</td>
<td>6</td>
</tr>
<tr>
<td>Exhibition Design</td>
<td>7</td>
</tr>
<tr>
<td>Retail Design</td>
<td>8</td>
</tr>
<tr>
<td>Graphic design</td>
<td>9</td>
</tr>
</tbody>
</table>
### SECTION C: WORK INTEGRATED LEARNING (WIL) ACTIVITIES DURING YOUR WIL TRAINING PERIOD

Listed below are a number of statements about Work Integrated Learning (WIL). Please indicate to which extent you agree or disagree with each statement by using the following scale:

1 = strongly agree; 2 = agree; 3 = do not know; 4 = disagree; 5 = strongly disagree.

Mark the appropriate block with a cross (X)

**Students:** Enrolled students at a Higher Educational Institution

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>1 Strongly agree</th>
<th>2 Agree</th>
<th>3 Do not know</th>
<th>4 Disagree</th>
<th>5 Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>You know where to search on the Internet for more information on a company</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>You use an internet website to browse for company profiles.</td>
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<tr>
<td>3</td>
<td>The WIL period allows ample time for you to explore different areas in the company you are working for</td>
<td></td>
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<tr>
<td>4</td>
<td>You feel that the time you spend with the company is enough time to specialize in a design direction</td>
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<tr>
<td>5</td>
<td>You would like to see a database providing information and names of WIL companies to select from</td>
<td></td>
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<tr>
<td>6</td>
<td>Will you be able to learn through observing company practices?</td>
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<tr>
<td>7</td>
<td>Do you have enough academic knowledge at 3rd year level to enter the industry?</td>
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<tr>
<td>8</td>
<td>Is WIL preparation and training necessary?</td>
<td></td>
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<tr>
<td>9</td>
<td>Were you prepared for WIL by your Department</td>
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<tr>
<td>10</td>
<td>Does the log book give a realistic/true reflection of what you have learned or experienced</td>
<td></td>
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<tr>
<td></td>
<td>Skills</td>
<td>1 Strongly agree</td>
<td>2 Agree</td>
<td>3 Do not know</td>
<td>4 Disagree</td>
<td>5 Strongly disagree</td>
</tr>
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<td>------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>11</td>
<td>Are visits from the sending institution important to you during your WIL period</td>
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<tr>
<td>12</td>
<td>The assessment of your portfolio of practical work is a true reflection of what has been executed during the WIL period</td>
<td></td>
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<tr>
<td>13</td>
<td>You have enough business practice skills to assist company staff during WIL</td>
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<tr>
<td>14</td>
<td>Design skills were important during WIL</td>
<td></td>
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<tr>
<td>15</td>
<td>Written skills were important during WIL</td>
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<tr>
<td>16</td>
<td>Oral skills were important during WIL</td>
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<tr>
<td>17</td>
<td>Presentation skills were important during WIL</td>
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<tr>
<td>18</td>
<td>Model building skills were important during WIL</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19</td>
<td>Photography skills were important during WIL</td>
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<tr>
<td>20</td>
<td>Technical skills were important during WIL</td>
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</tr>
<tr>
<td>21</td>
<td>Computer skills were important during WIL</td>
<td></td>
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<tr>
<td>22</td>
<td>Intellectual skills were important during WIL</td>
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</tr>
<tr>
<td>23</td>
<td>Motor skills were important during WIL</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>24</td>
<td>Higher thinking skills were important during WIL</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

24. Rate the skills that were important during your WIL training period
Scale: (1= not very important; 5= very important)
25. Which of the following higher thinking skills were important during your WIL training period?
Please rate the higher thinking skills
**Scale:** *(1 = not very important; 5 = very important)*

<table>
<thead>
<tr>
<th>Higher Thinking Skills</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Comprehension</td>
<td></td>
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<tr>
<td>Application</td>
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<tr>
<td>Analysis</td>
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<tr>
<td>Synthesis</td>
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<tr>
<td>Evaluation</td>
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</table>

26. Which of the following three domains were important during your WIL training period?
Please rate the three domains
**Scale:** *(1 = not very important; 5 = very important)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>1</th>
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<tbody>
<tr>
<td>Cognitive:</td>
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<td>recall or recognition of knowledge or the development of knowledge and intellect</td>
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<td>Affective:</td>
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<tr>
<td>including objectives describing changes in interest, attitudes and values</td>
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<tr>
<td>Psychomotor:</td>
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<tr>
<td>including the development of manipulative or motor skills</td>
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</table>

27. Which of the following motivations were important during your WIL period?
Please rate the motivations
**Scale:** *(1 = not very important; 5 = very important)*

<table>
<thead>
<tr>
<th>Motivations</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The expectancy of success</td>
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<td>The value of the practical task</td>
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<td>Task involvement</td>
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<tr>
<td>Subsequent achievement</td>
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</table>
28. Which of the following self-motivations were important during your WIL period?
Please rate the self-motivations
**Scale**:  (1 = not very important; 5 = very important)

<table>
<thead>
<tr>
<th>Self-motivations</th>
<th>1</th>
<th>2</th>
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<th>5</th>
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<tbody>
<tr>
<td>Positive attitude</td>
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<tr>
<td>Believe in yourself</td>
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<tr>
<td>Understand yourself</td>
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<tr>
<td>Trust yourself</td>
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<tr>
<td>Value success</td>
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<tr>
<td>Proud in yourself</td>
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<tr>
<td>Value achievement</td>
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<tr>
<td>Work satisfaction</td>
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<tr>
<td>Happiness</td>
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</table>

Thank you for your time
Dear Research Participant,

You are invited to complete a survey questionnaire that forms part of my formal DTech-studies.

The aim of this study is to develop and implement an alternative management program model to improve WIL (Work Integrated Learning) for the Interior Design qualification.

The mere placement of a student in the workplace in the Industry does not necessarily ensure employability and it must not be assumed that every single student that participated in WIL, will be employed.

Based on information obtained from this survey questionnaire, a new management model for the qualification will be formulated, to ensure that the academic syllabi for WIL contains sufficient training in gaining cognitive (brain) and practical (hands) knowledge as well as courage and confidence (heart) to cope with any design challenge during WIL and to utilise these acquired skills to solve a given problem.

Should you decide to participate in the study, you will be required to complete the paper-based questionnaire that should not take you more than 10 minutes to complete. You will be asked to respond to questions regarding training, preparation, placement, monitoring and assessment of WIL candidates. The information provided will be utilised solely for the purpose of research development.

All academic staff or co-operative personnel are eligible to complete the questionnaire.
Your participation in this study is completely voluntary. There are no foreseeable risks associated with this project, you will only be asked to share your thoughts and experiences in respect of WIL preparations and assessments.

Should you feel uncomfortable answering any questions, you can withdraw from the survey at any point. To ensure the success of the survey, it is important to understand your opinion and to learn from your experiences, even if you do not consider yourself to be knowledgeable about WIL technologies and design.

The results of the questionnaire will have no direct personal benefit for you, but you will make a contribution towards a better understanding of what you, your institution and the content of the syllabi need to address to ensure a well-rounded, experienced and confident WIL student.

All data provided in the questionnaire will be dealt with in strict confidentiality and will only be disclosed with your permission or if required by law. This means that access to your data will be strictly limited to the Researcher, Supervisors of the study and Designated Examiners (appointed by Tshwane University of Technology). The results of this study could be published in a scientific journal and/or presented at scientific meetings; however, the identity of a research participant will not be disclosed. The original questionnaires will be stored in a safe place for three years, where after it will be destroyed.

The Faculty Higher Degrees Committee and the Research Ethics Committee of the Tshwane University of Technology have approved the formal study proposal. The ethics clearance number is Ref#: REC2012/05/002(2). All parts of the study will be conducted in accordance with internationally accepted ethical principles.

The Primary Investigator, Mrs R Cilliers, can be contacted during office hours on (012) 382-6163, or 082 8250159. The Study Leader, Dr PEJ Smit, can be contacted during office hours on (012) 382-6187.

Should you have any questions regarding the ethical aspects of the study, you can contact the Chairperson of the TUT Research Ethics Committee, Dr WA Hoffmann, during office hours on (012) 382-626/46 or via e-mail at hoffmannwa@tut.ac.za. Alternatively, you can report any serious unethical behaviour by dialling the University’s Toll Free Hotline Number 0800 21 23 41.

Your participation in the study will be greatly appreciated.

Thank You
APPENDIX C
Academic and Work Integrated Learning (WIL) staff

QUESTIONNAIRE
Please do not provide your name, as this information is only used for research purposes. All information will be treated as strictly confidential.

SECTION A
BIOGRAPHICAL INFORMATION

Please answer the following question by encircling the applicable number.

1. Total years of work experience in your present position.
   - 0 – 3 years: 1
   - 4 – 9 years: 2
   - 10 years and longer: 3

SECTION B:
DEMOGRAPHIC INFORMATION

Please answer the following questions by encircling the applicable number.

1. In which province is your institution situated?
   - Western Cape: 1
   - Eastern Cape: 2
   - KwaZulu-Natal: 3
   - Northern Cape: 4
   - Free State: 5
   - North West: 6
   - Gauteng: 7
   - Mpumalanga: 8
   - Limpopo: 9

2. In which city is your institution situated?
   - Pretoria: 1
   - Johannesburg: 2
   - Durban: 3
   - Cape Town: 4
   - Port Elizabeth: 5
   - Other: 6

3. Number of employees in your Interior Design department?
   - 1 - 2: 1
   - 3 - 4: 2
   - 5 - 8: 3
   - 9 and more: 4
### 4 How many lecturers in your Interior Design department are involved with Work Integrated Learning (WIL)?

<table>
<thead>
<tr>
<th>Range</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>1</td>
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<tr>
<td>3 - 4</td>
<td>2</td>
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<tr>
<td>5 - 8</td>
<td>3</td>
</tr>
<tr>
<td>9 and more</td>
<td>4</td>
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</table>
SECTION C:
WORK INTEGRATED LEARNING (WIL) ACTIVITIES IN YOUR PROGRAMME

Listed below are a number of statements about Work Integrated Learning (WIL)
Please indicate to which extent you agree or disagree with each statement by using
the following scale

1 = strongly agree;  2 = agree;  3 = do not know;  4 = disagree;  5 = strongly
disagree.  Mark the appropriate block with a cross (X)

Company:  Used synonymously with commerce, industry and companies/organisations
Supervisor:  Assigned person to supervise the student doing WIL.

<table>
<thead>
<tr>
<th></th>
<th>1 Strongly agree</th>
<th>2 Agree</th>
<th>3 Do not know</th>
<th>4 Disagree</th>
<th>5 Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Administrative procedures concerning WIL form part of the faculty’s responsibilities</td>
<td></td>
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<tr>
<td>2</td>
<td>Administrative procedures concerning WIL form part of the department’s responsibilities</td>
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<tr>
<td>3</td>
<td>The Advisory Committee meeting held once per annum is enough to discuss all problems relating to WIL</td>
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<td>4</td>
<td>Workplace experience can be simulated in the absence of an active industry</td>
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<td>5</td>
<td>WIL should be introduced at third year level only</td>
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<td>6</td>
<td>Prior exposure to WIL (in first and second year) will enhance student progress</td>
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<td>7</td>
<td>Work based WIL should be the future strategy</td>
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<td>8</td>
<td>You have the necessary resources to execute WIL in your program</td>
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<tr>
<td>9</td>
<td>All students should be prepared for WIL and the workplace prior to placement</td>
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<td>10</td>
<td>Students are prepared/couched for WIL in the department prior to placement</td>
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<tr>
<td>11</td>
<td>Placement is the joint responsibility of academic staff and students</td>
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<tr>
<td></td>
<td></td>
<td>1 Strongly agree</td>
<td>2 Agree</td>
<td>3 Do not know</td>
<td>4 Disagree</td>
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<tr>
<td>12</td>
<td>The WIL period as described by the curriculum is sufficient for the program</td>
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<td>13</td>
<td>Debriefing (reflection of learning) of students after attending WIL is important to identify successful candidates</td>
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<td>14</td>
<td>It is necessary to visit students at the workplace during WIL</td>
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</table>

15. **Which of the following higher thinking skills of the WIL student are important to your programme?**
   Please rate the higher thinking skills
   **Scale: (1 = not very important; 5 = very important)**

<table>
<thead>
<tr>
<th>Higher thinking skills</th>
<th>1</th>
<th>2</th>
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<th>5</th>
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</thead>
<tbody>
<tr>
<td>Knowledge</td>
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<td>Comprehension</td>
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<tr>
<td>Application</td>
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<td>Analysis</td>
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<td>Synthesis</td>
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<td>Evaluation</td>
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</table>

16. **Which of the following three domains of the WIL student are important to your programme?**
   Please rate the three domains
   **Scale: (1 = not very important; 5 = very important)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>Cognitive:</td>
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<td>recall or recognition of knowledge or the development of knowledge and intellect</td>
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<td>Affective:</td>
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<tr>
<td>Including objectives describing changes in interest, attitudes and values</td>
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<td>Psychomotor:</td>
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<tr>
<td>including the development of manipulative or motor skills</td>
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</table>
17. Which of the following motivations of the WIL student are important to your program?  
Please rate the motivations  
**Scale: (1 = not very important; 5 = very important)**

<table>
<thead>
<tr>
<th>Motivations</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>5</th>
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<tbody>
<tr>
<td>The expectancy of success</td>
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<td>Task involvement</td>
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<td>Subsequent achievement</td>
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18. Which of the following factors help to stimulate self confidence that is needed for a successful WIL training session?  
Please rate the motivations  
**Scale: (1 = not very important; 5 = very important)**

<table>
<thead>
<tr>
<th>Stimulation factors</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>Age</td>
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<tr>
<td>Positive attitude</td>
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<tr>
<td>Knowledge</td>
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<tr>
<td>Skills</td>
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<tr>
<td>Understanding one self</td>
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<tr>
<td>Believe mechanism</td>
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<tr>
<td>Stability (financially and emotionally)</td>
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<td>Positive input (pears, family and community)</td>
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<td>Peer pressure</td>
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<td>Negative input (environment)</td>
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<td>Upbringing and development</td>
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<td>Understanding field of qualification</td>
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<td>Language proficiency</td>
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<td>Transport and mobility</td>
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<td>Health</td>
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<tr>
<td>Maturity</td>
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Thank you for your time.