Investigating the Effectiveness of Mentorship in Work Integrated Learning: a Case study of Office Management and Technology Students at DUT and MUT

By

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Submitted in fulfilment of the requirements of the degree of

Master of Management Sciences

in Administration and Information Management

In the Faculty of

Accounting and Informatics

at the Durban University of Technology

March 2021

Approved for final submission

Supervisor: Date 29.03.21

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DECLARATION

I declare that, **INVESTIGATING THE EFFECTIVENESS OF MENTORSHIP IN WORK INTEGRATED LEARNING – A CASE STUDY OF OFFICE MANAGEMENT AND TECHNOLOGY STUDENTS AT DUT AND MUT**, is the research written by me and that all the sources that I have used, quoted and consulted have been indicated and acknowledged by means of complete references.

March 29 2021

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SIGNATURE DATE

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ABSTRACT

Internationally, work Integrated Learning (WIL) is a required component of the National Diploma in Office Management and Technology. WIL is undertaken by undergraduate students with the participation of the academic coordinator from the university and a workplace mentor. Issues around mentorship appear to be one of the main challenges. Mentorship, in this study, is understood to involve an interaction or agreement between student, workplace mentor and university WIL coordinator. The problem identified was that this system is known to lack coordination and focus. The study was conducted at the Durban University of Technology (DUT) and at Mangosuthu University of Technology (MUT). This research employed mixed methods. The quantitative method involved a questionnaire designed to gather the experiences of a sample size of 90 students in all. Semi-structured interviews were also held with the WIL academic assessors from the two Universities, in order to allow them to open up about some sensitive issues. Online open-ended questions were designed and sent to workplace mentors. Similar questions were asked of all the stakeholders. The study concludes that WIL generally lacks sufficient interaction between stakeholders and that therefore the desired outcomes of mentorship are not fully met. While students were satisfied on the whole with the organizations they worked for, they were less happy with the support the universities were providing. The statistics from the students' questionnaire indicate that not all students were visited while on WIL, while workplace mentors indicated that they are not provided with appropriate guidance from the universities. Electronic communicative support by the universities also proved to be insufficient, with many students indicated that they are not happy with this personal contact they experienced. Manpower and workload were found to be the main challenges faced by the universities in providing sufficient support. There is only one WIL academic assessor responsible for all the students on WIL in each of the universities. The research suggests that the university's WIL coordinators should undertake a round of visits to companies before the WIL period and, if they have facilities appropriate for offering experiential learning tasks, then they could be formally accredited for this purpose. It is also suggested that the universities offer workplace mentors more formal guidance and an induction programme. There could also be a policy statement as to how many contacts should be made with the students while on WIL. A suggestion is also made

that WIL should take place in the second year as well as the third and, if possible, that the WIL period should be extended. All stakeholders confirmed that mentorship plays a huge role in the effectiveness of WIL and that closer interaction between stakeholders would be beneficial.

Keywords: Work Integrated Learning, Mentorship, Workplace mentor, University WIL coordinator.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to the people who assisted, encouraged and inspired me during the journey of completing my master's studies, in particular:

- My wonderful family, and friends especially my late mother for her emotional support and encouragement.
- My supervisor, Dr. JP Skinner, for her guidance and support.
- Mrs. Noelene Ross for her support and advice.
- The statistician, Mr. D Singh, for his support in the usage of statistical packages for analysis of data.
- The survey and interview participants for their valuable contribution.
- Lastly, my heartiest gratitude to the Ada & Bertie scholarship for funding this research.

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CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

This dissertation seeks to investigate the effectiveness of mentorship in Work Integrated Learning (WIL) at the Durban University of Technology (DUT) and Mangosuthu University of Technology (MUT).

The chapter begins with the context as well as the problem statement, to justify the motive behind choosing the study. The research objectives will explain the aims of the research and the rationale for the study will provide a reason for conducting this research study. The scope of the study will define the extent of the content that will be covered by means of the research. The study will focus specifically on mentorship in WIL. The research methodology and design are briefly discussed to show how the data and findings will be presented, and an overview of the chapters will be given..

1.2 Context of the Research

According to Cason (2016), the idea of cooperative education began in the summer of 1894. The story is told that Herman Schneider, who was an engineering graduate, was building bridges at this time, and while working on these he discovered two things about the students who were working on this project with him. The first was that the students' part-time work was not related to their area of study or future career. The second was that the students had trouble in adapting their classroom skills to the work in the field. He then began teaching and tested his observations by conducting interviews with current engineers and their employees. Subsequently the trainees were able to work in their own field, thus learning practical engineering skills that could not be taught in the classroom.

Jackson (2015) states that although WIL was developed nearly 100 years ago, it was not really known about until the 1960s. At this time, funds were provided for institutes and universities and the money was used to start WIL programs. WIL programs attracted the attention of colleges and universities, who wanted to include them in their

learning streams in order to prepare students for the change from college to the workplace, providing an opportunity to explore the world beyond the classroom.

According to Christine and Helga (2015) many people refer to WIL as an internship program as it provides the learner with real life learning experiences. It is included in many academic programs and universities not only in South Africa, but all over the world. There are many different names given to WIL programmes including: internships, sandwich years, workplace learning and cooperative education. Work Integrated Learning (WIL) was defined for this study as a programme involving a student who is taking a tertiary degree or diploma program, having a period undertaking professional work included in their programme of study (Peach *etal.* 2018).

Globally, universities are required to produce trained potential employees and the success of this often entails the involvement of large organizations in training graduates into the practices of work. Joan et al. (2013) confirm that the role played by industry in appraising student performance in the workplace has not been clearly defined and that this can be attributed to an absence of academically qualified supervisors in the workplace. Currently, this study will confirm, workplace mentors in South Africa appear to be unsure of exactly what is expected from their students in Work Integrated Learning**.** Ferns and Zegwaard (2014) state that there are debates as to whether the universities and colleges teach graduates the knowledge and skills relevant to work in a knowledge-based economy. However, both the United Kingdom and the USA are using Work Integrated Learning to prepare young people for work life.

WIL requires all the resources that may be needed to produce suitably skilled graduates, and research by Biggio and Cortese (2013) indicates that an improvement in the interaction between educational institutions, workplace and students will benefit students' work readiness. Central to a holistic student experience that meets stakeholder expectations, are mutually beneficial relationships between industry organizations and higher education institutions (Ferns, 2014). In South Africa, as experienced by the researcher, and by fellow students at the two comparable

universities which are the focus of this study, the WIL syllabus does not require workplace supervisors to interact in an on-going way with university supervisors, thus ensuring a blend of theoretical knowledge with authentic experiential opportunities. According to Owen et al (2014: 33-47) this results in the production of graduates who are not fully prepared for the world of work.

In South Africa WIL is a required component of the National Diploma in Office Management and Technology. It is undertaken by undergraduate students with the necessary participation of the coordinator and supervisor (Pop and Barkhuizen, cited in Council on Higher Education (CHE) 2011:17). Participation by these stakeholders in student mentorship involves an agreement to assist students in this way to obtain a diploma (Mutula 2010:38-53). It is the duty of the universities to help the students in finding the placement and also have to make sure that each student is allocated a mentor in the workplace, and finally to assess students' WIL achievement.

There are a number of challenges relating to the offering of WIL. These include lack of subsidies and lack of sufficient placements for all students, but among the challenges faced mentorship appears to be a very significant aspect. As Clare and Lloyd (2015) declare that the effectiveness of mentorship in WIL is linked to all the involved stakeholders i.e. students, workplace supervisors and university WIL coordinators. Therefore, the research will investigate whether all WIL stakeholders are currently equally involved in the programme and whether they agree collectively on what duties and what outcomes are expected from them within a specified time, in order to provide a valid feedback system for supporting students and assessing WIL learning outcomes.

There is little systematic research into the achievement of specific outcomes for WIL graduates and the impact on their career paths from placement or non-placement at WIL (Smith and Calvin2014: 209-223); nor of expected academic standards (Coates et al, 2010) associated with WIL and best practice in WIL. Supervisors from the workplace are required to provide feedback on the students' achievement of specific outcomes. Employers remain critical of the ability of graduates to link the theoretical aspects of their degree with the practical realities of work (Barker and Hubbins, 2017).

Moreover, a thorough literature search indicated that there is little research that shows that workplace mentors are talking to each other about an effective interaction for the quality of mentorship in WIL.

Globally, universities are required to produce trained potential employees and the success of this often entails the involvement of large organizations in inducting graduates into the practices of work. Joan *et al*. (2013) confirm that the role played by industry in appraising student performance in the workplace has not been clearly defined and that this can be attributed to an absence of academically qualified workplace supervisors. Ferns and Zegwaard (2014) also found that there were debates as to whether the universities and colleges teach graduates the knowledge and skills relevant to work in a knowledge-based economy. However, countries globally, including leading western countries such as the United Kingdom and the USA, are using Work Integrated Learning to prepare young people for work life (Tait *etal.* 2012).

WIL requires all the resources that may be needed to produce suitably skilled graduates, and research by Biggio and Cortese (2013) indicates that an improvement in the interaction between educational institutions, workplace and students will benefit students' work readiness. Central to a holistic student experience that meets stakeholder expectations, are mutually beneficial relationships between industry organizations and higher education institutions (Ferns 2014). In South Africa, as experienced by the researcher, and by fellow students at the two comparable universities which were the focus of this study, the WIL syllabus does not specifically require workplace supervisors to interact in an on-going way with university supervisors, thus failing to ensure a blend of theoretical knowledge with authentic experiential opportunities. According to Owen et al (2014: 33-47) this results in the production of graduates who are not fully prepared for the world of work.

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There are a number of challenges relating to the offering of WIL Miller (2016) indicates that these include lack of subsidies and lack of sufficient placements for all students, but among the various challenges faced, mentorship appears to be a very significant aspect. As Clare and Lloyd (2015) explained, the effectiveness of mentorship in WIL is linked to all the stakeholders involved i.e. students, workplace supervisors and university WIL coordinators. Parties involved in the WIL appear to be uncertain and not clear of what is expected from them. The research investigates whether all WIL stakeholders are currently equally involved in the programme and whether they agree collectively on what duties and what outcomes are expected from them within a specified time, in order to provide a valid feedback system for supporting students and assessing WIL learning outcomes. This appeared to be a weakness which prevented students from experiencing mentorship as unified and supportive.

There is little systematic research into the achievement of specific outcomes for WIL graduates and the impact on their career paths from placement or non-placement at WIL (Smith and Calvin, 2014: 209-223); nor of expected academic standards (Coates *et al.* 2010) associated with WIL and best practice in WIL. Supervisors from the workplace are required to provide feedback on the students' achievement of specific outcomes. Employers remain critical of the ability of graduates to link the theoretical aspects of their degree with the practical realities of work (Barker and Hubbins 2017).

1.3 Problem Statement

Mentorship, in this study, is understood as involving interaction or engagement between student, workplace supervisor and university WIL coordinator in the support of individual students. According to Coll (2011) WIL generally lacks interaction between stakeholders therefore the expectations and desired outcomes are not met. Richardson *et al*. (2013:20) concurred that in business degrees, industry feedback is recognized as an integral part of the assessment of WIL, yet the role played by industry

in mentoring student performance in the workplace often appears to be ineffective. Whilst all stakeholders appeared to agree on the benefits monitored WIL provides, Cooper *et al.* (2010) found that there were conflicting interests that jeopardize further development and innovation in WIL. Ferns and Smith (2014) agreed that there was a lack of interaction between university, organization and student during WIL, and their research sought to guide university leaders in best practices and curricula development in WIL.

While Nicolaides (2014: 4) saw WIL as an ideal opportunity for students to be more work ready, he also believed that industry has not fully realized the need to play a greater role in mentoring, and the great potential for working together to meet industry needs and wants, which this can provide. The WIL syllabus appeared to be not total clearer to the workplace mentors and for them to be very clear about their responsibilities, UoTs need to work more with the industry to make sure that it improves its effectiveness. Keating (2012) concurred that WIL provides a valuable context for learning. This research aimed to investigate the effects that mentorship may have in the offering of this component of learning.

In the context of MUT (where the research is a junior lecturer) and DUT (of which he has personal experience) all of the issues of concern noted above appeared to be relevant and in need of further investigation.

1.4 Research Aim and Objectives

This study therefore aimed to critically investigate the system of mentorship currently involved in the WIL experience of Office Management and Technology students at DUT and at MUT in order to be able to recommend strategies which could improve mentorship practices in WIL.

The study focuses on the following objectives:

a) To investigate the nature of mentorship provided by university and organization to students during WIL.

b) To assess the written requirements of the syllabus in regard to mentorship practices.

c) To investigate WIL coordinators', workplace mentors' and students' experience of current mentorship and supervision of WIL.

d) To recommend strategies and policies that could improve the quality of interaction between the parties involved in WIL.

1.5 Significance of the study

The study was able to probe the experiences of WIL stakeholders from the standpoint of mentorship during WIL. The study afforded all three WIL stakeholders an opportunity to express their feelings and experiences about this training. Through the questionnaire, students were able to present the different styles of mentorship that were employed by the workplace mentors. Before conducting this study, the researcher had a conversation with some workplace mentors and they appeared to lack information as to what is expected from them and to be confused about the the exact nature of their role in WIL. They talked about the shortage of the WIL academic assessors from the universites and their heavy workload causing, they felt, a degree of ineffectiveness in this aspect of mentorship in WIL. This study also found that there is a culture in which students often do not take WIL seriously and it also confirms that the workplace mentors are often not sure about what is expected from them and would welcome greater contact with the universities. The study highlighted the need for clarity concerning the responsibilities of the role players involved, and on the related issue of assessment methods.

The results of the investigation enabled the researcher to establish whether the apparent ineffectiveness of mentorship is a perception or a realty. The study provides feedback from the students, workplace mentors and WIL academic assessors from two UoTs on the degree of effectiveness of mentorship practices in WIL provided for these prospective office managers. It helps to clarify the kind of interaction that should ideally take place between WIL academic assessors from the university, workplace mentors and students and the challenges involved in achieving this at present

1.6 Research methods

Combining quantitative and qualitative methods provides the researcher with a better understanding of the research problem than the use of one of these methods only (Lund 2012). As all methods have specific limitations as well as specific strengths, many researchers propose that qualitative and quantitative methods should be combined in order to compensate for their mutual and overlapping weaknesses. Kelle (2017: 321-361) states that a combination of qualitative and quantitative methods could help to overcome limitations and to solve problems of mono-method research. Therefore, the research design involved mixed methods of interviews with WIL academic supervisors, online surveys completed by workplace mentors and Likert scale questionnaires, completed by students. Mixed method research enabled triangulation of methods to assess the research questions in different ways and using different groups of respondents.

The researcher possessed sufficient prior knowledge and experience in the field to enable him to conduct the research. In order to facilitate learning, one of the fundamental principles the researcher employed was understanding students' prior knowledge. Marks and O'Connor (2016) it is well known that students [and, by implication, researchers] build on what they already know and have come to understand through formal and informal experiences.

The research comprised two surveys conducted among B Tech Office Management and Technology students at DUT, all of whom had been third year undergraduate students previously, together with MUT Office Management and Technology final year students, along with workplace supervisors, who had all been recently involved in WIL training. Interviews were conducted with lecturers who are the university WIL coordinators in both universities (DUT and MUT) and directly involved in the implementation of the WIL component. WIL lecturers and workplace supervisors made curriculum policy and mentorship support materials available to the researcher. An online survey sent to workplace supervisors was also completed.

1.7 Limitations of the study

Overall, there were no serious challenges encountered when conducting this study. The student respondents had to be limited only to those available at MUT on the day set by the lecturer and to the B Tech students at DUT who returned after completing WIL.

1.8 Definition of Some Keywords

1.8.1 Work Integrated Learning.

Work Integrated learning (WIL) is the term given to educational activities that integrate academic learning of a discipline with its practical application in the workplace (Abeysekera 2016: 40). The aim is to ensure that students develop the ability to integrate their learning through a combination of academic and work-related activities. Work Integrated Learning (WIL) is an essential component of many work-oriented qualifications (Jackson 2015: 17). According to Louise (2015: 2521) WIL is a partnership between students, university, and industry. This involves formalised interaction between stakeholders who have a common understanding of the meaning and purpose of cooperative education. He adds that the success of WIL requires cooperation of all stakeholders.

1.8.2 Mentorship.

A mentor can be defined as an individual who is responsible for providing support and feedback to someone who is less experienced than they are. In industry, mentorship consists of an employee training system under which a senior or more experienced individual (the mentor) is assigned to act as an advisor to a junior or trainee (Neupane, 2015). The mentor may share with the mentee information about his or her own career path, as well as provide guidance (Business Dictionary 2017). According to Pitney and Ehlers (2014), the knowledge, advice, and resources a mentor is able to share depend on the format and the goals of a specific mentoring relationship.

Generally, the researcher simplified the term “mentorship” by defining it as the guidance provided by a mentor, especially an experienced person in a company or educational institution. Swap *etal,* (2015), defined mentorship as a relationship in which a more experienced or more knowledgeable person helps to guide a less experienced or less knowledgeable person. The mentor may be older or younger than the person being mentored, but they must have a certain area of expertise. They further state that, the purpose of mentorship is to tap into the existing knowledge, skills, and experience of senior or high performing employees and transfer these skills to newer or less experienced employees in order to advance their careers.

1.8.3 Workplace Mentor.

Workplace is an establishment or facility at a particular location containing one or more work areas, while a mentor normally refers to a foreperson in a low level management position that is given authority over a worker or put in charge of a workplace, and usually authorised to recommend and provide rewards regarding the employees in their department (Business Dictionary, 2017). Therefore, for the purpose of this study, workplace mentor is a person in the first line of management who monitors and regulates the temporary WIL employees in their performance of assigned tasks (Ngwane 2015).

1.8.4 University WIL academic assessor.

This is a lecturer appointed by the university to synchronize and integrate the activities and responsibilities of a WIL programme. He or she can also command and control structures to ensure that the resources of an organization are used most efficiently in pursuit of the specified objectives, in this case, the WIL programme. Along with organizing, controlling, and monitoring, coordinating is one of the key functions of management (Ngwane, 2015).

1.8.5 Students.

Bringle (2016: 221 – 239), a person formally engaged in learning, especially one enrolled in a school or college. There are two different kind of student i.e. an

undergraduate student who is a university student who has not yet completed a first degree or diploma, and a postgraduate student is a student engaged in a postgraduate course.

1.9 Outline of Chapters

Chapter 1 Is an introduction to the study providing the context, the research problem, research objectives, a brief explanation of the research design and a definition of key words as well as an outline of the chapters in the dissertation.

Chapter 2 provides a review of the relevant literature and discusses the varying views expressed by researchers, authors and theorists. An analysis of the relevant research assisted in addressing the main research question of this study

Chapter 3 discusses the research design. It generalises and establishes ways of approaching research questions and justifies the design chosen for the study. This research employs both qualitative and quantitative approaches and involves semi-structured interviews, online open-ended questions, and a questionnaire to collect data in order to answer the research question.

Chapter 4 presents the data analysis. With the assistance of a qualified statistician, using Microsoft Excel software and SPSS 25, the raw data was converted it into pie charts, columns and bar graphs. These are used to transform data to information and to summarise this data so that the reader could construct a mental picture of specific aspects of the mentorship practices within WIL.

Chapter 5 concludes the investigation of the effectiveness of mentorship in the WIL of the OMT DUT and MUT students. This study finds that communication in WIL is still problematic as some students indicate that they were allocated a workplace where their academic assessors never interacted with them. This research recommends that universities should allocate more people to coordinate WIL and that mentorship be given more focus by the industry players, with involvement of workplace mentors in discussions on updating the WIL syllabus, possibly extending the WIL period, and also by providing mentors with induction and training programmes.

1.10 Summary

This chapter has given a brief introduction to the concept of the effectiveness of mentorship in Work Integrated Learning using the example of Office Management and Technology students at the Durban University of Technology and Mangosuthu University of Technology as a case study. The chapter also presented the context of the research, the research problem, its aim and objectives, and a brief introduction to the research design and research methods, along with some key definitions of words used in the study. An outline of the chapters was also provided.

The next chapter will cover the literature review (including books, journal articles, and theses) related to the topic of this research.

CHAPTER 2: LITERATURE REVIEW

1.1 Introduction

According to Howard *et al.* (2012) a literature review is an evaluative report of information found in the literature related to a selected study area. They add that it is a summary or synopsis of a particular area of research, allowing anybody reading the paper to establish why you are pursuing this particular research program. A literature review compiles and evaluates the research available on a certain topic or issue the researcher is researching and writing about.

In this chapter, the researcher will review the literature shaping Work Integrated Learning (WIL), types of WIL, mentorship, mentoring an OMT student, interaction\mentorship in WIL, the Office Management and Technology (OMT) curriculum, the Durban University of Technology (DUT) and Mangosuthu University of Technology (MUT) WIL curriculum, assessment of mentorship in the organization, and effective mentorship in WIL**.**

2.2 Theoretical framework of the study

The theoretical framework which underpinned this study was constructivism. It was employed to limit the scope of the data collected by focusing on specific variables and defining the specific viewpoint framework that the researcher will take in analysing and interpreting the data to be gathered.. This can be defined as a teaching philosophy based on the concept that learning (cognition) is the result of “mental construction” (Fosnot 2013). In this study, students construct their own understanding by reflecting on their personal experiences about WIL, and by reflecting on the new knowledge and comparing it with what they have already learnt from the classroom. Students create their own mental models to make sense of the world, and accommodate the new knowledge learnt by adjusting them. Therefore, to be effective, a teacher must help the student in discovering his or her own meaning. This understanding of the nature of mentorship and of establishing the truth also guides the research project as a whole and the mixed methods research methodology which was selected.

2.3 The policy framework

In South Africa, for the purpose of national quality assurance, the Higher Education Quality Committee (HEQC) has established projects on a variety of topics. One of these projects was on WIL and is explained in the publication entitled, *Work Integrated Learning: A Guide for Higher Education Institutions* (HE Monitor 2016). This publication specifically advises academics who are involved in teaching a WIL module to consider the significance of the mentorship component in WIL.

According to the Winberg *et al.* (2016) every professional discipline in South Africa consists of three fields: 1. the academic; 2. educational practice; and 3. professional practice. The academic field provides the scientific background for the profession, while within the educational field, curricula, teaching and learning strategies are designed and assessment is implemented. Students subsequently move into the field of professional practice in their final year of study. These three fields have different focuses, but all operate within the knowledge domain of the discipline. The publication specifies that, "programmes that do not provide students with insights into both academic and the professional dimensions of their chosen fields do not adequately prepare students for professional practice" (Winberg *et al.* 2016: 60)

WIL programmes in the UoTs' courses are not new. In vocationally orientated degrees and diplomas that lead to professional accreditation, this component has been widely used and is being increasingly made a diploma requirement. Recent research in Australia, the United State (USA) and the United Kingdom (UK) shows that those students who had experienced WIL were more likely to find employment in their chosen field, and to have good experiences within that employment (Harvey, Moon & Bower 2017).

Mentorship as part of the WIL curricula is known to have a positive impact in the OMT programme in the UoTs (Mackay & Challis 2016). However, colleges are under pressure to conduct "better WIL" which enhances graduates work-readiness with skills that match with what employers are looking for from the university graduate (Sebastiaan 2016).

Both DUT and MUT offer a WIL programme. This is a compulsory programme of the OMT national diploma and prepares the students with the skills and knowledge that are required for professional practice. Mentorship is one of the features of this programme while students are in the workplace. Classwork or course work is regarded as an induction provided before students' work placement. Mentorship requires a combined interaction between student, WIL academic assessor from the university and workplace mentor (Devenish *et al*. 2014: 24-24). It can therefore be concluded that mentorship in WIL needs all the involved stakeholders to work together and actively participate to make sure it is effective. These stakeholders can use visits, emails, and telephone communication to make sure that an interaction remains active and happens appropriately.

2.3 The Value and Nature of Work Integrated Learning

Work integrated learning (WIL) refers to activities that combine theory with practice and these activities normally take place in the workplace. Jackson (2013) states that WIL has been found to make a significant contribution to graduates' work readiness. According to the Concise Encyclopedia of System Safety: "Work Integrated Learning is the term given to an activity that integrates academic learning with its application in the workplace, that is, it combines theory with practice as part of an enrolled program of study" (2017: 1).

According to the Council on Higher Education (CHE) *(*2016: 279-293)
"Higher education is equipped to play a major role in generating the high- and medium-level capacities and skills required in the public sector". This emphasises the importance of WIL as a means of adequately preparing students to meet the challenges and demands of the country and of industry. The critical value of higher education institutions in South Africa is therefore to ensure that quality graduates are produced to increase the production of knowledge as well as to provide skilled graduates to enter industry and the public service.

Work-integrated learning in Universities of Technology is a characteristic which distinguishes them from traditional Universities, in that its primary focus is to prepare

students for the world of work. It may include work placement, project-based learning, problem-based learning, community service or internship. This type of learning usually represents a collaborative effort between an organization, the student, and the university, in order to facilitate the application of real-life practice to theory (Bates 2019).

A WIL programme is an attempt to establish a relationship between tacit and explicit knowledge. Leong (2012: 3) differentiates between tacit knowledge and explicit knowledge by defining tacit knowledge as the knowledge which people carry in their mind through experience, which is difficult to transfer to another person by means of writing it down or verbalizing it. He defines explicit knowledge as knowledge that has been articulated or can be articulated, codified, and stored in certain media. It can be readily transmitted to others. In addition, tacit knowledge can be considered valuable because it provides an understanding of the context of people, places, ideas, and experiences. Explicit knowledge is fairly easy to capture and store in database and documents and is usually shared with a high degree of accuracy. WIL is a means of conveying tacit knowledge to students who otherwise only receive explicit knowledge of their discipline while studying at university.

For several years now WIL has been important in many fields in higher education, beyond the traditional discipline areas of nursing, medicine, education, and engineering (Boud and Feletti 2017). Office Management and Technology is one example.

2.3.1 Types of WIL

WIL can be grouped into five types: ad hoc; co-operative education; work-based programmes for the organization; internship programmes; and service learning or community service (Mutereko & Wedekind 2016). A description of each follows.

The first type of WIL is an ‘ad hoc’ approach. Here there is a wide variety of possibilities depending on the contingencies of the situation. In terms of this approach students may find, or have a work placement found for them. The programme may have a flexible content or be a very fixed curriculum. The only thing that is fixed in this regard

is that the student acquires knowledge and skills in a classroom and university setting and then puts them into practice in a WIL environment (Peach & Gamble, 2011).

The second type of WIL is ‘cooperative education’, which provides academic credit for a structured job experience. This means that the time spent in the workplace is seen as part of an academic programme and it generally involves a contractual arrangement between the faculty and outside agencies such as business and industry. A recruitment agency can also be used for this purpose. The Cooperative Education Office at DUT has full-time staff that help students with their needs throughout their time in the programme (Wang *et al*. 2009). A cooperative programme usually begins after certain units in the core course of the programme are completed, or the programme alternates between work and study.

The third type of WIL involves work-based programmes for organizations. These learning degrees are developed by the organizations themselves and are in the early stages of development. Work-based learning was introduced to meet the needs of organizational staff that were interested in personal development but were unable to attend a programme of study at a university. In this type of workplace programme, structure, management, culture, and systems are key to the nature and scope of learning that occurs (Kirkpatrick & Garrick 2012).

The fourth type of WIL is the internship programme. In this type of programme, the work is carefully monitored, and students are provided with learning goals that must be achieved within a certain period of time. Students are expected to learn the organizational structure of the work environment and to develop professionally (Esia-Donkoh *et al*. 2015: 105-120). This is a good model for the professional development of office managers. However, it is difficult to provide an identical learning agenda for all students in different firms.

A fifth type of WIL programme is ‘service learning’ or community service, which is done in the university setting. In this method, the service experience is monitored, and intentional learning goals are set in the same way as in the internship model. During

this process students are expected to gain critical thinking skills by taking part in public service work which also has the potential to develop research skills.

Therefore, WIL is a broad term that encompasses different types of programmes and activities, including internships, WPL, cooperative education, community-based learning, industry-based learning, and experiential learning. The foundation of them all is learning through work, but the definition and type of WIL will indicate the methodology used in each type. In all cases, workplace application must be intentional and organized, and it must be acceptable by the institution and/or to the accrediting body. Mentoring, to be discussed next, is one of the methods used to transfer skills and support continuous learning (Keevy, 2016).

2.4 Mentorship

Satisfaction with the WIL experience is generally dependent upon the presence or absence of both a supervisor and mentor. Any type of WIL the UoT chooses to provide for its students has to be monitored for it to be effective. Generally, mentorship is a process of helping and giving advice to someone who has less experience than the mentor, especially in a job situation. A further definition by Altuntas (2012: 652-656), states that mentorship is “an employee training system under which a senior or more experienced individual (the mentor) is assigned to act as an advisor or guide to a junior or trainee. The mentor is responsible for providing support to, and feedback on, the individual in his or her charge”. In accordance with the definitions of mentorship by Kundasami (2011: 3) and by Samadi (2013: 7) in this study, “mentorship is defined as the guidance provided by a mentor, especially an experienced person in a company or educational institution”.

Despite the proven value of mentorship, it has also been found to be highly problematic in its implementation (Mysorekar 2012). According to Mysorekar, mentoring students in WIL has to be subjective because we are making a judgment about what people have done through their presentation or written reports. The current mentorship in WIL appears to be focused on register filling and signing between student and a workplace mentor, without an effective means of making sure that a student is doing the job

satisfactorily. Therefore, there is a need to come up with a method of mentorship that is reliable and not merely administrative or bureaucratic in nature.

WIL stakeholders can have a formal mentoring style where a student needs to have a scheduled appointment to consult with his/her workplace mentor. The quality of the learning outcomes has to be monitored in order to ensure the maintenance of high standards (Thobi 2010). According to Washbourne (2014: 373-387) “this must be supported by the induction of students, supervisors and mentors and the development of appropriate assessment methods for these programmes and this must be followed up by reflection and debriefing on the work by all parties”. This author believes that WIL learning needs to become more deliberate and intentional.

2.4.1 Interaction in WIL Mentorship.

Mentorship is a very important aspect of effective work integrated programmes. It involves interactions among diverse groups such as students, employers, academic staff, higher education, professional bodies, and the placement or co-operative learning office. Mentorship is used here to describe different types of interaction (Zegwaard *etal,* 2019). The interactions between partners are based on cooperation, in terms of which the contribution of each stakeholder and the attainment of mutual benefit for all participants must be recognized, otherwise the mentorship will cease to be effective (Harvey *et al*. 2011). According to Kronick and Cunningham (2013: 139-151) “good partnerships are based on mutual respect, trust and benefit for both sides, good communication, process improvement and the sharing of resources. However, long-term, sustained partnerships are based on personal relationships. These start and develop between some individuals and are sustained by the same people”.

“When students enter the workplace, it is important to make sure that the workplace is educative and enhances the learning experience. The issue of collaboration, therefore, becomes a challenging task” (McNamara 2013). Shore *(*2017) The role of universities is to provide students with the necessary theoretical skills and office environment knowledge to be able to solve problems in business and commerce. The employer, on the other hand, must provide the student with an opportunity to apply his/her knowledge to real-world problem situations, and expose him/her to typical

organizational cultures, human relations, and work conditions. With suitable guidance and supervision, the student will be taught to work independently and to develop an awareness of the ethics and requirements of the organization.

WIL programmes in OMT assume that the best way to comprehend administrative theory is to discover whether students can relate the relevant theory to interpreting office problems on the ground (Sarker *et al*. 2017). For WIL to be successful, each stakeholder has a specific role to play. Nicolaides (2012: 7) agrees with Moody (2003) that “the best type of placement program is one which involves the hosting business from the outset and where it demonstrates a genuine commitment to student learning. Students are not to be regarded as ‘cheap sources of labor’ by their hosts”. Nicolaides (2012: 4) also believes that industry needs to play a greater role in developing the WIL experience for students and that “this provides an ideal opportunity for academics and employers to build long-term relationships, and a potential for working together to meet industry needs and wants”.

WIL programmes at DUT and MUT appear to lack a significant mentorship component. The literature suggests that under appropriate supervision the students will be trained to work independently and to advance their awareness of the ethics and requirements of the qualification. However, both learner guides from these UoTs only define “mentorship” and the requirements of a mentor. They do not specify how workplace mentors should go about mentoring a student. On the side of the university they only state that “the university must appoint someone who is experienced to mentor the students in WIL”. Neither university states anything about planning the mentoring process. This lack of planning may result in students not knowing what to do, and result in an inability to produce expected results in a specified time (Bilsland *et al*. 2014: 145-157). This clearly shows that there is still a need for stakeholders involved in WIL to understand better what is expected from them.

Supervising is nearly always an add-on job. If a workplace supervisor is given no money, little release time and must assume new responsibilities for the effective induction of a new member into the profession, why would an already overburdened experienced professional say ‘yes’ to such an additional role? McKenna’s study, as

quoted by Makura (2020: 117-126) revealed that the workplace supervisors in his study “felt a sense of pride in passing the skills of the profession to the next generation; felt that they were helping the organization, being rejuvenated, challenged and reinforced in their own professional identity; analyzed their own skills more and received stimulating ideas; were reaffirmed that they could work with other people; were honored to have been selected and felt important when asked for advice”.

However, Gunn *et al.* (2017: 15-26) discussed some more negative findings. These authors found that academic mentors from the university were failing to provide thorough mentorship to the students in WIL. According to this study, their lack of commitment towards mentoring becomes a problem when mentors fail to convey clear goals and direction and then student and workplace supervisor may be left to wonder what they are supposed to do, and the WIL’s success is no longer a top priority. They conclude that ineffective communication may lead to ineffective mentorship in WIL. Sinanan (2016) suggested that experienced lecturers should be allowed to mentor the students, in order for them to enhance their self-esteem and self-worth. Educators develop intrinsic motivation, become competent, confident and display commitment to mentoring.

Overall, it seems that mentoring is a strategic tool that, when done correctly, can develop work readiness. On the other hand, as Gunn *et al.* (2017) indicate, insufficient training or workshopping of mentors can be another reason for the failure of satisfactory outcomes of WIL. Insufficient training at the beginning of the work integrated experience may lead students to fail this programme.

2.4.2 Mentoring an OMT student

The concept of mentoring takes various forms in different cultures and periods of history. In this section, the focus is on the mentoring of Office Management and Technology students in South Africa at the present time. Navarra *et al.* (2018: 20-24) highlight that the aim for mentorship as part of WIL is to support students to develop their potential and to be ready for the real world at the conclusion of their three years’ diploma studies.

Before discussing the mentoring of OMT students with the aim of considering its effectiveness, the researcher will discuss the concepts of workplace supervisor and OMT academic mentor in WIL.

2.4.2.1 Workplace supervision

A workplace supervisor is someone who takes a special interest in helping a student to develop into a successful professional i.e. in this instance, an office manager Martin *et al (2011)*. In the research context, mentoring is defined as the guidance provided by a mentor, especially an experienced person in a company or educational institution.

In Australia, a workplace supervisor is expected to have the following responsibilities and attributes (TDT IRT Mentoring Guide 2010). S/he should:

- Transfer skills to the students.
- Facilitate the students' professional growth.
- Support and encourage students.
- Monitor their progress and provide feedback to the student and the university and
- Provide information, guidance and constructive comments.

The Training Development Team (TDT) 2014 adds that a workplace supervisor should be armed with the following attributes:

- Have the ability to listen, be open and committed.
- Be knowledgeable in their specific field.
- Be honest and give constructive advice.
- Have an ability to motivate and demonstrate leadership and
- Be a good time manager.

One of the biggest constraints in higher learning is its limited link to the real-world work. Introducing undergraduates into the field through structured and effective mentoring can go a long way to support them in making the transition from learning into work

(Edwards, Perkins, Pearce, and Hong 2015). These authors highlight the following functions for workplace mentors:

- Establishing a working relationship to identify the mentoring needs of both the mentor and mentee.
- Agreeing on the most appropriate approach to mentoring.
- Adopting a task-based approach to mentoring through developing tasks appropriate to the development needs of the mentee as well as being able to make the value of the organization.
- Assessing the development of the mentee, both formatively and summatively.

“Successful mentoring systems rely on competent mentors who are capable of forming strong, supportive relationships with students” (Sherman, Voight, Tibbetts, Dobbins, Evans &Weidler 2009: 64). They add that “mentors, like all strong adult education instructors, should have a firm understanding of adult learning theory”. They further stated that “as an educator, it is important to facilitate the process of goal-setting. Students need to be given the freedom to assume responsibility for their own choices. When it comes to workload, they also need to be proactive in making decisions and in contributing to the process”. Mentors can have a significant effect upon the professional development of students. Whether a mentor's impact is positive or negative depends in large part upon how well informed and skilled the mentor is, and upon the mentor's commitment and availability (Hillman, 2010).

Although there are numerous potential benefits of mentoring for all parties concerned, according to Robertson (2017: 4-5) it is not always a positive experience and this author identifies the following negative experiences:

- The workplace supervisor delegates insufficient work to the student.
- The workplace supervisor excludes a student.
- The workplace supervisor lacks technical skills and cannot guide a student.
- There may be a bad attitude about the organization or job; or
- The workplace supervisor cannot mentor effectively due to personal problems.

Role of the student in workplace mentoring. A student on WIL may be defined as an inexperienced person on a journey of professional and self-development with the accompaniment of a workplace supervisor (Webb *et al.* 2014). For students to become experienced and professional, they also have a role to play during the WIL period. It is therefore claimed that to achieve effective student mentoring, students should possess the following qualities (Krumboltz 2015):

- The students should work hard and challenge themselves.
- They must be flexible and be able to accept criticism.
- The students should not be afraid to ask questions.
- They must be honest and unafraid and
- The students should be patient with themselves as well as with the process.

According to the DUT (2017:2) and MUT (2020) Learner Guides, students' role in WIL is as follows:

- They should take advantage of the opportunity offered to them by workplace supervisors.
- They should develop good listening and communication skills.
- They must drive the mentoring relationship by developing discussion points for the workplace supervisor to comment on.
- Students should build relationships with their supervisors and
- They should seek relevant information.

2.4.2.2 Academic supervision

According to Popper & Gee (2017: 27-35) "the work integrated learning coordinator is accountable for developing, managing, and promoting the college's WIL program (including global mobility programs), ensuring the provision of quality and effective WIL activities within the college". These authors further mention the following responsibilities:

- Providing high level strategic advice, statistical analysis, and reports to the college on all matters relating to WIL.
- Promoting the benefits of WIL to students and externally to industry.
- Working effectively with the workplace manager to develop and implement guidelines that comply with the university policy and industry requirements for students undertaking WIL.
- Developing and delivering industry events, workshops and presentations internally on campus and in external forums with a focus on increasing students' employability.
- Effectively supervising the WIL including mentoring and managing the production of all direct reports.

According to Arenson *et al.* (2015) responses from lecturers, concerning their academic mentoring role, show that the lecturers believed that all students ought to have mentors, and that liaison with these mentors should ideally occur through visits, although other forms of contact might be made in difficult circumstances. The roles envisaged for these mentors included:

- Strengthening competence in key work areas
- Mentoring to support a transition from learning
- Supporting career development
- Strengthening practice
- Supporting career progression, succession planning and talent management

Much of the research however implies that there is inadequate university support in the WIL process. In this regard, the role of the supervisor is extremely important in improving university support.

A study conducted by Keating (2014) at Cape Peninsula University of Technology in South Africa indicates that there is a need to arrange an easily identifiable contact point for employers contacting the institution, which might include a "one-stop-shop" which co-ordinates a range of work experiences and a single co-coordinator who co-

ordinates Faculty-based groups, or a single co-coordinator who can direct organizations to contacts across the university.

2.5 The OMT curriculum

The National Diploma in Office Management and Technology at DUT (now renamed "Information and Corporate Management") is a three-year programme designed to equip students with secretarial or office skills for employment in various fields of endeavor. Students on this programme are exposed to courses in their special areas as well as courses in general education (DUT ICM learner guide (2020)[1]. "In addition to the acquisition of vocational skills in Office Management and Technology, the students are equipped with effective work competencies and socio-psychological work skills, which are essential in everyday interactions with others".

This qualification was, and is, intended for administrative officers at an intermediate level in all sectors of the economy, and "qualifying learners will provide independent and competent management support in the form of business and information administration, demonstrating various administrative and communication skills, as well as elementary and/or advanced skills in a Legal, Personnel, or Financial environment, which will enable them to plan and execute tasks creativity, professionally and efficiently in accordance with international standards in this field". (DUT ICM learner guide 2020: 7). This Diploma aims to allow "the Office Administrator to show his/her creative and innovative abilities by fully utilizing all the advanced functions of computer software programs and allied administrative duties".

According to Rambe (2011) Office Management and Technology consists of two fields: a) the academic; b) and professional practice. The academic field offers technical training for the profession and students afterwards move into the field of professional practice in the final year of study. In DUT and MUT, WIL is one of the main aspects of the Office Management and Technology (at DUT now ICM) Diploma whereby students take a period of three months in a workplace. In this period students are given a chance

[1] N.B. Since this research was first undertaken the name of the OMT qualification was changed at three UoTs in South Africa. DUT's course is now Information and Corporate Management (ICM) while MUT's remains as before.

to relate the theoretical information gained in the classroom to resolving problems of the office assigned to them. Students have skills but they also have administrative knowledge for the application of the skills.

While there were a few differences between the courses offered at DUT and MUT at the time when this research was undertaken none were significant enough to suggest that students on WIL had contrasting learning experiences and the structure of WIL policies at the two institutions were essentially the same. The MUT prospectus (2020: 61) states that, “the Office Management and Technology programme provides an opportunity for a learner to acquire a range of administrative skills and business management, crucial to successful functioning of any organization”. The purpose of this qualification is to provide students with background knowledge of the concepts underlying many of the administrative tasks that they are maybe required to perform. It also explains that the qualification prepares the students to perform their administrative duties efficiently and gives the students a thorough business background so that they understand the business environment which they will be working. Subjects at the time of conducting the research were essentially the same.

The literature shows that the OMT curricula share the same purpose as they seek to arm the OMT students with administrative skills and business management knowledge. The modules offered to the students by these two UoTs are the same and the OMT programme takes a period of three years with a compulsory 9 -12 weeks for WIL in the workplace. Further similarities in WIL from these UoTs were identified during this research as, for instance, both universities of technology have one WIL coordinator responsible for all the students on WIL training, and both universities have established good working relationships with industry which makes it easier for their students to find placements.

In both universities this is an NQF level 6 qualification which consists of 364 SAQA credits and takes three years’ duration to study and complete. WIL is done at third year level and a student can only graduate after he/she has completed a compulsory WIL component. The period of WIL is approximately three months in most UoTs except for the Vaal University of Technology (VAAL) where WIL takes a year. VAAL policy

procedure (2016:10) states that, the WIL duration could be extended or terminated if the student does not meet the minimum requirements for the National Diploma. At both DUT and MUT it is approximately three months.

2.6. The DUT and MUT WIL Curriculum

Work Integrated Learning is explained as “a training system that aims to integrate classroom instruction with practical training and experience in the work place, create opportunities to review the curriculum on an on-going basis, and provide the opportunity to create research opportunities for post-diplomat students” (Durban University of Technology 2018: 3). According to this Department, a compulsory component of the National Diploma: Office Management and Technology, is for each student to complete a minimum of nine weeks of experiential learning. This represents a total of a maximum of 360 working hours. As mentioned above, at MUT a student can graduate only after he or she has completed a compulsory WIL component for a period of 12 weeks. The WIL curriculum content involves the modules done in the classroom via theory but exercised in practical experience during WIL. For example, under Business Administration (one of the two major modules) a student’s focus is on how to conduct effective meetings, information, and administrative management and problem-solving. Aspects of all of these are experienced in WIL training. For another major module, Information Administration, the MUT learner guide (2020) explains that a student should have an ability to use a basic Microsoft package and managing a database. During WIL practical experience of these should be developed.

Minor modules which the students are required to practice in the workplace during WIL are:

1. Communication – Verbal and non-verbal communication, vocabulary building and business correspondences.
2. Legal Practice – The concept “Law” and the present SA legal system and civil proceedings and documents.

3. Human Resources – Human resources management for the 21st century, leadership, the field of organizational behaviour and group dynamics and work teams.

This is an essential section of the co-operation education curriculum furnishing students with the skills, knowledge and attributes that are required for Office Management. Courses are offered before and after work placement, providing preparation for both work placement and its review afterwards. After the placement, there is a reflection process, providing an opportunity for the implicit learning from the workplace to become explicit learning which is assessable (Chang *et al*. 2012). This is also DUT and MUT policy.

The learner guides explain that “WIL is facilitated by the academic supervisor (whose responsibility it is to secure placement of students). Once the students have been notified of their placements, they go through an orientation programme to ensure that they are aware of what is expected of them”. Once the students are placed at a workplace site the mentor (employer supervisor) takes over the responsibility of day-to-day mentorship.

Neither DUT nor MUT provide detailed information about mentorship in WIL. Both learner guides indicate that, “the university appoints an academic assessor to monitor and assess students engaged in WIL”. Although the DUT Student Guide discusses visitation, it does not state how many times a student should be visited during WIL. It only states that “an appropriately qualified and experienced academic staff member” will visit the company to monitor students. Students are expected to complete projects which will be assigned to them by the workplace mentor and which will contribute to their summative assessments. Students keep a ‘logbook’ of their daily activities which will be signed by students and signed off on a daily basis by the workplace mento, to indicate that the entries are entered correctly and also to reflect on the competencies displayed by the student. The mentor’s final report and the students’ logbooks are the only guide/source for the academic supervisor to make a final assessment on the performance of the student while on a work-integrated learning placement.

2.7 Students' Comments and Behaviour

Various researchers have noted the following students' remarks regarding WIL academic supervisors:

- *The student is not directly involved in the processing of his/her final assessment* (Brown *et al*. 2013: 32)
- *The student does not have any recourse to challenge the outcome of his /her assessment.* (Danielson 2017: 10)
- *Academic supervisors do not give students an opportunity to explain their personal circumstances which might be a contributory factor/s to the student performing poorly* (Duffy 2013: 31).
- *Students must find their own placements at specific industries. Very often they have to rely on an official letter issued by the lecturer. Employers are reluctant to take on learners due to the fact that injury to any student might have serious repercussions for the employer. Unsuccessful placements of students' result in students repeating a whole year* (Khuong 2016: 151).

It should be the mentors' responsibility to develop positive behaviour in the students. In several parts of the world, student behaviour becomes a key feature of degree programmes within and beyond the Office Management discipline, and work-integrated learning (WIL) is widely considered to develop students' behaviour positively. According to Johansson (2013) such programmes build student confidence, and confidence and enhance their appreciation of the significance of employability skills.

2.8 Assessment of mentorship in an organization

Many studies on student methods of learning have been piloted in social science (e.g. Davoudi & Parpouchi, 2016) but with few research studies carried out in Office Management and Technology. The research done by Engvall, Lampa, Levin, Wickman and Ofverholm (2014) found that "study approaches or orientations are formed in the interaction between individuals and their environment". They describe a typical example of student learning experience which has three modes, namely, background variables, learning processes, and learning outcomes. They specify that there is an

association with learning outcomes and factors related to learning processes and that the learning environment can indirectly influence learning. Coll (2009) indicates that some academics assume that their own mentoring methods are rigorous, so they frustrate any attempt to discuss the attainment of rigor in the assessment of workplace learning.

In research related to industry Grove and Trede *et al*. (2014) in the United States recognized five main barriers that could explain why workplace supervisors appear to be ineffective in assessment of learning. These are:

1) Senior management often does not appeal for evidence on the impact of the training that was provided.
2) Lack of capability between Human Resource Department professionals concerning how to convey training evaluations.
3) Lack of clear training objectives attached to training programmes, so that knowing what to evaluate against is difficult, if not impossible.
4) The limited finances available to training departments' means those resources are chosen to be devoted to training provision rather than training evaluation.
5) The threats associated with evaluation may be too great given that the evaluation data might divulge that the training was not mentored effectively.

Further research indicates that the evaluations are often the key driver of enlightening the training instead of influencing student performances (Fadeyi *et al*. 2015). Research prepared on the office manager's job task (Martinez, Lontoc, Villena & Languador, 2014) discovered that four key characteristics related to this task are allied with providing chances for on-the-job learning. These characteristics are:

1) Transitions – WIL is made meaningful for students by personalizing their learning, enhancing their awareness of the work relationship, enhancing work-related learning, and encouraging personal aspiration. (e.g. new function, unusual responsibilities or proving oneself).

2) Task-related characteristics – Enthusiasm can be characterized by someone who shows passion; willingness to be involved; a positive “can do” attitude and enjoyment of the task in hand. (e.g. creating change, high taking responsibility).
3) Obstacles – Students lament that when they contribute to what is happening in the workplace their ideas are not taken seriously. (This indicates e.g. a difficult organizational environment, lack of management support, lack of personal support or a difficult boss).
4) Support – To be efficient and effective, students demand support from the employers to be able to set and prioritize goals and plan to achieve WIL goals within a specified period (i.e. a supportive manager).

Managerial jobs must incorporate developmental considerations. Deutz *et al.* (2018: 1174) established “a 15-item Developmental Challenge Profile questionnaire based on the four managerial characteristics listed above”.

According to Flato G *et al.* (2013), in ‘achievement research’ experts would be concerned with their own activities and those of others, using self-reflection to advance, sometimes collaboratively, and at other times individually, their educational practice and learning. He suggests that more academics and office environment supervisors should initiate action research based on their own learning in the workplace, later discussing challenges and solutions and, as a result inspiring the generation, diffusion and application of knowledge in their respective fields. Similarly, Morley *et al.* (2016) identified five broad categories or *developmental components* for training managers: Transitions, Creating Changes, High Levels of Responsibility, Non-authority Relationships, and Obstacles. These challenging situations provide the trainee manager with the opportunity and motivation to learn.

“Assessment practices vary from theorist to researcher to author but commonly include the academic tutor/supervisor, the mentor (workplace supervisor) and the student” (Drisko 2018: 279). “Very often assessments of both the academic tutor/supervisor and the mentor seem to dictate the final assessment of the student. The student is required to accomplish tasks assigned by both the mentor and academic supervisor”. In most cases it appears that the student is not given the opportunity to add intrinsic

value to the assessment process like, but is required to submit a portfolio or present an essay of his/her experience of being at the worksite.

One of the biggest constraints in higher learning is its limited link to the real-world work. Introducing undergraduates into the field through structured and effective mentoring can go a long way to support them in making the transition from learning into work (Karanges *et al.* 2015). These authors highlight the following functions for workplace mentors:

- Establishing a working relationship to identify the mentoring needs of both the mentor and mentee.
- Agreeing on the most appropriate approach to mentoring.
- Adopting a task-based approach to mentoring through developing tasks appropriate to the development needs of the mentee as well as being able to add value to the organization.
- Assessing the development of the mentee, both formatively and summatively.

Successful mentoring systems rely on competent mentors who can form strong, supportive relationships with students (Chiroma & Cloete 2015: 03-07). They add that mentors, like all strong adult education instructors, should have a firm understanding of adult learning theory. They further stated that “as an educator, it is important to facilitate the process of goal-setting. Students need to be given the freedom to assume responsibility for their own choices. When it comes to workload, they also need to be proactive in making decisions and in contributing to the process”. Mentors can have an important effect upon the professional development of students. Whether a mentor's influence is positive or negative depends largely on how well informed and skilled the mentor is, and upon the mentor's level of commitment to the students and his/her availability (Hartmann *et al*. 2013).

2.9 Employment opportunities for students

Students in WIL programmes experience valuable networking opportunities while working in the real workplace environment because they become familiar with the place of employment, and particularly with people in charge of hiring. From the survey

provided by Rampersad (2015: 3-4), in South Africa 65% to 80% of all jobs today are found through networking. Therefore, WIL programs are extremely important for students in South Africa because job opportunities are not plentiful.

Chan (2012) explains that students who participate in a WIL program also gain from opportunities to increase their interpersonal skills such as teamwork, communication, and job specific skills – all of which help them to secure future employment. He argues that programs which are based in the university gain fewer benefits than programs located in the real world. WIL programs are able to provide this “real world” experience for students.

Qenani *et al* (2014:08) Work Integrated Learning gives students, including Office Management and Technology students, a better idea of available job opportunities and increased confidence in finding work in their field of study after they graduate.

2.10 Barriers to successful mentorship

According to Beringer *et al,* (2013: 837) the WIL programmes they researched lacked interaction between stakeholders therefore the expectations and outcomes are often not met or reached. Appropriate mentorship improves communication levels between all stakeholders. Similarly, a study conducted by Jackson (2019) focuses on determining the impact of WIL on work-readiness in a wide variety of disciplines and across a wide range of universities and types of WIL. It seeks to guide university leaders in best WIL practice and curricular investment. The findings emphasize the role of collective partnerships between university and organizations in providing suitable mentorship for students in WIL.

Masum and Lodhi (2015: 1) are of the belief that the following are the reasons for the ineffectiveness in WIL:

- Unclear objectives of the programme.
- Frequency and length of the meeting are not determined.
- Communication is not essential and

- Review process is not identified.

A success story of a mentorship programme was at Dublin City University and Junior Chamber International Mentorship Programme. The joint mentorship programme was set-up as a pilot programme in 2003 and it involved mentoring of second year Dublin City University students by local businesspeople. The programme provided students with the opportunity of directly accessing current work practices and received targeted career advice from an experienced person in the field. Due to the success of the pilot programme, graduates from Dublin City University had also become mentors (Dublin City University 2015:1)

Overall if the WIL component is in the form of workplace-based learning, then it must "be appropriately structured, properly supervised and assessed" (HEQSF, 2013). Generally, the objective of a mentorship is to help students obtain various skills and gain career guidance. It therefore appears from the literature that mentorship can be accepted as a key strategy to achieve success in work integrated learning through both collaboration and clearly defining the roles of all involved stakeholders. Failing in this may result in non-effective WIL and WIL goals may not be achieved.

2.11 Summary of the Reviewed Literature

The literature therefore indicates that work-integrated learning as an educational strategy or curriculum component should go beyond just being conceptualised as an addition to the syllabus but should become an integral component of programmes or qualifications. The literature also defines the role of WIL in making a significant contribution to graduates' work readiness and indicates that assessment of WIL should become a meaningful exercise rather than an activity merely to fulfil the requirements for the purpose of graduation. For WIL to be successful, it has to be mentored effectively by both academic coordinators from the university and workplace mentors. Thus, while the value of cooperation and integration between the stakeholders in WIL programmes is emphasized, findings also reveal that this is often not achieved while students' experience of WIL is mixed.

In as much as the students in the workplace need a mentor, but this stakeholder does not have to work on a day-to-day basis to help a mentee make decisions, but he or she is there to serve as someone who can offer support, wisdom, and teaching over time. Mentoring enables the student to understand and learn about the realities of a workplace and their intended profession through information passed on by their mentor and from direct involvement in their mentor's workplace (Ruig 2013). The majority of the students experienced the mentoring programme as positive since the programme offered them exposure and contributed to gaining more self-confidence and this in itself contributed to their own motivation. The results clearly indicate a need for mentorship as an integral part of the graduate internship programme.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Based on evidence from the literature review and primary research to be conducted by the researcher, this research study was designed to enable the researcher to recommend policy interventions for DUT and MUT which could help to improve the effectiveness of mentorship in WIL. The study articulated the main research question and sub-questions based on areas where further study was seen to be required. These questions will now be investigated and discussed, and the research methodology explained in terms of design, methods, sampling, research instruments and procedures utilized for data collection, as well as the procedures used during the data analysis.

This research was a case study using mixed methods that is, employing a research design that uses both qualitative and quantitative data to answer a set of questions. A case study is “an empirical enquiry that investigates a contemporary phenomenon within its real-life context in which multiple sources of evidence are used” (Harrison *et al.* 2017: 1).

3.2 Research Design

Research design refers to the overall strategy that a researcher chooses to integrate the different components of the study in a coherent logical way, thereby ensuring the researcher will effectively address the research problem (Allan and Skinner, 2020). It constitutes the blueprint for the collection, measurement, and analysis of data. According to Creswell and Creswell (2017) says that research design provides ‘the glue’ that holds the research project together. It shows how different parts of the research project work together to address the research questions.

In this research, two approaches were used to collect data viz., a survey via questionnaires (quantitative approach) and semi-structured interviews and online open-ended questions (qualitative approach). The questionnaires in this study were

used to address many issues the students may be encountering during WIL and to obtain an overall measure of their opinions. Semi-structured interviews were used to allow the WIL academic assessors from the UoTs to open about sensitive issues and for a researcher to learn the reasons behind the answers provided. Online open-ended questions were used to find more of the workplace mentors' feelings and their personal perspectives. So, the research design which was used is exploratory in order to discover the current situation as regards mentorship in WIL at two universities of technology. No exactly comparable research has been previously undertaken.

3.3 Population

Explaining population is the first step in sampling. A research population is explained as a well-defined collection of individuals or objects known to have similar characteristics to which the results will be generalized. Matthews *et al.* (2012) add that 'population' refers to a group, of individuals or items that share one or more characteristics from which data can be gathered. The separate individuals or objects belonging to the population are called the elements of the population.

The population in this study consisted of 51 Office Management and Technology registered students at Durban University of Technology, specifically those on the Ritson Campus because OMT is offered in this campus, and 25 students of Mangosuthu University of Technology. The population also includes both universities of technology academic assessors responsible for Work Integrated Learning, and 12 workplace mentors. In this study, the size of this population is 90.

3.4 Sampling

Generally, it is impossible to conduct research involving the whole population and a sample needs to be selected from a population. Sampling refers to the process of selecting a fractional part of the whole relevant population (Marc *et al*. 2014). Sampling theory has been developed to suggest ways of drawing "scientific" samples, that is, samples that are random in respect to the population, and whose findings can tell us more about the population in general. It is very desirable for the sample to be drawn in such a way that it would be valid to generalize its results to the population.

Etika, Alkassim & Ababukar (2016: 55) explain that there are two main methods of sampling i.e. probability sampling (also known as random sampling) and non-probability sampling (also known as purposive sampling). The difference between them is that in probability sampling the chances of members of the wider population being selected for the sample are known, whereas in a non-probability sample the chances of the members of the wider population being selected for the sample are unknown. In probability sampling every member of the wider population has an equal chance of being included in the sample. In non-probability sample some members of the wider population will be excluded and others definitely included.

The sample of DUT students consisted of those students who had completed their National Diploma in Office Management and Technology and who had registered for B Tech. Generally, when the students have completed at the end of the year, you cannot easily capture them all because some of them never come back after they have completed their undergraduate qualification. However, a selection of them come back to do their B Tech so they are available for any research project. In 2017, a total number of 123 students completed their ND: OMT and 89 of them registered for B Tech in 2018. Questionnaires were distributed to the 55 B Tech students attending a lecture of Organizational Behavioural Aspects in the last 30 minutes of the lecture and were collected once all students finished answering them.

The sample of MUT students consisted of those students who were registered for the National Diploma in Office Management and Technology. Out of 38 registered students 21 students, while submitting their WIL logbooks, filled in and completed the questionnaires, and the researcher was contacted via a phone call by the MUT WIL academic assessor, to come and collect the questionnaires on the university closing date. The survey was carried out late in 2018.

This study therefore used purposive sampling. Under the Faculty of Accounting and Informatics at DUT, there are five programmes and Office Management and Technology was chosen as the sample because it is the only one that offers WIL, and the researcher, having completed his undergraduate qualification in this Department

can confirm that he is very familiar with it, and this department was relevant and easily accessible for information acquisition. This programme is a practical one which aims to enable students to identify and solve problems and make decisions using critical and creative thinking within the business environment. Both part-time and full-time student groups participated. Those who were present at the lecture and who were prepared to take part formed a convenience sample. The survey was carried out early in 2018. The information was therefore collected from a sample of OMT students within a predetermined population and at the same point in time.

The first qualitative component of the study involved semi-structured interviews with the single lecturer responsible for WIL in the Office Management and Technology discipline in each of the universities. The DUT OMT Department has only one WIL academic assessor who is responsible for 89 students going to WIL in different workplaces. This is the most experienced person as she has coordinated WIL in this Department for six years. Before that time there were three academic assessors, but she is the only academic mentor now. The second qualitative component consisted of seven open-ended questions completed by 12 of the workplace mentors.

The researcher noted that although at DUT, there were two groups on the OMT course, i.e. part-time and full-time students, MUT has one group of students only. It was also noted that the faculties and departments of these institutions are different from each other. At DUT this programme can be found within the Faculty of Accounting and Informatics in the Department of Information and Corporate Management (ICM) (formerly the OMT Department) at MUT, it is still called Office Management and Technology, and is provided under the Faculty of Management Sciences in the Department of Office Technology. Their contents and WIL period were, however, almost the same at the time the research was conducted.

3.5 Pilot testing

According to Fatisson *et al.* (2013: 205), the purpose of a pilot test is to establish the validity of the data collection instrument. This is to ensure that it can elicit the information required in order to solve the research problem. Therefore, for this study, before distributing the final questionnaire, the researcher did a pre-test of his

questionnaire. This was done to find out if the questions were clear and understandable. In addition, the researcher wanted to see if any further problems would occur concerning the questionnaire. The questionnaire was therefore sent electronically to six students doing their B Tech at Durban University of Technology in 2018, and the researcher ensured that they did not participate in the final study. The respondents made some suggestions. Question 3 was “are you presently employed?” they advised that the researcher should at least add another question which specifies the kind of employment in Question 4. Therefore, the researcher made this suggested change and the questionnaire was agreed as suitable for distribution.

3.6 Data Collection

Generally, data refers to the answers from survey questions or observations and/ or other pieces of information collected by the researcher. For this study, data was collected using questionnaires, interviews and from the online open-ended questions.

3.7 Quantitative research

Quantitative research can be defined as a research approach which is used to enumerate the problem through creating numerical data or data which can be converted to useable statistics. This approach studies attitudes, opinions, behaviours, and other defined variables in a large sample population to determine the results (Wahyuni 2016). The purpose of this approach is to generate knowledge and create understanding about the social world, and to observe phenomena or occurrences affecting individuals.

DUT and MUT were selected for this study as they were currently participating in the completion of WIL and as they were convenient for the researcher to approach. As indicated above, at DUT the questionnaires were distributed to all the available OMT B Tech students who had already participated in WIL at the end of the previous academic year. This was done during a lecture and after gaining permission from the Head of Department and the lecturer concerned. At MUT, they were dropped in at the office of the WIL academic assessor of the institution after an agreement between her

and the researcher was reached. The purpose was for the final year who were completing their WIL and submitting their WIL logbooks to fill the questionnaire.

3.7.1 Questionnaire

To survey is to ask participants questions and write down their responses for analysis (Mohapatra, 2014: 16). This author explains that a questionnaire enables one to obtain data from a large number of the respondents and it is inexpensive with lower costs than other research methods, such as the expense of time and travel often required to conduct face-to-face interviews.

The instrument used for data collection during the quantitative part of the study comprised a structured questionnaire, which was developed after a review of the related literature. A questionnaire refers to a set of written or printed questions with a choice of answers, devised for the purposes of a survey or statistical study (Gillet *et al*. 2013: 1345-1346). Data collected using questionnaires may involve either opinions or facts. According to Chu (2015) it is vital that, at all stages of using a questionnaire, the researcher is clear about whether the information being sought is to do with facts or opinions. For this study, questionnaire focused mainly on opinions as the questions were allowing the participants to choose and tell their feelings.

For the purpose of this study, the questionnaire was selected as one of the data collection instruments (For the questionnaire and covering letter, see Appendix A). It was designed to collect data from students on their views of mentorship in the WIL programmes at DUT and MUT so that improvements could be suggested if this should prove to be necessary. Closed and open-ended questions were employed in this study. Open-ended questions were chosen because they allowed respondents to express themselves and give more information. Closed-ended questions ensured that the information required by the researcher was obtained.

The questionnaire used in the study consists of two sections, namely, a biographical section and a WIL section, more especially Section B (the WIL section) concerned mentorship. In the biographical section of the questionnaire, general questions were asked, such as gender, university attended, year of completion of study and whether

employed or not. In the WIL section, mentorship-related questions based on the research question and sub questions were asked. Experiences of, and suggestions from, the students were sought.

The researcher included questions that would provide information relating to all the research questions cited in Chapter 1. The researcher had studied other work done in this field and based on his own personal knowledge of the field and other previous research works; he developed a questionnaire which was then checked by the supervisor. After consultation with supervisor, some changes were made to the questionnaire, thus making it more user-friendly.

Some questions involved two-part “yes” or “no” options. Some of the questions included tables while other questions included five-point Likert scales with response options “strongly agree”, “agree”, “neutral”, “disagree”, and “strongly disagree”. Questions 7 referred to the responsibilities of the various role players and the respondents were given different options from which to choose. Other questions involved descriptive answers or presented participants with a few answers from which to choose. There was also one open ended question – question 8.

Section B in the questionnaire included questions about the students’ overall satisfaction with WIL placement and effectiveness of mentorship during their training. Questions were asked about the mentoring and supervision provided during the WIL period. There were also questions regarding the challenges faced during the WIL period, and questions which aimed at the improvement of this programme as well as questions ascertaining the attitude of the students. Each questionnaire was accompanied by a covering letter, explaining the purpose of the research study, consent terms, voluntary participation, confidentiality and the anonymous nature of the responses, as well as the telephone number and e-mail address of the researcher for further enquiries.

In summary, the researcher sent an email to the University Research Office and Head Department of Information and Corporate Management to obtain their permission to conduct this study and copied Organizational Behavioural Aspect lecturer at DUT

requesting time during her lecture to distribute and collect questionnaire (See Appendix B). Questionnaires were distributed in the last 30 minutes of a lecture for Organizational Behavioural Aspects to B Tech students and were collected soon after all students have finished answering the questions.

In the case of MUT, the researcher visited the MUT WIL academic assessor to request that she participate in the study with her students, agreement was made and then the questionnaires with the consent letter were dropped in her office. The researcher requested her that she ask those who would like to participate to fill in the questionnaire when they are submitting their WIL logbooks as they had stopped attending the lectures.

3.8 Qualitative research

Ghauri *et al.* (2020: 02) explains that qualitative research is aimed at gaining a deep understanding of an organization or event, rather than a surface description obtained from a large sample of a population. He further states that its purpose is, “to provide an explicit rendering of the structure, order, and broad patterns found among a group of participants”.

The qualitative component of the research involved data obtained from interviews with the two current WIL academic assessors. Each UoT in its department has one lecturer who is responsible for WIL. Therefore, the WIL academic assessors from these institutions were interviewed. The researcher also drafted a questionnaire through an online link in order to get workplace supervisors’ ideas. Each of the questions was open-ended and designed to solicit qualitative responses. Twelve workplace supervisors filled in this questionnaire.

3.8.1 Interviews

An interview is an interaction between two or more people face-to-face. Pinsky (2015: 189) describes an interview as a verbal communication with one individual or with a group, that can be either structured or semi-structured. A semi-structured interview is a type of interview in which the interviewer asks only a few predetermined questions

while the rest of the questions are not fully planned (Pollock 2019). But compared to structured interviews, semi-structured interviews are less objective and legally harder to defend. Interviews can be used in many ways for many purposes, depending on the background of the research and the context in which the interview occurs.

Two interviews were used as the data collection instruments in the qualitative component of the research project. The WIL academic assessors from DUT and MUT were interviewed and asked questions regarding their experiences, including questions on the advantages and disadvantages of mentoring; challenges and learning curves; reflections on the programme and questions that required a deep understanding of the challenges faced (See Appendix C). The interview questions for the both WIL academic assessors from both UoTs were the same. These semi-structured interviews were organized through emails, phone calls and some short meetings between the researcher and the interviewees. The interviews were separated and held in different institutions in their offices and were recorded by cellphone for the analysis purpose.

An interview guide was developed, and, within these guidelines, more probing took place. The interviews were recorded, and detailed documentation of the comments was made, without indicating the name of the interviewees. The purpose of the interviews was to obtain a deeper understanding of the situation and to acquire information regarding the nature of mentoring, and guidelines given. The results from the interviews were compared with the results of the questionnaire, which provided the views of the students and with the online survey results and interviews with the workplace supervisors.

For the online open-ended questions, as another instrument to collect data for this study, its importance was to corroborate and augment evidence from other sources. It played a significant role in this study. Its aim was to obtain the workplace mentors' insights. The researcher requested a list of the contact details for the workplace mentors which the DUT Department of Information and Cooperate Management works with during WIL. The list of 32 workplace mentors from different companies was provided with their contact details. Each workplace mentor was sent an email

(attaching link) to answer questions; those questions were designed to provide a background to WIL. The researcher also visited the workplace mentors who took part to explain the questions attached in the online survey (See Appendix D). Twelve workplace mentors responded and participated to this study. Lastly, they were advised to set up a meeting should they encounter any challenges and they responded positively saying that the researcher should come, and we did this.

The respondents to both the questionnaire and the interviews answered the questions with honesty and to the best of their ability. The barriers to truth here are not necessarily a matter of honesty or deception at all (Lionis *et al.* 2016) but more of trust.

Data were analyzed for both i.e. qualitative and quantitative research instruments. Once all the questionnaires were distributed and collected, then findings were tabulated in a Microsoft Excel spread-sheet table. And then data was transferred to a data sheet with the analysis in pie charts and bar graphs.

Factor analysis was used to reduce the number of variables, to find a relationship between variables and categorize them. The method was not based on individual question analysis. Within the qualitative section (interviews) because the researcher was trying to make sense of different responses from different people, he used the approach of gathering the information, analysing each response, and looking for insights. Content analysis was used to analyse the qualitative data.

3.9 Mixed methods

The use of both quantitative and qualitative research within a single research project can be referred to as a ‘mixed method’ study. In the quantitative method, both questionnaire and online survey, the researcher included open-ended questions in order to obtain the participants’ views (the students and workplace supervisors). According to Schoonenboom and Johnson (2017: 107-131) mixed methods is a rich field for the combination of data because with this design “words, pictures, and narrative can be used to add meaning to numbers”. In other words, what we generally consider qualitative data – “words, pictures, and narrative” – can be combined with

quantitative, numerical data from a larger-scale study on the same issue, allowing research results to be more comprehensive and relevant for future studies.

Using mixed methods assisted in the total understanding of the research problem. Mixed methods research helped in investigating the degree of interaction between stakeholders in WIL through interviews with lecturers and supervisors and the use of a survey questionnaire. The issues were explored using mixed method research trying to account for what has already occurred and analyzing the information to draw conclusions. Thereafter, to generalize findings to a larger population, i.e. Durban University of Technology (DUT) B Tech and Mangosuthu University of Technology (MUT) OMT final year students, a quantitative research questionnaire was used. The study therefore used survey research to obtain information from a large group of people (Ponto, 2015).

UK Geocities (2007) as quoted by Muskat *et al*. (2012: 09-21) state, in an overview of the mixed methods approach and its advantages, that "qualitative research generates rich, detailed and valid data that contribute to in-depth understanding of the context. Quantitative research generates reliable, population based, and general, data and is well suited to establishing cause-and-effect relationships". They point out that the advantages of mixed method research include:

- Increased validity – Confirmation of results by means of different data sources.
- Complementary – Adding information i.e. words to numbers and vice-versa.
- Research Development – One approach is used to inform the other, such as using qualitative research to develop an instrument to be used in quantitative research.
- Creating new lines of thinking by the emergence of fresh perspectives and contradictions (Muskat *et al*. 2012: 09-21).

Muskat (2012: 27) also states that no single source has complete advantage over all others and various sources are complementary. She further states that no kind of source of evidence is likely to be sufficiently valid on its own. The researcher wanted

to produce facts about the mentorship in WIL from a large group of students and from other sources of evidence.

3.10 Validity and Reliability

3.10.1 Validity

According to Simon & Goes (2016) validity refers to the conceptual and scientific soundness of a research study. Its primary purpose is to increase the accuracy and usefulness of findings by getting rid of, or controlling, as many confounding variables as possible, which provides greater confidence in the findings of a given study.

For the purposes of this research study, both face and content validity were established by Department of Business and Information Management specialists. The questionnaire was sent to three specialists in the field before its distribution in order to check the validity of the questionnaire and to make sure that the questions were both appropriate and comprehensive. A similar process was applied for the face and content validation of the interview guide. The specialists also checked the interview questions. The questionnaire was pretested (see piloting above) to make sure that questions were properly understood and were not ambiguous.

3.10.2 Reliability

Reliability confirms the consistency and stability of the measuring instrument (Simon and Goes 2016: 39). It tests if the study fulfils its predicted aims and hypothesis and ensures that the results are due to the study. The Microsoft Excel package (data analysis instrument for quantitative method) ensures reliability of the analysis.

3.11 Limitations and delimitations of the study

Only two UoTs were involved in the study and only those students available at the time set for quantitative data collection were included in the study.

3.12 Ethical Considerations

3.12.1 Anonymity

The term “anonymity” can be defined as the quality or state of not being identified or identifiable. In this study anonymity was ensured by the absence of the names and identity numbers of participants.

3.12.2 Ethical Considerations

The rights of individuals were protected by making sure that the information was kept confidential and that participation in the study was voluntary. The research design and agenda were clarified. The purpose of the research was explained to the participants, and the researcher was introduced in a covering letter. Care was taken to be sensitive to any cultural or social issues and that no conflict of interest existed. The methodology was explained to all respondents. As regards the questionnaire, the DUT ethical guidelines were strictly adhered to. The research and ethics committees of DUT’s Faculty of Accounting and Informatics approved the final draft of the questionnaire before its distribution. During the interviews, the WIL academic assessors from the UoTs were also given a letter indicating that their participation was voluntary, and they also signed a consent form. The purpose of the research was explained, and researcher was introduced in the covering letter. Further, there were no sponsors with specific interests.

3.13 Conclusion

This chapter began by explaining the research design and the mixed methods that were used in the study to collect data i.e. how both quantitative and qualitative research methods were employed. Pilot testing was done before distributing these questionnaires to the DUT B Tech OMT and MUT ND: OMT students in 2018. The researcher faced no challenges with the students filling in and completing the questionnaires. How the qualitative data was gathered from both academic supervisors and workplace mentors, was further explained.

The researcher used the data gathered, as explained in this chapter, and analysed it as discussed in the next chapter, in order to come to conclusions regarding the effectiveness of mentorship in WIL. In the final chapter he could then then draw the researcher draws conclusions and make recommendations based upon this primary data analysis, as well as on the findings from the secondary data gathered for the literature review.

CHAPTER 4: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discusses the findings obtained from the research instruments used in this study. The questionnaire was the primary tool that was used to collect data and was distributed to the class of 2018 B Tech: Business and Information Management students at Durban University of Technology and National Diploma: Office Management and Technology at Mangosuthu University of Technology final year students.

The data collected from the responses were analysed with Microsoft Excel using tables, bar graphs and pie charts. The results will present the descriptive statistics in the form of graphs, cross tabulations and other figures for the quantitative data that was collected. Inferential techniques include the use of correlations and chi square test values which are interpreted using the p-values.

4.2 The Sample

The sample consisted of the respondents from two Universities of Technology: DUT and MUT. From DUT, 56 questionnaires were distributed to the students attending a lecture, and 55 were collected once the students finished answering them. From MUT the questionnaires distributed to the students were 38 and 21 students returned them. In total, 94 questionnaires were dispatched and 76 were returned which gave above 90% response rate.

Table 4. 1

	Frequency	Percent
DUT	55	72.4
MUT	21	27.6
Total	76	100.0

4.2.1 The Research Instrument

The research instrument consisted of 17 items, with a level of measurement at a nominal or an ordinal level. The questionnaire was divided into 2 sections which measured various themes as illustrated below:

A Biographical data

B Mentorship Related Questions

4.2.2 Reliability Statistics

The two most important aspects of precision are **reliability** and **validity**. Reliability is computed by taking several measurements on the same subjects. A reliability coefficient of 0.60 or higher is considered as “acceptable” for a newly developed construct.

The table below reflects the Cronbach’s alpha score for all the items that constituted the questionnaire.

Table 4. 2

Section	Name	N of Items	Cronbach's Alpha
B7.1 - B7.4		4	0.670
B10 - B15		6	0.677
B17.1 - B17.5		5	0.764

The reliability scores for all sections exceed the recommended Cronbach’s alpha value. This indicates a degree of acceptable, consistent scoring for these sections of the research.

4.2.3 Factor Analysis

Why is factor analysis important?

Factor analysis is a statistical technique whose main goal is data reduction. A typical use of factor analysis is in survey research, where a researcher wishes to represent a number of questions with a small number of hypothetical factors. You need not believe

that factors actually exist in order to perform a factor analysis, but in practice the factors are usually interpreted, given names, and spoken of as real things.

The matrix tables are preceded by a summarized table that reflects the results of KMO and Bartlett's Test. The requirement is that Kaiser-Meyer-Olkin Measure of Sampling Adequacy should be greater than 0.50 and Bartlett's Test of Sphericity less than 0.05. In all instances, the conditions are satisfied which allows for the factor analysis procedure. Factor analysis is done only for the Likert scale items. Certain components divided into finer components. This is explained below in the rotated component matrix.

KMO and Bartlett's Test

Table 4. 3

		Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
Section	Name		Approx. Chi-Square	df	Sig.
B7.1 - B7.4		0.711	69.873	6	0.000
B10 - B15		0.547	97.510	15	0.000
B17.1 - B17.5		0.747	105.732	10	0.000

All of the conditions are satisfied for factor analysis.

Rotated Component Matrix

B7.1 - B7.4

Component Matrix[a]

B7
Table 4. 4

	Component 1
My work placement was suitable	0.845
I had adequate support from the university throughout my placement	0.380
I performed course related duties in my WIL	0.854
When I had problems my workplace supervisor was always there to help me solve them	0.778

Extraction Method: Principal Component Analysis.
a. 1 components extracted.

The figures show that there is close agreement among three of the statements, the only statement which was different and below the others was “I had adequate support from the university throughout my placement”. That component was 0.380 and all the others were all above 0.777. While the other three statements have very positive and

had similar components, the one that key to the research has the lowest and most negative component. There is a clear indication that, the support provided for students from the university during WIL is less than satisfactory.

B10 - B15

Rotated Component Matrix[a]

Table 4. 5

B10	Component 1	2
I consider mentorship as a significant aspect of WIL.	0.093	0.762
I considered the quality of mentorship in the workplace during WIL to be satisfactory.	0.168	0.827
I considered the quality of supervision provided by the university during WIL to be satisfactory.	0.111	0.557
Generally, I was pleased with Work Integrated Learning.	0.744	0.262
I was offered experience specifically in OMT	0.921	-0.056
I had personal contact with university mentor and workplace supervisor	0.645	0.223

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

The majority of the students consider mentorship in WIL as a significant aspect with 0.762 component.

While the others are all positive, participants were not so satisfied with the quality of supervision provided by the university with a 0.557 component, nor with their experience of personal contact with a university mentor and workplace supervisor with 0.645 component. Just over 50% agreed.

B17.1 - B17.5

Component Matrix[a]

Table 4. 6

	Component 1
Teamwork ability.	0.550
Ability and willingness to learn.	0.794
Good communication Skills.	0.767
Emotional intelligence.	0.783
Individual initiative.	0.762

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Above half of the participants with 0.550 component reckon that “teamwork ability” was not absolutely essential in WIL. The participants indicate that “individual initiative” is one of the most important and needed skills in WIL with 0.762 component.

With reference to the table above:

- The principle component analysis was used as the extraction method, and the rotation method was Varimax with Kaiser Normalization. This is an orthogonal rotation method that minimizes the number of variables that have high loadings on each factor. It simplifies the interpretation of the factors.
    - Factor analysis/loading show inter-correlations between variables.
    - Items of questions that loaded similarly imply measurement along a similar factor. An examination of the content of items loading at or above 0.5 (and using the higher or highest loading in instances where items cross-loaded at greater than this value) effectively measured along the various components.

The statements that constituted sections B7 and B17 loaded perfectly along a single component. This implies that the statements that constituted these sections perfectly measured what it set out to measure.

It is noted that the variables that constituted Section B10-15 loaded along 2 components (sub-themes). This means that respondents identified different trends within the section. Within the section, the splits are colour coded.

4.2.4 Section A: Biographical Data

This section summarises the biographical characteristics of the respondents.

The figure below describes the overall gender distribution.

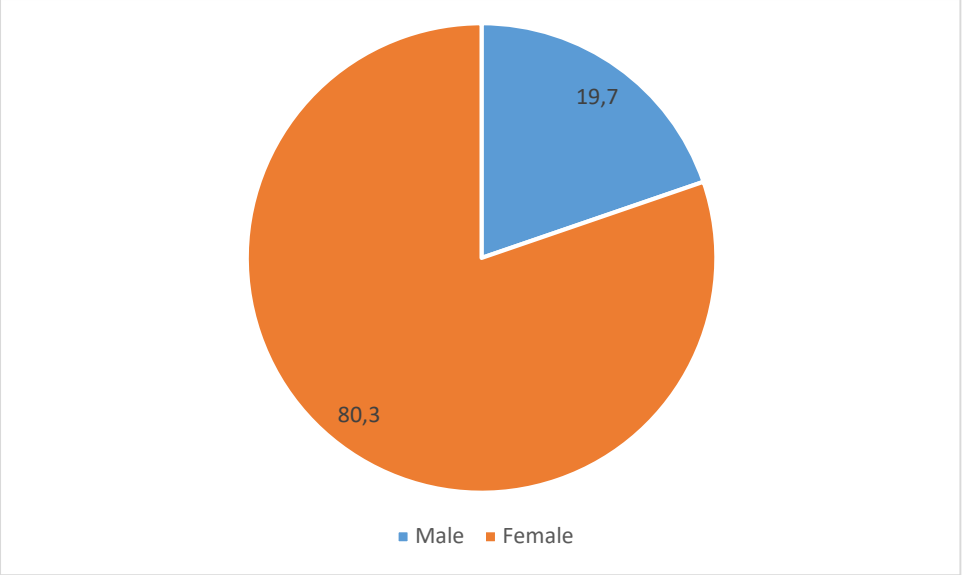


Figure 4. 1: Gender

The ratio of females to males is 4:1 (80.3%: 19.7%) ($p < 0.001$).

Initially, society considered that Business and Information Management, or Office Management and Technology, programmes were for women only but, although the sample is still dominated by the females, nearly 20% are men.

The table below indicates the year of completion of WIL. All DUT student respondents were from the cohort of honors students of 2017, and all MUT students (where there is no B Tech degree) were 3rd year diploma students. Therefore, as the table below shows, several respondents (who would have been from the hons group from DUT) had passed their undergraduate diplomas at various times over the past decade, and even earlier. This indicates that there is a desire amongst several to further their studies after working for a number of years. It also implies that their experiences of WIL covered several different years.

Table 4.7: Year of Completion

	Frequency	Percent
Before 2009	8	10.5
2009 - 2010	5	6.6
2011 - 2012	1	1.3
2013 - 2014	6	7.9
2015 - 2016	9	11.8

2017	47	61.8
Total	76	100.0

As expected, significantly more of the respondents (61.8%) indicated that they had completed their training in 2017 ($p < 0.001$). This cohort which completed in 2017 was made up of the students who registered their first year in 2015, hence this large percentage for one group. However, it is also noticeable that those who completed more than 10 years earlier, i.e. before 2009, were coming back to further their studies. The figure below indicates the respondents' current employment status.

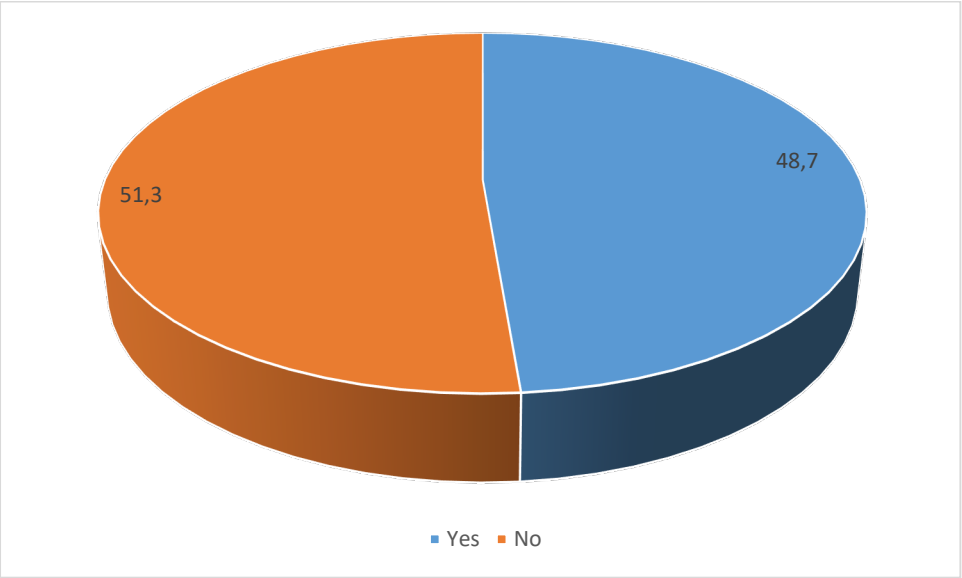


Figure 4. 2: employment Status

The question was whether the respondent is employed or not and the purpose was to find out if the current WIL produces employable students. There were very nearly as many respondents who were employed as there were not ($p = 0.819$). Therefore, nearly half of the students were employed on completing their training for employment. They were also asked:

Please specify whether you were employed by the WIL company after the completion of your WIL training or were placed there for a period.

While there is no obligation on the WIL companies to employ students after the WIL period is over, it can be noted that nearly 40% of the respondents had obtained either contract or permanent employment with the companies where they did their WIL training.

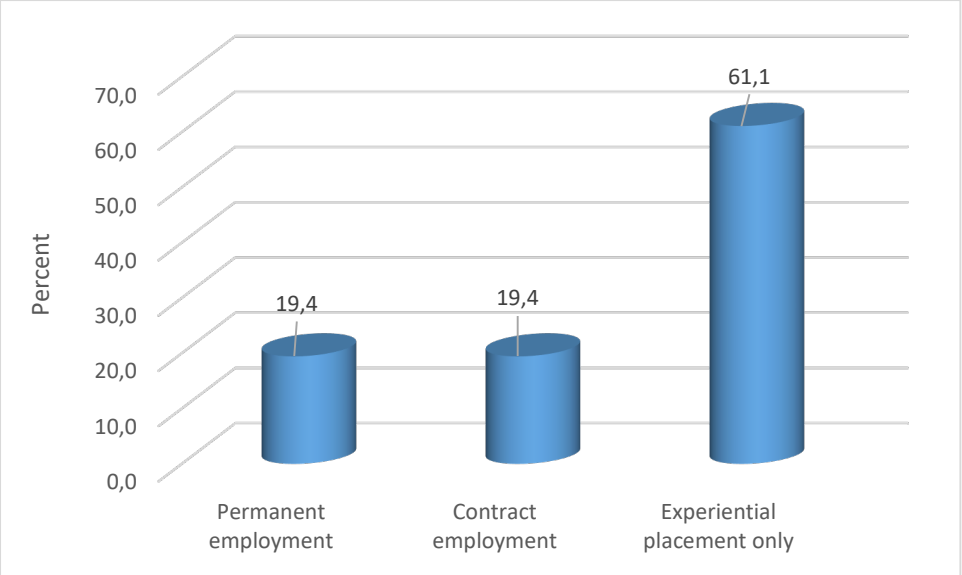


Figure 4. 3: Type of Employment

The ratio of PE: CE: EP was 1:1:3 taking the whole numbers. Therefore, the bulk of the respondents (61.1%) were employed for experiential training only, but approximately 40% were offered permanent or contract employment thereafter ($p < 0.001$).

4.2.4 Section B

The section that follows analyses the scoring patterns of the respondents per variable per section.

The results are first presented using summarized percentages for the variables that constitute each section. Results are then further analyzed according to the importance of the statements.

The figure below indicates responses to being given a mentor and assessor.

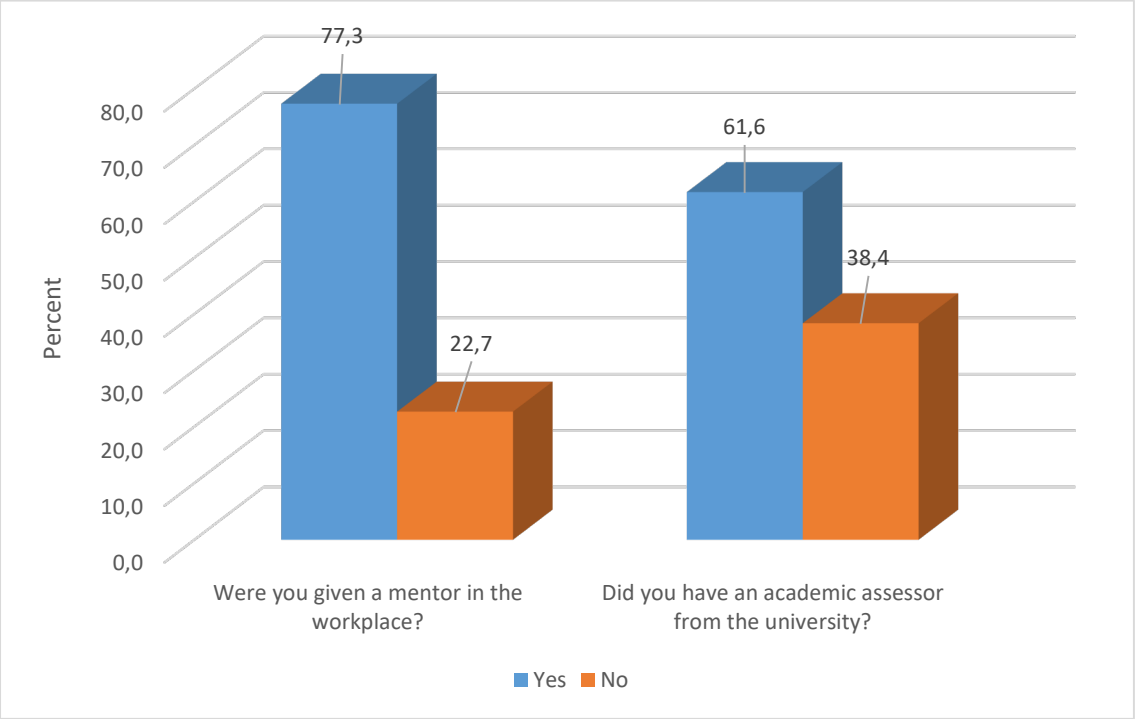


Figure 4. 4: Mentor and Supervisor Abvailability

The majority of the respondents agreed that that they were given a mentor and assessor ($p < 0.05$); with a smaller number indicating that they had an academic assessor. For workplace mentorship, the ratio is 3:1 again taking the whole numbers. This indicates that there were more participants who had mentors in their workplaces than had university supervision; the ratio was 2:1 (whole numbers). More than 75% of students were supervised in the workplace. However, it can be noted that over 22%

were given no mentor in the workplace, and nearly 40% received no mentorship from any academic assessor while on WIL training.

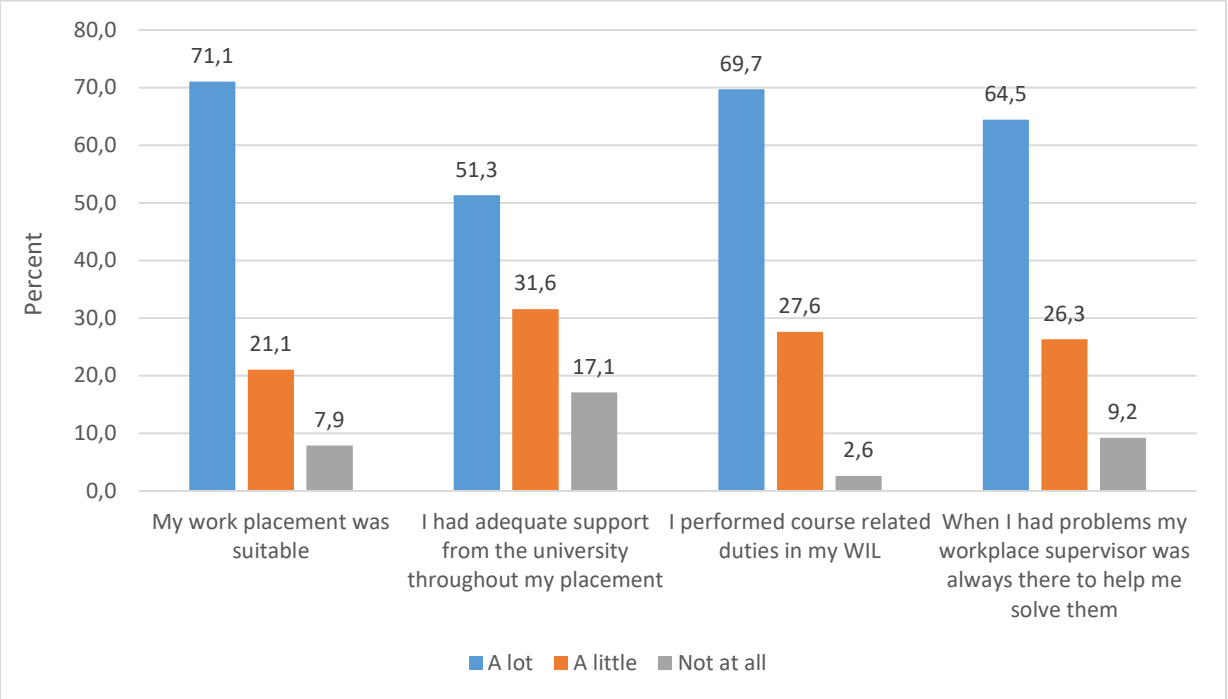
Question 7

The table below summarises the scoring patterns.

Table 4. 8: WIL Experience 1

	A lot	A little	Not at all	Chi Square p-value
My work placement was suitable	71.1	21.1	7.9	0.000
I had adequate support from the university throughout my placement	51.3	31.6	17.1	0.001
I performed course related duties in my WIL	69.7	27.6	2.6	0.000
When I had problems my workplace supervisor was always there to help me solve them	64.5	26.3	9.2	0.000

Figure 4. 5: WIL Experience 2



The following patterns are observed:

- Some statements show (significantly) higher levels of agreement whilst other levels of agreement are lower (but still greater than levels of ‘not at all’)
- There are no statements indicating higher levels of ‘not at all’.
- The significance of the differences is tested and shown in the table.

It can be inferred that where a student’s response is “a little”, it means that he or she was not entirely in agreement with the statement.

All the other three statements have between 60% and 71% agreement with “a lot” responses but only 51.3%. agreed strongly with the statement “I had adequate support from the university throughout my placement”

Quite a large majority (71.1%) believed that their work placements were suitable. However, this means that approximately 30% were not quite happy and felt that they were in the wrong place. (However it is understood that sometimes, it is not easy to find a work placement from the university, so 70% might be a reasonable figure). If you had a suitable placement, you are likely to perform course related duties in WIL. Hence the graphs of these two statements are both around 70%.

As mentorship is the focus of this study the most significant statistics concern tthis aspect. The figures show that 48.7%, or nearly half, of respondents felt that they did not have sufficient support from the university, with 17.1% “not at all” satisfied with it.

Aproximately 70% of the respondents agreed that they perfomed course related duties during their WIL but this entailed that 30 % did. During WIL, workplace mentors are duty bound to attend to the students’ difficulties in the workplace and 65% of the respondents agreed that they had workplace mentors to attend to their WIL challenges, but 26.3% did not feel that they had adequate support and above 9% had no mentor.

While the participants indicated that the support they received from the workplace was better than the support provided by the WIL academic assessors from the university, 35.5% believed that they did not get any help at work when they were stuck.

To determine whether the scoring patterns per statement were significantly different per option, a chi square test was done. The null hypothesis claims that similar numbers of respondents scored across each option for each statement (one statement at a time). The alternate states that there is a significant difference between the levels of "A lot" and "Not at all". The results are shown in the table.

The highlighted sig. values (p-values) are less than 0.05 (the level of significance), it implies that the distributions were not similar. That is, the differences between the way respondents scored (a lot, a little, not at all) were significant.

Question 8

In the questionnaire, students were provided with an opportunity to write down their suggestions about mentorship in WIL (Question 8) and the data showed that students often have different experiences of WIL than those perceived by their workplace mentors. Although 49 students left this question in the questionnaire blank, 23 students noted some of their challenges, and some solutions they would like to see in the workplace during their WIL. These included:

1. Treat the students as other employees. (Two different students suggested this)
2. Workplace mentors must keep it in their mind that WIL is a learning process not to assume that students ought to know everything from the beginning.
3. Students must be given work related to their course and not to be treated as tea women and messengers.
4. Different personalities in the workplace sometimes lead to clashes.
5. A way must be found for every student to be allocated a mentor.

Question 9

Table 4. 9: WIL experience 3

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi Square p-value
I consider mentorship as a significant aspect of WIL.	37.3	52.0	8.0	1.3	1.3	0.000

I considered the quality of mentorship in the workplace during WIL to be satisfactory.	29.7	47.3	20.3	2.7		0.000
I considered the quality of supervision provided by the university during WIL to be satisfactory.	29.3	45.3	20.0	4.0	1.3	0.000
Generally, I was pleased with Work Integrated Learning.	33.3	37.3	18.7	8.0	2.7	0.000
I was offered experience specifically in OMT	30.7	40.0	21.3	5.3	2.7	0.000
I had personal contact with university mentor and workplace supervisor	18.9	39.2	13.5	18.9	9.5	0.001

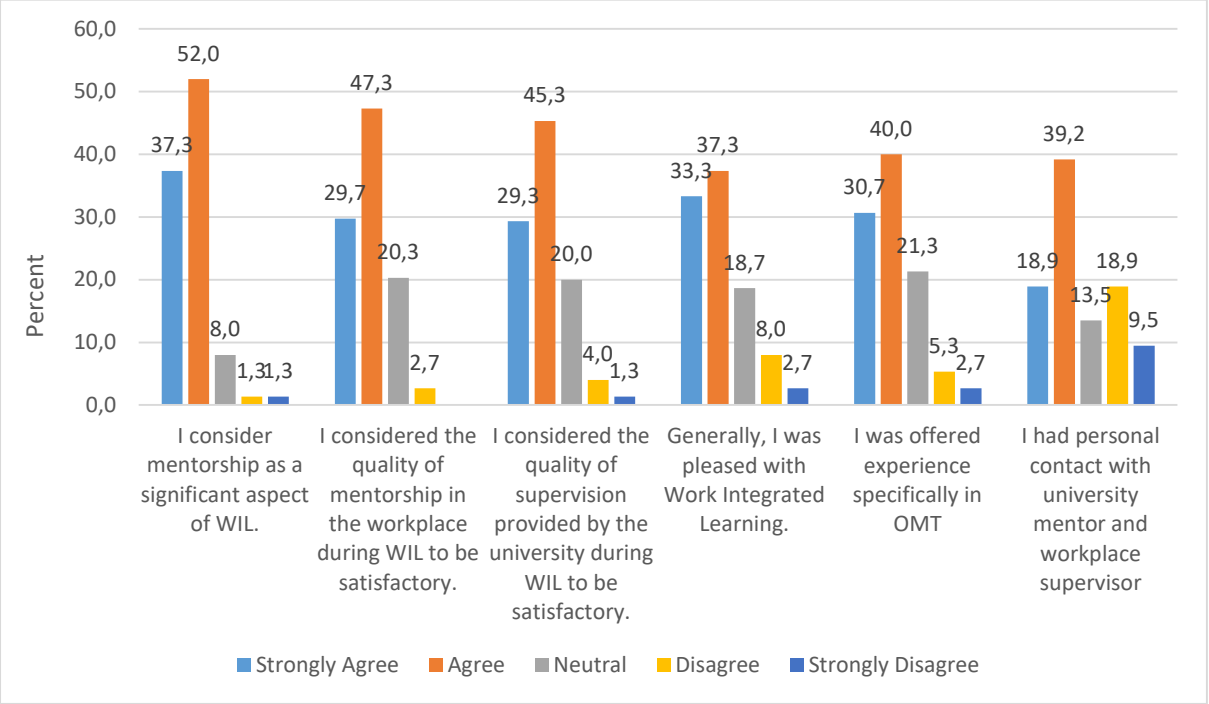


Figure 4.6: WIL experience 4

The levels of agreement are higher than those of disagreement. It can also be seen that in the first five statements, the level of agreements by the participants – when adding "strongly agree" to "agree" – were at 70% and upwards. The graph reflected agreement of the acceptable quality of both mentorship and supervision with disagreement always at a lower level. Therefore, it can be said that the students were generally satisfied with the organizations they worked for. The agree bar had a much greater percentage in all of the statements. WIL is clearly seen as a very significant

tool in terms of preparing students for the workplace although the trend (percentage) of those agreeing to this aspect reduces to a small percentage in the other statements, but according to the whole set of data, WIL can be judged to be partially satisfying to the participants.

However, the last statement “I had a personal contact with university mentor and workplace supervisor” which is relevant to the main focus of this research indicated that only 58.1% students agreed to have had an interaction with university mentors and workplace supervisors. Whilst there were 13.5% students who were not sure whether there was an interaction or not in their WIL academic supervisor, above a quarter (28.4%) of the students stated that they had no contact at all with their university supervisors and workplace mentors.

Overall, there is an agreement with the statements, the participants are not being negatively critical and there are not many who strongly disagree. The overall trend is that of agreement. The chi-square p-values indicate that the levels of agreement were significantly higher than the levels of disagreement.

Respondents were also asked: *Was there any direct contact between your academic assessor from the university and your mentor in the workplace?*

Table 4. 10: Contact

	Frequency	Percent
Yes	38	52.1
No	35	47.9
Total	73	100.0

There were approximately the same number of respondents who indicated that there was contact, as there were who indicated that there was no contact (p = 0.725). The ratio of ‘yes’ to ‘no’ is 1:1 (52.1%: 47.9%). It can be noted that nearly half of the respondents indicated that they had no direct contact between the assessor and the workplace mentor.

In this section, the researcher wanted to discover the method of communication that the participants used to interact with the other stakeholders in WIL. While there is a reasonable response by telephone with 23.7%, overall, communication seems inadequate and limited. This clearly indicates that there is really not much of communication during WIL, or that communication is not strong. The data indicates that no method was used by over 25% of the respondents.

Of those that did have contact, the following methods were used.

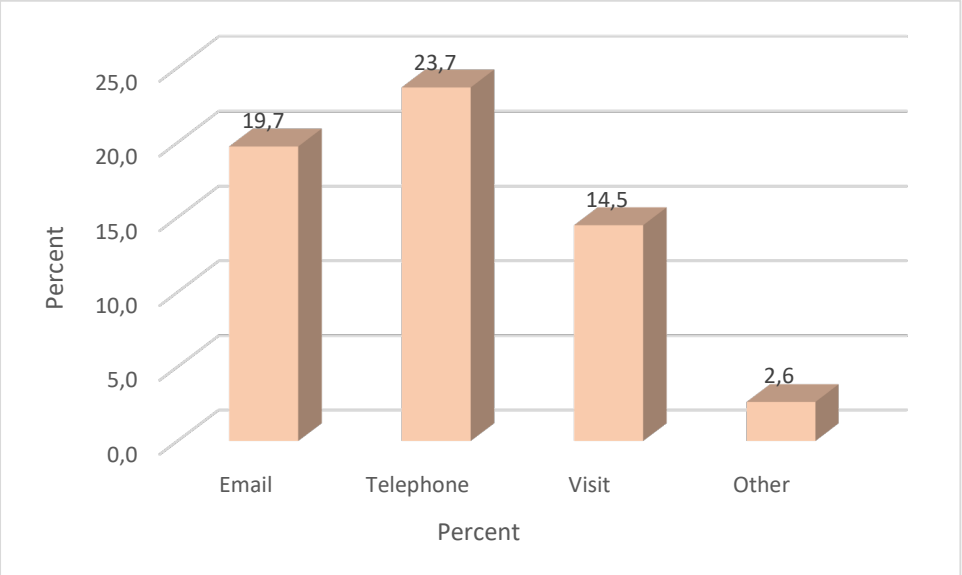


Figure 4. 7: Communication Channels

Multiple responses were allowed; hence the percentage does not add up to 100%. An electronic interaction (email and telephone) between university and workplace appeared to be fairly low at around 40 to 45% while not even 15% students were visited in their placements. It is clear that the use of telephone dominated, followed by email then visit and lastly “other” (which may include fax, post etc.) The ratio is approximately 8:9:6:1.

Respondents were also asked:

Research indicates that certain attitudes improve the success rates of Work Integrated Learning students. Which of the attitudes listed below do you see as important based on your experience? Please tick (✓) the appropriate box on the scale.

Table 4. 11: Students'Attitudes

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Chi Square p-value
Teamwork ability	50.0	37.8	8.1	2.7	1.4	0.000
Ability and willingness to learn	59.5	36.5	4.1			0.000
Good communication Skills	59.7	36.1	4.2			0.000
Emotional intelligence	40.5	45.9	13.5			0.001
Individual initiative	47.3	47.3	5.4			0.000

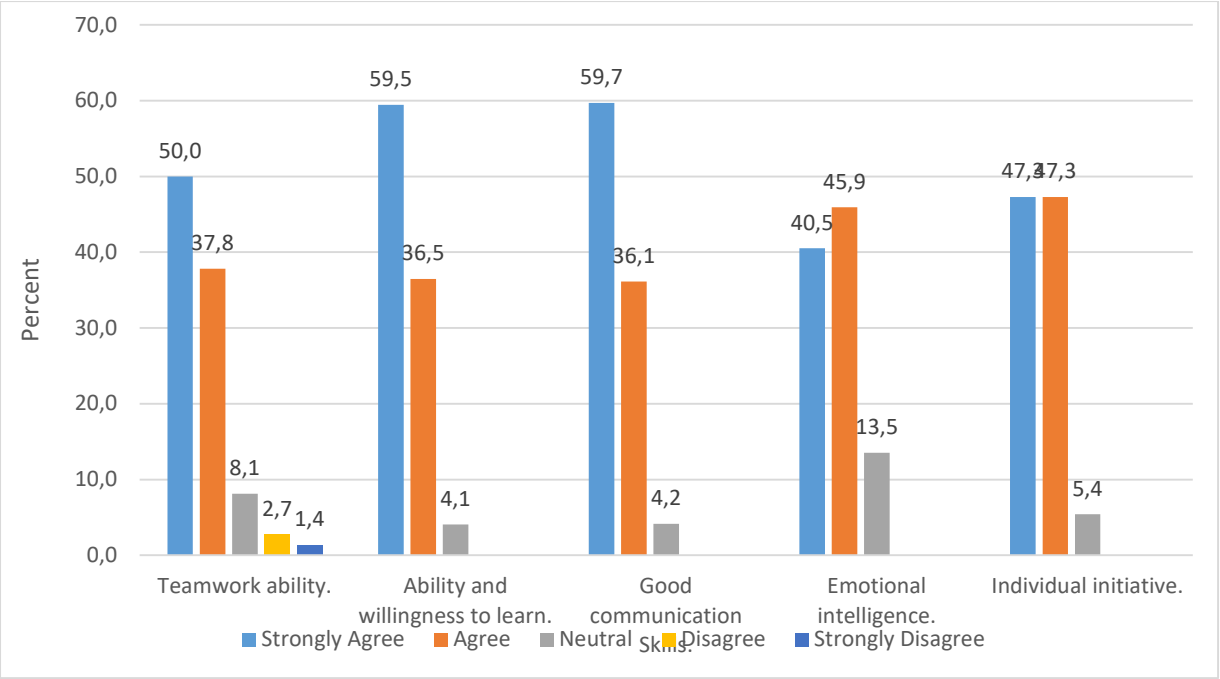


Figure 4. 8: Students'Attitudes

It is very noticeable that in this graph there is a particularly high level of agreement amongst participants that these are the skills most needed in WIL. Some statements registered no disagreement indicating that all respondents considered those statements to be important for WIL to be successful.

Whilst a very small percentage of respondents (4.1%) disagreed or strongly disagreed with "teamwork ability" as a necessary ability in WIL, 87.8% of students either agreed or strongly agreed that "teamwork ability" is helpful in improving their success rates during WIL. No respondents indicated disagreement with the other statements. In

statements, “ability and willingness to learn” and “good communication skills”, more that 90.0% students agree that these are important attitudes in improving success of WIL. And for “emotional intelligence” and “individual initiative” responses of 90.4% and 94.6% showed that the students are in agreement that they need these attitudes to do better in WIL.

It should be noted that the communication’s graph showed an inadequate communication between the WIL stakeholders (figure 4.8) and several of the students indicated that there is insufficient support from the university. In this graph, 95.8% of the respondents agree that good communication is needed in WIL.

4.2.5 Cross tabulations

Cross tabulations are data tables that present the results of the group of the respondents as well as from sub-groups of survey respondents. They enable the researcher to examine the relationships within the data that might not be readily apparent when analysing total responses (Wildemuth 2016). Cross tabulations can be a procedure that cross tabulates two variables, thus displaying their relationship in tabular form.

The traditional approach to reporting a result requires a statement of statistical significance. A **p-value** is generated from a **test statistic.** A significant result is indicated with "$p < 0.05$".

A second Chi square test was performed to determine whether there was a statistically significant relationship between the variables (rows vs columns).
The null hypothesis states that there is no association between the two. The alternate hypothesis indicates that there is an association. The table summarises the results of the chi square tests. (see appendix E).

For example: The p-value between “I had adequate support from the university throughout my placement” and “Did you have an academic assessor from the university?” is 0.020. This means that there is a significant relationship between the

variables highlighted in yellow. That is, the allocation of an academic assessor did play a role in terms of the support the respondent received from the university.

All values without an * (or p-values more than 0.05) do not have a significant relationship.

Correlations

Bivariate correlation was also performed on the (ordinal) data. The results are found in the Appendix F.

The results indicate the following patterns:

Positive values indicate a directly proportional relationship between the variables and a negative value indicates an inverse relationship. All significant relationships are indicated by a * or **.

For example, the correlation value between “When I had problems my workplace supervisor was always there to help me solve them” and “My work placement was suitable” is 0.397. This is a directly related proportionality. Respondents indicate that the more support they received from their supervisor, the more suitable the placement was, and vice versa.

The correlation value between "I performed course related duties in my WIL” and “I had adequate support from the university throughout my placement” is 0.572. This correlation is significant. Students feel like when an academic assessor and a workplace mentor are actively involved in WIL, they are given duties related to the course in the workplace.

Between these statements, “I considered the quality of supervision provided by the university during WIL to be satisfactory” and “I consider mentorship as a significant aspect of WIL” the correlation value is 0.664. Participants highlight that if the quality of supervision given by the university is satisfactory, then mentorship as a significant aspect of WIL will be effective.

Lastly, the correlation value between “Teamwork ability” and “Individual initiative” is 0.646. This is a related comparative. Data by the respondents indicates that in WIL they must be able to work alone as well as with other people.

4.3. Data from Interviews (Qualitative Analysis)

4.3.1 Interviews with academic assessors

Interviews with academic assessors from the two UoTs were conducted. These participants were chosen as they are the ones responsible for supervising and assisting the students when they are on WIL. The purpose of the interview was explained to the participants at the beginning and the participants agreed to be interviewed. The actual interview was recorded using a cell phone. All the questions and the responses that were directly related to the research objectives are transcribed below.

These questions are grouped, based on their relationship with the research objectives that were given in Chapter 1. The questions are given in sequence and the text of the answers are tabulated below the question. At the end of each question conclusions are drawn or observations made, based on the responses given. The questions are as follows:

Interview Question 1

Is it the policy of the Department to provide students with any background material, such as study guides, before they go into industry? If so, how useful do you feel this is? If not, could this be useful in your opinion – and what form should it take?

1. DUT. A learner guide and information booklet are provided. They as so useful because they have background information about WIL and explain all the stakeholders’ responsibilities. But because these information booklets are not

part of class work and are not taught in class, sometimes students are too lazy to read them and they do not really go through these guidelines.

2. MUT. There is a manual for students, explaining what is expected. There is also a logbook system. This is very important.

According to the responses given, it appears that both UoTs do provide students with information booklets and study guides, However, sometimes the students do not really read them hence they can end up not knowing what is expected from them

Interview Question 2

Before students' placement, is there an induction course, or other specific orientation, provided? Please comment on this if it is provided, and, if not, would you consider this to be beneficial?

1. DUT. No. No induction is provided. Students do need a little bit more of assistance prior to WIL.
2. MUT. Lectures are regarded as part of induction. They cover some of the induction topics in class like "office ethics".

It was noted that there was no real induction course prepared for the students before placement and in some cases, they categorize the work done in class as an induction.

Interview Question 3

Do you consider that liaison between the university academics and the students during the WIL period is important? Please comment on how this happens and whether you believe that it is practicable for the WIL academic assessor to carry this out thoroughly.

1. DUT. Yes, liaison is important. Contact details are made available in the information booklet for contact purposes and enquiries. The student and the WIL academic assessor try and deal with the issues.
2. MUT. Yes, the liaison is important. There is an email and WhatsApp group to keep constant contact with the students in WIL, and students are encouraged not to be shy to communicate the difficulties they face in the workplace. WIL

academic assessor is not able to reach out to all the students due to the number and distance. And there is too much workload when you are supervising a student and being a lecturer at the same time.

It appeared that WIL academic assessors from both universities are interacting with the students in the form of email, telephone and WhatsApp when there is a problem. However, WIL academic assessors find it difficult to cope with lecturing duties and mentoring the students that are away for WIL at the same time.

Interview Question 4

Is it possible for you to visit all of your students during WIL? How often are visits to students normally arranged?

1. DUT. No, not all the students are visited. There is no time and there is only one person (also a lecturer) responsible for WIL. At least once.
2. MUT. We only visit those placed in a proximity workplace. Once at least.

Generally, the WIL academic assessors from the UoTs highlighted that they do not really do visits to everyone as they only visit those students who are placed close to the universities. Therefore, the students are only visited if their placements are close by. They also add that the workload for WIL is too much for them so they end up paying less attention to the students in WIL than they would like.

Interview Question 5

Please tell me about any additional challenges you experience with mentoring students.

1. DUT. There is not enough time allocated for WIL. Too much workload. It's impossible for one WIL academic assessor to mentor all the students.
2. MUT. Inability to visit all of the students in WIL. Finding a placement for the students because some students want to be placed in their respective towns or near their homes. Different understanding of WIL by the industry. For instance, some of the companies think that you are forced to pay a student when doing

their WIL in your company. They are running from the responsibility without information.

A variety of challenges were identified. The main challenge was time, as the WIL academic assessors find it difficult to visit all of the students. The reason for this could be that they are responsible for WIL and lecturing at the same time. It appears that there is still a need for the university and industry to collaborate and have a common understanding of WIL. Industry seems to be still confused and lacking understanding as to what is expected from them, and it is the universities' responsibility to make means to educate them about the importance and context of the WIL.

Interview Question 6

Do you find that all students receive a similarly interactive relationship from their mentors? If not, how could this situation be improved?

1. DUT. Yes, the students are encouraged to use the contact details given in the logbook when they encounter any difficulties.
2. MUT. Yes, sometimes it depends on the attitude of the employer. We encourage them to place the students for a WIL as part of giving back to the community as per The Companies Act no. 71 of 2008. Government must intervene to convince the companies to take the students for WIL.

All the participants agreed on the similarity of interactions – that there is no prejudice or bias. When the student faced challenges in the workplace, once they phone or email to their WIL academic assessors those challenges would be addressed. They encourage the use of contact details in the information booklet and they also encourage the companies to work with them in accommodating the students.

Interview Question 7

Do you have any further suggestions for the implementation of mentorship in WIL?

1. DUT. A proper programme for mentorship must be designed between WIL academic assessors and the students. There must be sufficient manpower and time allocated for mentorship in WIL.
2. MUT. Let us start getting industry involved in WIL by formalizing the partnership with them. After identifying the workplace mentors, we are working with, we can start giving them induction and training as to what is expected from them.

It appears again that some participants, that is both the students and the workplace mentors, do not have complete background information about what is expected from them in WIL and that collaboration between the stakeholders is not adequate.

4.3.2 Online survey analysis

In order to gain insights from the point of view of another important role player in WIL, an online survey was conducted with 12 different workplace mentors. The respondents answered the questions provided as follow:

Have you mentored students before? How many students are you supervising in the workplace?

- Yes, 7
- Yes, 2
- Yes, about 20-25
- Yes, I have monitored students before, and they were 4
- Yes, 14
- Yes, 16
- Yes - they were 4 or 5.
- Yes - 7
- Yes. I have supervised 11 students from 2014 until now.
- Yes, 4
- Yes, 8 under my supervision.
- Yes 6

All the participants had mentored students before and only one workplace mentor had supervised more than 20 students. Most of the participants had supervised less than 10 students.

How do you liaise with them?

- Communication is very good
- All the time. Every 1 – 1 ½ hours
- On a man to man basis
- We keep contact daily to make sure they work and learn.
- Physically check them every day in their temporary offices.
- I gave them my email address for questions, and they were free to ask from the admin clerks.
- I work with them in the administration with my admin officers. Anytime they have a question we are all there.
- By sharing office with them in the admin area
- I advise them to write their inquiries to my workplace email address, as I access it now and then.
- Before lunch I tell them to wait for me so that they can tell me the problems they face.
- Office Visits.
- I only attend them when they have questions.

Do you consider your liaison important? Please explain.

- Yes
- Yes, in a working environment you always need to be busy as well as efficient.
- Yes. These are students and need to be mentored.
- Very important, as I have mentioned in the above question (2) they come to the workplace to learn so I believe that mine as the supervisor is to challenge them by assigning them work.
- Yes, this is how you check with them the problems they are facing. For good supervision.

- Yes, if you cannot interact with them, they will sometimes face some challenges and have no one to ask.
- Very important, when you have a learning player in the team you should make sure they are attended.
- Yes - when they have questions, you must be there to attend to them immediately
- It is very important. Any trainee or beginner sometimes gets stuck and requires their superior's intervention.
- Yes, because the students find a way to express themselves. They are the human beings too.
- Very important. WIL is about teaching and learning, every time I feel like there is something they should know, I note it down and go straight to their office and educate them and I advise them to do the same and vice versa.
- Yes. Without answering those questions, a team cannot move.
- All the participants believe that liaison is important in WIL. Even though a workplace is a busy environment, but we need to maintain efficiency too and this learning process (WIL) requires interaction for it to be successful. Liaising with the students in WIL also helps them feel involved and provides them with an opportunity to ask when they encounter some challenges.

Workplace mentors appeared to communicate with the students in WIL effectively. The students are given attention in the workplace in different ways – some are physically attended, and others ask their questions through emails. However, emails are not always opened at a convenient time. Students responses to this question, while generally favorable, did reveal a more limited level of contact than is given here by the workplace mentors themselves. ….

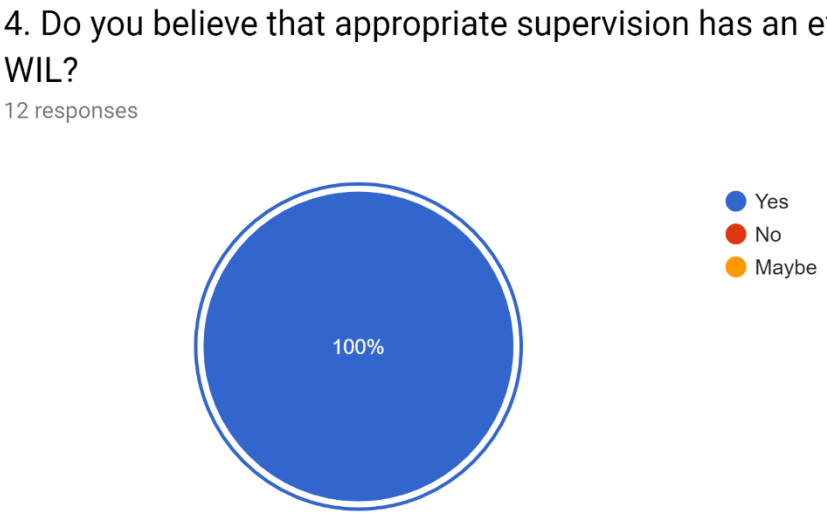


Figure 4. 9: Appropriate supervision of WIL

All of the mentors from the workplace believe that appropriate supervision has an effect on the value of WIL.

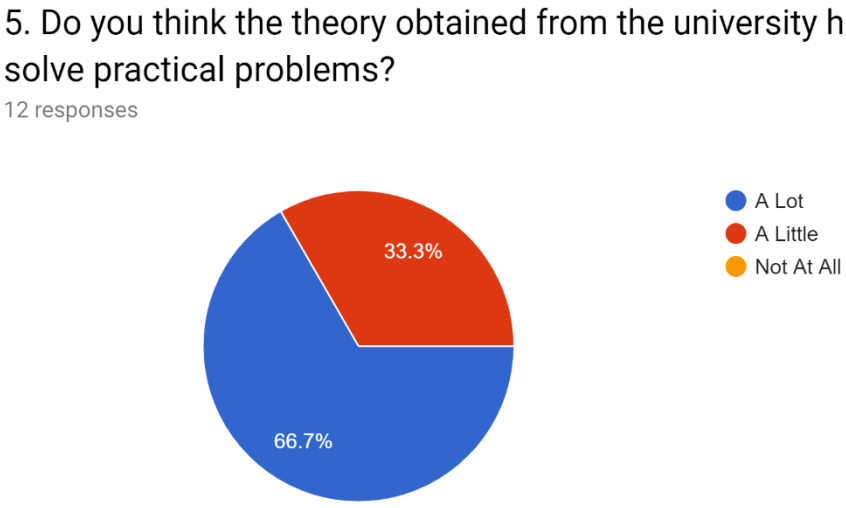


Figure 4. 10: Theory vs Practical

More than 66% of the workplace mentors think that the university syllabus is relevant and helpful in the WIL programme. However, a third of them that think the theory

obtained from the university only helps a little to solve the practical problems students face in the workplace environment. Nobody felt it was of no help.

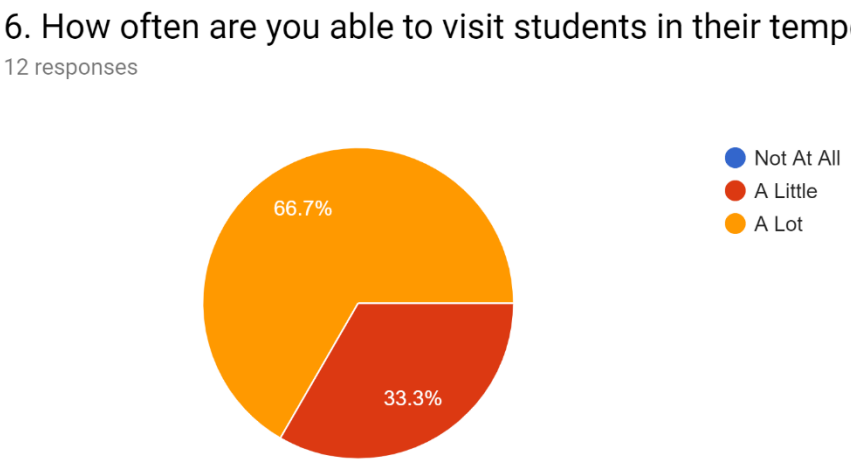


Figure 4. 11: Visitations

Two thirds of the workplace mentors responded that they do visit the students in their temporary offices a lot, while one third admitted to only visiting them ‘a little’.

7. How long do you think WIL should be?

- 3 months
- 6 months - 1 year
- 6months
- 6 months to 1 year.
- 6 to 9 months and or a year
- 6 months.
- A year.
- 6 months or more
- One year.
- They should come for two months in every year in these three years of diploma to make 6 months.
- 6 months upwards.

- 4 months.

In question 7, students were asked to recommend an appropriate time for WIL, and they commented and recommended one-year placements. As regards the workplace mentors, there were a variety of views, with between six months and a year being recommended most frequently. Only one recommended the current WIL period of three months and only two recommended less than six months.

What challenges do you experience with WIL?

- Time management.
- No challenges.
- Students have to leave in the middle of WIL and move res.
- Time consuming as we must make sure that we go with them.
- Holidays disrupt WIL. Time consuming in work showing a student about workplace culture, and it was never easy to convert theory to practical.
- Having someone who is not professionally trained among your employees can be a challenge. Learning and teaching is always a problem, the students sometimes get stuck when you have more important issues on hand and its natural.
- Some of the students tend to undermine the admin officers or compare themselves with them. Information booklets must be upgraded
- Students with their questions can disturb one when he or she is deeply on something else work related
- Conflict between the female employees and female trainees/students.
- Too many responsibilities so we do not give them full attention. Its natural.
- WIL is time consuming and requires a lot of understanding.
- Going up and down answering their questions and come back to your duty.

A variety of challenges were identified. Some challenges are similar to those stated by the university WIL academic assessors, such as the increased workload created by

WIL and the fact that it is time consuming. It also appeared that female workplace mentors and a female student may come into conflict when working together.

Do you have any suggestions for the improvement of WIL?

- Improve working skills, extend time and provide good working conditions
- Not at this time.
- Let students start WIL after finishing exams. Consideration should be given for their travelling costs if moved from res.
- Extension of WIL period.
- Adjust the theory to be more relevant. Students should not stop WIL because of holidays and university should fund WIL students to cover expenses.
- University must induct the workplace about WIL.
- Let the period be more than 3 months
- More liaison. At least one visit per week
- WIL period should be expanded if possible. You can't learn theory for years then expect to learn practical in 2 - 3 months.
- Workplace mentor to pause other responsibilities and only mentor a student.
- Meeting of all WIL participants at least one day a week to address and solve the problems the students may be facing.
- Anything computer-based at school must be taught more clearly as they struggle to apply those theories.

Some recommendations were related to the challenges identified earlier as well as the recommendations highlighted by the university WIL assessors. For example, it was suggested that an induction be held to discuss what is expected from each stakeholder in WIL. More consistent visits and better liaison with the university were also recommended, and that this could be achieved by having a schedule or a calendar for visits. Most of the workplace mentors considered WIL to be an important aspect of the curriculum although some expressed concern about the short WIL period. An

elimination or lessening of other responsibilities for workplace mentors is also recommended.

4.4. Conclusion

This chapter discussed the data collected in 2018 from students at the two UoTs and the researcher, with the assistance of a qualified statistician, used Microsoft Excel to analyze the data. Factor analysis was explained. To address the objectives of this study further, data was also obtained via a qualitative approach by conducting interviews with the university WIL assessors and through an online survey involving open-ended questions sent to the workplace mentors. Thus, each of the main stakeholders was involved

While responses to the WIL experience from the students were generally favorable, it was clear that they felt a lot less positive about the liaison between themselves and the university during WIL and the interviews with the university WIL assessors indicated that there is a clear need for more manpower. The short time allocation for WIL was highlighted, and workplace mentors recommended more structured interaction between themselves, the students, and the university.

To conclude this study, the findings will be further discussed and summarized, and recommendations will be made in the next chapter.

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes this study which investigated the effectiveness of mentorship in WIL as practiced within the Office Management and Technology Departments of two Universities of Technology. Conclusions are drawn from the results and analyses discussed in Chapter Four. In this chapter recommendations, based on the findings of both primary and secondary data, will be made, and strategies considered that could be implemented to improve the quality of interaction between the student, workplace mentor and university academic assessor.

5.2 Answering the Research Questions

This section provides the conclusions and recommendations that are based on the research questions.

5.2.1 Research Question 1

What is the nature of the individual support provided by the university and the workplace organization for students during WIL?

During the interviews, both the WIL academic assessors mentioned that all students were provided with a study guide and information booklet which is traditionally considered to be an important aspect of WIL. However, there is no specific material provided for the workplace mentors such as a WIL information booklet, and nor are workplace mentors afforded an opportunity for their roles and responsibilities to be discussed. These are only available in the Universities' WIL policy documents. During WIL, workplace mentors are simply required to indicate the duties performed by the student and to sign a register.

Both universities of technology use a similar WIL Information Booklet. DUT and MUT WIL policy (2020:1-2) states that the workplace mentor's core function is to monitor and assess the students' progress and provide feedback to other stakeholders (i.e.

academic WIL assessors from the universities and the students). It further states that WIL academic assessors from the universities are responsible for monitoring and assessing students engaged in WIL and for approving the employer workstations, as well as conducting onsite visitations to monitor each student's performance.

Both UoTs consider liaison between the university academics and the students important and they both provide contact details of the university assessors in the information booklets (DUT) while one of the universities (MUT) includes a WhatsApp group. However, manpower and workload remain challenging for the assessors as they are also required to continue with their lecturing duties.

According to the WIL academic assessor from MUT, students appear to be still confused about what is required from them because sometimes they do not go through the materials provided sufficiently well for them to be really familiar with the content and, as discussed above, workplace mentors often also do not have all of the background information about what is expected from them in WIL.

University WIL academic assessors highlighted that they do not visit all the students – they generally only visit those who are placed close to the university. Although 66.7% of workplace mentors do visit the students in their temporary offices, this leaves 33.3% who pay few, or no, visits to the students on WIL. In New Zealand the importance of developing competencies that are required by graduates in the workplace has been highlighted recently in research fields such as business and science (Burchell, Hodges, & Rainsbury, 2010; Coll & Zegward, 2016; Hodges & Burchell, 2013; Sleap, & Read, 2016). The benefits of work-integrated learning experiences to enhance these competencies have also been emphasized in the literature (Dressler & Keeling, 2014). The policy of the university states that, students must be visited at least once by the university assessor when they are on WIL. However, the DUT WIL academic assessor confirmed that she does not visit all the students on WIL because she is the only person responsible for overseeing the WIL programme, whilst she is also a lecturer, so she says she does nothas not have enough time. The MUT WIL academic assessor also confirmed that she generally visits only those students who are placed close to the university.

This was confirmed by the statistics coming from the students, which indicate that in both UoTs not all students were visited by their university WIL academic assessors. At MUT, those who were placed close to the university were visited and the rest were not visited at all. The data shows that not even a quarter of the students were visited in their placements. Thus, many of the students indicated that they received insufficient support from the university. The data also indicates that electronic interactions (email and telephone) between university and workplace only took place with 40% to 45% of students. Many interactions were by telephone but even this was experienced by only a small percentage (23.7%) of students, followed by emails at 19.7%. It therefore appears that support from the university remains an issue.

Overall, the statistics show that nearly half of the students who participated in the study did not believe that they had adequate support from the university. Question 7.2 of the questionnaire for the students was, “I had adequate support from the university throughout my placement” and 48.7 percent of the students were not fully satisfied with this support. Data confirmed that the support from the workplace was better than the support provided by the WIL academic assessors from the university. However, both parties appear to be struggling to provide effective mentorship for students in WIL. 35.5% of students stated that they did not get any help from their workplace supervisors when they were stuck. It appears therefore that mentorship in WIL is still insufficient.

It is interesting to note however that the interviews with the academic assessors gave a slightly different interpretation of these issues. Although 97.3% of students indicated, in response to the questionnaire, that they consider mentorship as an important aspect of WIL and, in the suggestion section, nearly all those who answered the question “Can you suggest any other improvement in the mentorship of WIL?” indicated their support for the UoTs to continue to offer WIL, the MUT WIL academic assessor mentioned that these are the very same students who, in her opinion, do not take WIL seriously. She found that students often fail to use the resources available which have been provided to benefit them. She believed that this lack of apparent interest on the part of the students is among the reasons why the Universities often do not get

placements for their students from industry easily. For example, students could use the internet initially to take the initiative to search for available workplaces, some of which may pay a stipend during for WIL intern. Students could also use the libraries to further their knowledge about WIL and overall could engage more actively in their WIL experience, she believed.

Overall, therefore mentorship in WIL appears to be still ineffective for many of the individual participants. To the workplace mentors, it is disheartening to be involved in WIL with little information of what is expected from you, and to find that you are given no formal guidance provided by the Universities such as an introductory workshop. Information from the Universities' WIL policy documents also appear insufficiently informative for the academic assessors as, for instance, there is no policy statement on how many contact visits must be made with the students during WIL. Suggestions made to improve the situation included two out of the workplace mentors noting that there is a need for the university to meet with the other WIL participants to induct the workplace supervisors about WIL, and that at least one day a week should be set aside to address and solve the problems the students may be facing.

However, it should be noted that, despite these indications of issues still to be resolved, the students' general responses were more positive than negative. For instance, in question7.2, "I had adequate support from the university through my placement" it was noticed that when you add "a lot" and "a little" together, you get 82.9% who were positive. And in question 7.4, "When I had problems my workplace supervisor was always there to help me solve them" 90.8% of the respondents indicated that their workplace mentors were there when they needed them in their temporary offices. However, in most cases, it was also noted that "strongly agree" responses were lower than "agree" and this could indicate that the respondents were not fully satisfied with what was asked in that particular question. For example, in question 9.6, "I had a personal contact with the university academic WIL assessor and workplace mentor" the respondents indicated with only 58.1% that the support they got from both workplace and the university was satisfactory.

Recommendation for Research Question 1

The researcher's recommendation is that special attention should be given to the content of the WIL syllabus to include more input from the workplace. It should not only contain the main areas of study but should also provide for some flexibility within each area so that the different companies or organizations are able to provide the content they require. A programme for mentorship could be designed with input from WIL academic assessors, the workplace mentors and a student representative. Even though manpower, time and distance can be challenges, the appointment of at least one stakeholder from each of the three involved parties would make mentorship more effective.

Organizing the orientations between all the WIL participants could change the mind-set of the students about WIL and ensure that they begin to take it more seriously. Information available in the booklets and study guides could be made a part of assessment and at least 10% of students' year marks could be drawn from questions which require knowledge of these documents.

Although the university assessors' contact details are made available in the logbook, it could be one of the university WIL assessor's duties to dedicate some time, and a day each week, to make a follow-up contact with the students just to check-up to their progress and to give support, as some may not have access to their companies' telephones and internet for emails.

5.2.2 Research Question 2

What are the requirements of the syllabus regarding mentorship practices?

As mentioned above, both Universities' WIL academic assessors confirmed during the interviews that they provide their students with the universities' information booklets and study guides and that these documents identify areas to focus on during WIL. However, it was noted that the students and workplace mentors do not actually go through these together systematically; and therefore, students often end up not knowing exactly what is expected from them in WIL. The information booklet and logbook do not specify much about mentorship; they only explain the roles and

responsibilities of the stakeholders involved in WIL. WIL policy on mentoring states that the university will appoint a qualified and experienced academic mentor to monitor the students that have been placed for WIL. Liaison between the responsible parties is not specifically mentioned.

Work Integrated Learning policy for both universities states that, “the university will make every effort to facilitate WIL for placement for students and, where placements are unavailable or limited, the university may develop options for the students so that they may complete the programme” (DUT & MUT WIL policies pg 2). During the interviews, WIL academic assessors from both DUT and MUT highlighted that they have good working relationships with many companies, so this helps their students to find suitable placements. Although there is this ongoing relationship between the parties (universities and industry), and students confirm that the UoTs helped them with finding suitable workplaces, it was also noted that the UoTs are still struggling to help all their students and that finding sufficient places is becoming increasingly difficult.

WIL academic assessors as appointed by the universities are required to monitor and assess students engaged in WIL. They are also responsible for approving the employer workstations and conducting onsite visitations to monitor each student’s performance at least once. Through online systems, WIL academic assessors from both universities are responsible for an approval of the students’ WIL registration, assessment of students’ progress reports and for planning and completing onsite visitation schedules and reports.

WIL policies of the both Universities (2020: 4) state that “monitoring systems must include an early warning check to identify students who are in danger of not meeting all the requirements for the satisfactory completion of WIL”. It does not specifically state how this should work, nor how many times the students must be visited when they are in WIL for workplace or academic assessors to follow up on weaker students. As mentioned above, academic assessors explained that they generally only visit those who are placed reasonably close to the university and, from the WIL policy, there is nothing specified about the visitation of the students by their workplace mentors.

Thus, this provision concerning ‘at risk’ students appears to be difficult to implement. So far it appears that this provision is seldom, if ever, implemented in either of the universities. According to the DUT logbook, when students do not meet WIL required standard, they are required to repeat WIL in the following year. The UoTs could make the students aware of the consequences of failing WIL from the beginning of their final year, so that they can be aware of this, and the researcher believes they would start taking WIL more seriously than they currently do.

According to the WIL policy, should there be a new workplace which offers itself to accommodate students for WIL, or when a student finds a placement of his/her own, it is the responsibility of the university to approve that workplace and present a detailed report about the expected WIL outcomes to that workplace. In both universities, the WIL academic assessor supervises and manages all placement activities between employer and student. Both academic assessors mentioned during the interviews that they work with industry to accommodate their students. Data collected through the online survey further confirmed that indeed there is a working relationship between the UoTs and many companies as there were workplace mentors who had supervised between 10 to 25 students from 2014 till now.

The workplace mentor is assigned by the company to supervise, guide and coach the students during their WIL experience. This person prepares the students for WIL by first orientating them and reading out their rights and the code of conduct. In collaboration with the academic assessor from the university, the workplace mentor assesses the student’s performance through assessment criteria and procedures detailed in the learner guide. Workplace mentors are therefore required to assess their students as per the university’s WIL requirements. The failure appears to be in any direct contact between the two as structures – as these are not in place, and time is limited for both assessors and workplace mentors

The workplace mentor is required to develop a training programme that briefly outlines the tasks and the duration of each task the student will be exposed to, in order to meet the learning outcomes of the WIL. The training programme lists the topics of tasks with a brief description of each task and the approximate duration of the task in days,

weeks, months. The training programme is a dynamic document and may be edited on an ongoing basis. Again, it seems that the basis of good policies exists, but ongoing contact is lacking.

Although DUT's WIL policy states that it is the responsibility of a student to question the workplace supervisor when they encounter any challenges during WIL, the study guides do not indicate to the workplace mentors how to mentor a student during WIL period. Coll (2009) indicated that many workplace mentors do not really know what is expected from them and the WIL academic assessor confirmed in the interview that industry often has a different understanding of WIL from the universities.

Upon completion of the WIL training, workplace mentors and students complete a feedback report on curriculum issues. These reports are collected and presented to the Department for consideration during the curriculum review process. At the end of WIL students provide feedback to the university on curriculum and performance related issues. This current system of feedback report (collection and presentation) used by both UoTs appears to be overlooking the need for closer mentorship of students in WIL and it could possess some drawbacks. For instance, if a student cannot be visited the whole WIL period, and comes back for submission and presentation, the chances are that some students may dodge WIL by filling in the logbooks on their own.

In both UoTs, the WIL academic assessors issue a list of students who went to the workplaces for WIL and place it on the noticeboard or university's blackboard. This list consists of students' names and the dates, highlighting the presentation day for each student. The students then present their WIL final report to the WIL academic assessors. Therefore, the WIL academic assessor assesses the final report presentation and decides whether the student has successfully passed the WIL or not. As in any teaching and learning context, WIL programme can be passed or failed depending on the student's performance and willingness to learn. Currently, in both UoTs, there is only one WIL academic assessor who is responsible for all the students in WIL and 29% of students noted that they would like a more personalized assessor who will be in touch with them individually.

The information discussed in Chapter 4 indicates that persons who received “more suitable work placement” and “good workplace supervision” also performed course related duties in WIL.

During the interviews, the WIL academic assessors’ responses confirmed nearly all of the students’ inputs while the two academic assessors also agreed on most points. For instance, during the interview with the WIL academic assessor from MUT, it was suggested that “WIL should take place in the second year of this qualification to avoid missing time” and a student also suggested this. It was also mentioned by the DUT mentor that there is no real induction course prepared for the students before placement and the MUT confirmed that MUT only categorizes the work done in class as an induction. Students felt that they did not get enough attention from the university during WIL and the university assessors agreed that they are not able to visit as often as they would like to.

Recommendation for RQ2

Universities have worked hand in hand with the workplaces in accommodating the students for WIL to take it as their full responsibility to provide the students with both WIL academic assessors and workplace mentors who have the time to devote to their support. Literature indicates that, once the students are placed in the companies, they must start developing good relationships with their workplace mentors. For instance, Grove and Ostroff, (2010) confirmed that students could build these relationships by being active and curious enough to be able to provide their opinions for the workplace mentor to help them explain further. Therefore, the UoTs could try to find a way to allocate each student with a WIL academic assessor, which would however require reverting to an earlier situation when more lecturers were assigned to mentoring WIL students.

University coursework could include an updated logbook and information booklet as part of the third-year syllabus in Office Management and Technology (OMT). Students should not be allowed to do their WIL programme at any other company, but only in these companies with which the universities have close relationships. The policies of both UoTs highlight that in a case where students select their own placement then it is the university's responsibility to request the contact details of that company from maybe a student to tighten up the relationship with that company. It was also noted that smaller companies are often not able to provide such a good WIL experience as larger ones. Overall, the universities could strengthen their relationship with the companies in regard to WIL training and find a way to orientate the industry about WIL programme in such a way that all the aspects of mentorship will be covered.

Because both UoTs have strong working relationship with many companies, WIL academic assessors should be able to organize a workshop which will involve at least one workplace mentor from each company, the WIL academic assessor, and a student leader, to discuss each stakeholder's responsibilities in WIL. It is also recommended that a follow up email containing a short report giving feedback from the workshop should be sent. This could be shared with those workplace mentors who were unable to attend the workshop. Emails from the university WIL academic assessor could also list to each industry participant, responsibilities that are expected from them, encouraging responses which would involve alternative or additional ideas from the workplaces.

One potential special arrangement could be joint educational programmes between the industry and institutions. These and other WIL issues could be discussed when the university authorities meet with industry players on wider issues. One point of the agenda would then be WIL. The researcher suggests that the UoTs consider this aspect about WIL and have somebody who is responsible to monitor WIL processes (probably the WIL academic assessor) invited to give an input and recommendation during these wider general meetings.

Although the universities cannot dictate to industry players what to do, they, together with the companies they are working with during WIL, could revisit the information

booklet and study guide, then come up with a collective agreement as to what can be done to improve the quality of mentorship and to include decisions within these documents annually. Detailed minimum tasks for experiential learning for each programme could be identified. These updated documents would then be appropriate for the suggestion made above that the universities could make knowledge of WIL count at least 10% of the students' year mark.

Based on these considerations, more energy and effort could be dedicated to the work placement of students, especially involving innovative arrangements between universities and industry.

5.2.3 Research Question 3

What are students' experiences of current mentorship and supervision of WIL?

The participants indicated that there is not much collaboration between the stakeholders in WIL and communication with mentors through electronic methods (email and telephone) is not extensive. Some students noted that while they were allocated an academic assessor by the university, they never interacted with them directly, while 42% of students indicated that they had no direct contact with either university WIL assessors or workplace mentors. During the interviews with academic assessors it was indicated that, while all students are treated equally by the university, all students do not receive the same service during their WIL placement. Those in big companies generally receive a better training than others who have been placed in smaller firms. Thus, the student experience of mentorship is also uneven.

As explained earlier, WIL is an important aspect of the OMT programme, and students cannot complete this qualification and graduate without, or before, undergoing WIL and there are marks awarded for WIL which need to appear in the students' academic record. All the workplace mentors affirmed the belief that appropriate supervision influences the value of WIL, and more than 66% of them think that the university syllabus is relevant and helpful in the WIL programme.

In the questionnaire, students were provided with an opportunity to write down their suggestions about mentorship in WIL (Question 8) and the data showed that students often have different experiences of WIL than those perceived by their workplace mentors. Although 49 students left this question in the questionnaire blank, 23 students noted some of their challenges, and some solutions they would like to see in the workplace during their WIL. These indicated that relationship s between office staff and students can be strained and that students are sometimes assigned trivial tasks.

It is clear from this that more mentoring is needed and that the workplace mentors still need to be inducted more carefully into their roles and responsibilities and how they should treat the students during WIL period.

Recommendations for RQ3

The university should appoint more WIL academic assessors and make sure that every student in the workplace is under the authority of a mentor. If the universities cannot include this in their budgets, the researcher suggests that they approach some participating companies for sponsorship. From the university side there should be a teaching and learning grant which could be deployed in funding lecturers who may volunteer to mentor students during WIL period, ensuring that they do not have lecturing duties at the same time.

The researcher maintains that WIL academic assessors from the university should not be involved in teaching during the WIL period, so that they can stay in closer touch with the students on WIL. WIL academic assessors should interact with each student at least once in a month and, through an email or phone call, more frequently if they cannot visit.

As mentioned above, if the universities can consider involving WIL practices as part of their assessments, students would start taking WIL more seriously, and WIL would be valued more highly than it is currently. For instance, students could be required to do a project or assignment before going for placement to set their goals for the WIL, such as a learning plan. By doing this, they then would check in with their workplace mentors to remind them of the things they have not done or covered.

5.2.4. Research Question 4

What are the recommended strategies and policies which could improve the quality of interaction between the parties involved in WIL?

This chapter has stressed the nature of support provided by WIL academic mentors from the universities and workplace mentors, outlining the written requirements of the WIL syllabus, while the challenges of WIL as experienced by the students, were also discussed. The researcher also discussed the systems of collaboration that exist between stakeholders in WIL and will now reflect on those strategies and policies discussed above which could be used in improving the interaction and collaboration between stakeholders in order to enhance the quality of mentorship in WIL.

The researcher asked the workplace mentors how many students each mentor supervised. Although they did not highlight manpower as a challenge, there was one workplace mentor who supervised 20 to 25 students. In Question 7 of the interview questions with university assessors, they made recommendations including the following:

- University should induct or workshop the companies about the expected outcomes of the WIL programme.
- There must be additional WIL academic assessors and more time should be allocated for mentorship and supervision.
- Supervisors and mentors should communicate with students effectively on a weekly basis at the least, so that any weaknesses in the training can be identified and dealt with timeously.

These all reflect a keenness to become more closely involved with the university and to increase their interaction with students. Question 3 of the online open-ended questions for the workplace mentors was, “Do you consider your liaison with students important? Please explain” and the responses to this question were all positive as all the participants agreed that liaison is important in WIL. One of the workplace mentors affirmed the belief of the researcher that without attending to students’ questions, a

team spirit cannot be created. 95.8% of students also agreed that “good communication skills” is one of the most needed skills in WIL.

Workplace mentors acknowledged the fact that the workplace environment is a busy place, but they believed that they always strive for the interaction between themselves and students to be effective. They described different ways of involving the students and making sure that their enquiries are attended to. Some attend to the questions immediately, making question time before lunch, others make random visits to the WIL students’ desks.

Like the other stakeholders involved in WIL, the workplace mentors were also asked to share their views on the length of the WIL period. Out of twelve, only one workplace WIL mentor was happy with the current WIL period of three months. 66.6% workplace mentors suggested that WIL period should be six months or more. They indicated that time is the main challenge in WIL, as this programme adds more in their responsibilities. Two mentors also noted that having a student or trainee in the workplace can be disruptive as students ‘pop in’ to the employers’ offices with questions at any time.

In Question 8 of the workplace mentors’ questions, there were similarities between their answers and the academic assessors. For instance, one mentor recommended that “University must introduce an induction workplace about WIL.” This confirms that there is still some confusion from the side of the workplace and, as someone who has undergone WIL, the researcher can confirm that workplace mentors do not always know what is expected from them.

Recommendations for Research Question 4

The responses noted above indicate that there should be additional manpower and time allocated for mentorship in WIL by both the universities and the industry players. After the companies involved have appointed people as workplace mentors, companies could start giving them some induction and training including involvement with the university workshops if these are implemented as suggested above, and as endorsed by the university mentors (see below). This could be achieved by involving

at least one workplace mentor from each participating company in discussions on updating the WIL syllabus and possibly extending the WIL period. The suggestion that WIL experience could be provided for students in their second year of study could also be debated.

Arrangements to improve the effectiveness of mentorship could be made continuously before the placement. In the case of a student choosing a placement for themselves, the university could make a follow-up with that company to make sure that the student has someone who is responsible for them and who they will report to. The university could make a regular contact with any workplace mentor who will be supervising the students during WIL on a yearly basis as well as before placing the students. This process should be formalized and regular monthly contact via email or telephone calls should become the norm during the placements. Overall there should be more formal structures which will enable all the WIL participants to meet and work together as one body talking to each other.

A workplace mentor could make his/her work email address available for the students to use to submit their questions or explain difficulties they may face in their offices. Although emails may not be received at a convenient time, the mentor could make time to respond to them when other work is completed. Also, in response to the students' concerns, students need to be regarded as part of the company's workforce even although they are temporary. By so doing, you could be adding more responsibilities to the students and they could begin to take the WIL serious.

With the workplace mentors' other work responsibilities, it is clear that it can be difficult for them to visit the students in their offices often. However, at the least, they could have a calendar for scheduling visits to check how well the students are learning. The students could write down all their daily or weekly enquiries and challenges they are encountering, and the workplace mentor could schedule a meeting to come and attend to all those challenges at one time. In addition, as both UoTs' academic supervisors indicated that they have a good working relationship with the industry players, reducing the other responsibilities of the mentors during WIL could be discussed.

Although it is recognized that this would cause some difficulties for the universities, they should at least consider extending the WIL period. Ideally it could be recommended that WIL be a period of from six months upwards. This would encourage closer working relationships between the WIL students and their workplace mentors who would see the students more as interns able to contribute meaningfully to the work of the office.

5.3 Summary

After a careful observation of the comments, remarks and suggestions made by all the participants i.e. WIL academic assessors from the UoTs, workplace mentors and the students, this research study concludes that, even though the students were satisfied on the whole with the organizations they worked for, they were not happy with the support the universities are providing for them during WIL, nor were they entirely satisfied with the support they got from the workplace mentors.

WIL academic assessors from the UoTs identified a variety of challenges and they both emphasized that because of time, it is difficult to visit all of the students. Because they are responsible for lecturing, supervising the students in WIL comes as an additional responsibility. It can be suggested that the UoTs minimize their responsibilities by appointing them as WIL academic assessors only and give the lecturing part to other people.

The workplace mentors seem to be still confused about the context of WIL and lacking understanding as to exactly what is expected from them. This research suggests that the universities have a responsibility to arrange a joint educational strategy to discuss and update the WIL curriculum.

The WIL academic assessor from MUT suggested that government should intervene to convince companies to take the students for WIL and this could be used by the companies as a sign of giving back to the community. It is possible that this policy could be linked to Government's support of industry training through the Sector Education and Training Authorities (SETAs). Students in question 8 were also required to provide possible suggestions for the betterment of mentorship in WIL, and some

mentioned the possibility of government intervention and making sure that students are getting stipends during WIL. This could also link to SETA involvement and longer WIL periods.

5.4 Limitations of the study and suggestions for further research

This research unearthed some unexpected findings. For instance, the researcher did not expect that ineffectiveness of mentorship in WIL could partly be attributed to students not taking WIL seriously and fully appreciating that the whole programme is all for their benefit. This finding could be the basis for further research. The use of two universities in this study, and the finding that their situation was very similar in nearly all respects, suggests that the findings of this research will be relevant to other UoTs, and to students studying similar courses in other South African UoTs. However, further research could be conducted in new contexts and with different disciplines to address the limitations of considering only a single discipline.

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APPENDICES

APPENDIX A: ETHICAL CLEARENCE

Faculty Research Office
Durban University of Technology Date
Sept 20, 2020

Student Victor Sinokholo
Student Number: **21643987**
Degree: Masters of Management Sciences in Administration and Information Management
Email: **21643987@dut4life.ac.za**

Dear Mr Victor:

ETHICAL APPROVAL: LEVEL 2
Your email correspondence in respect of the above refers.
I am pleased to inform you that the Faculty Research Ethics Committee (FREC) has granted provisional permission for you to conduct your research " ***Investigating the effectiveness of mentorship in Work Integrated Learning – a case study of Office Management and Technology students at Durban University of Technology"***

When ethics approval is granted:
You are required to present the letter at your research site(s) for permission to gather data. Please also note that your research instruments must be accompanied by the letter of information and the letter of consent for each participant, as per your research proposal.

This ethics clearance is valid from the date of provisional approval on this letter for one year A student must apply for recertification 3 months before the date of this expiry.
Recertification is required every year until after corrections are made, after examination, and the thesis is submitted to the Faculty Registrar.

A summary of your key research findings must be submitted to the FRC on completion of your studies.

Please note: retrospective approval will **NO** longer be granted for ethical approvals

Kindest regards.

Prof Richard C Millham
Dept of IT, Faculty of Accounting and Informatics
Ritson Campus
Durban University of Technology
Durban, South Africa, 4001

Richardm1@dut.ac.za +(27) 031 373 5542

APPENDIX B: GATEKEEPERS LETTER FOR QUESTIONNAIRE DISTRIBUTION

64 Kingston Flat
35 Park Street
DURBAN
4001
16 November 2017

Durban University of Technology
P. O Box 1334
DURBAN
4000
South Africa

Dear Ms Govender

This is to ask for permission to conduct my research at Durban University of Technology. The title of my dissertation is ***"Investigating the effectiveness of mentorship in Work Integrated Learning – a case study of Office Management and Technology students at Durban University of Technology and Mangosuthu University".*** With your permission, I am planning to be distributing the questionnaire to all the students who register for B Tech in 2018, but excluding those who completed their diplomas in 2017 and are not registering for the further degree.

I hope I will be granted permission to conduct this study. Once I have permission from your office I will approach Dr Ngwane, as HoD of the Department concerned, for his formal permission to proceed. He has already indicated that he supports this research

Should you need any further information, kindly contact Mtiki Sinokholo Victor (researcher) at 068 054 9123 or victormtiki@gmail.com or my supervisor at DUT, Dr Jane Skinner (083 658 5951) or janes@dut.ac.za .

Yours sincerely.

Researcher.

APPENDIX C: CONSENT LETTER

INFORMATION

Title of the Research Study: Investigating the effectiveness of mentorship in Work Integrated Learning – a case study of Office Management and Technology students at DUT and MUT.

Principal Investigator/researcher: Mtiki Sinokholo Victor, MMSc: Administration and Information Management

Brief Introduction and Purpose of the Study:

My research study aims to critically investigate the system of mentorship currently involved in the WIL experience of Office Management and Technology students at Durban University of Technology in order to be able to recommend strategies which could improve mentorship practices in WIL should this appear to be necessary.

CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, _____, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number:_____,
- I have also received, read and understood the above written information regarding the study.
- I am aware that the results of the study, including my personal details will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Persons to Contact in the Event of Any Problems or Queries:

Please contact the researcher 068 054 9123 or victormtiki@gmail.com, my supervisor Dr Jane Skinner (031 904 3045; 083658 5951) or the Institutional Research Ethics Administrator on 031 373 2900. Complaints can be reported to the Director: Research and Postgraduate Support, Prof S Moyo on 031 373 2577 or moyos@dut.ac.za

_____ _____ _____ _____

Full Name of Participant **Date** **Time** **Signature / Right Thumbprint**

I, _____ herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Mtiki Sinokholo Victor 3/09/2017

_____ _____ _____

Full Name of Researcher **Date** **Signature**

APPENDIX D: QUESTIONNAIRE FOR QUANTITATIVE ANALYSIS

STUDENT QUESTIONNAIRE

Dear Participant

I am conducting this study to investigate mentorship in WIL as a factor that may affect the expected outcomes and the quality of the WIL experience provided for students.

I would like to invite you all to participate in this research by completing all the questions in this questionnaire.

There are no foreseeable risks to you from participating in this research. All responses to this study are anonymous and will not be used in any way that can identify you.

Section A: Biographical Information

Please tick (✓) in the appropriate box.

1. Gender

Male	
Female	

2. In which year did you complete your Work Integrated Learning?

Before 2009	
2009 – 2010	
2011 – 2012	
2013 – 2014	

2015 – 2016	

3. Are you presently employed?

Yes	
No	

4. Please specify whether you were employed in the work integrated company or were placed there for a period.

Permanent employment	
Contract employment	
Experiential placement only	

Section B: Mentorship Related Questions

5. Were you given a mentor in the workplace?

Yes	
No	

6. Did you have an academic accessor from the university?

Yes	
No	

7. Please answer the following.

Question	A lot	A little	Not at all
My work placement was suitable			
I had adequate support from the university throughout my placement			
I performed course related duties in my WIL			
When I had problems my workplace supervisor was always there to help me solve them			

8. Can you suggest any other improvement in the mentorship of WIL?

---

9. Please tick (✓) in the appropriate box.

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree

I consider mentorship as a significant aspect of WIL.					
11. I considered the quality of mentorship in the workplace during WIL to be satisfactory.					
12. I considered the quality of supervision provided by the university during WIL to be satisfactory.					
13. Generally, I was pleased with Work					

Integrated Learning.					
14. I was offered experience specifically in OMT					
15. I had personal contact with university mentor and workplace supervisor					

16. Was there any direct contact between your university mentor and workplace supervisor?

Yes ☐

No ☐

If yes, please provide a tick next to relevant box.

Email	Telephone	Visit	Other

17. Research indicates that certain attitudes improve the success rates of Work Integrated Learning students. Which of the attitudes listed below do you see as important based on your experience? Please tick (✓) the appropriate box on the scale.

Question	**Strongly Agree**	**Agree**	**Neutral**	**Disagree**	**Strongly Disagree**

17.1. Teamwork ability.					
17.2. Ability and willingness to learn.					
17.3. Good communication Skills.					
17.4. Emotional intelligence.					
17.5. Individual initiative.					

End of questionnaire. Your participation in this survey is **HIGHLY APPRECIATED.** Many thanks. 👍👍

APPENDIX E: INTERVIEW GUIDE

INTERVIEW QUESTIONS FOR WIL ACADEMIC ASSESSORS

It is a great privilege for me to be doing this interview with you and I thank you for making time for this. As you know, I am conducting research into the effectiveness of mentorship in WIL. The interview should take not more than 30 minutes of your time. Your name will not be disclosed.

1. Is it the policy of the Department to provide students with any background material, such as study guides, before they go into industry? If so, how useful do you feel this is? If not, could this be useful in your opinion – and what form should it take?

2. Before students' placement, is there an induction course or other specific orientation, provided? Please comment on this if it is provided, and, if not, would you consider this to be beneficial?

3. Do you consider that liaison between this UoT academics and the students during the WIL period is important? Please comment on how this happens and whether you believe that it is practicable for WIL supervisors to carry this out thoroughly?

4. Is it possible for you to visit all of your students during WIL? How often are visits to students normally arranged?

5. Please tell me about any additional challenges you experience with mentoring students.

6. Do you find that all students receive a similarly interactive relationship from their mentors? If not, how could this situation be improved?

7. Do you have any further suggestions for the implementation of mentorship in WIL?

ONLINE SURVEY QUESTIONS

INTERVIEW QUESTIONS FOR WORKPLACE MENTORS

(These interviews will only be necessary if the quantitative questionnaire to supervisors does not provide suitable data).

I am conducting research titled ***"Investigating the effectiveness of mentorship in Work Integrated Learning – a case study of Office Management and Technology students at Durban University of Technology and Mangosuthu University of Technology".*** As busy as you might be, thank you for making time to participate in this interview. The information you will be giving here will be kept confidentially and no names or identities will be mentioned.

1. How many students are you supervising in the workplace?
2. How do you feel about your liaison with them?
3. Do you consider your liaison important? Please explain.
4. Do you believe that appropriate supervision has an effect on the value of WIL?
5. Do you think the theory obtained from the university helps the student to solve practical problems?
6. How often are you able to visit students in their temporary offices?
7. What do you think of the period of placement? Is it too long or too short? Please explain
8. What challenges do you experience with WIL?
9. Do you have any suggestions for the improvement of WIL?

APPENDIX F: CHI-SQUARE TESTS

	Chi-Square	df	Asymp. Sig.		
University	15,211	1	0,000		University
Gender	27,842	1	0,000		A1
In which year did you complete your Work Integrated Learning?	114,737	5	0,000		A2
Are you presently employed?	0,053	1	0,819		A3
Please specify whether you were employed in the work integrated company or were placed there	25	2	0,000		A4
Were you given a mentor in the workplace?	22,413	1	0,000		B5
Did you have an academic assessor from the university?	3,959	1	0,047		B6
My work placement was suitable	50,632	2	0,000		B7.1
I had adequate support from the university throughout my placement	13,447	2	0,001		B7.2
I performed course related duties in my WIL	52,447	2	0,000		B7.3
When I had problems my workplace supervisor was always there to help me solve them	36,5	2	0,000		B7.4
I consider mentorship as a significant aspect of WIL.	81,2	4	0,000		B10
I considered the quality of mentorship in the workplace during WIL to be satisfactory.	30,757	3	0,000		B11
I considered the quality of supervision provided by the university during WIL to be satisfactory.	50	4	0,000		B12
Generally, I was pleased with Work Integrated Learning.	34,667	4	0,000		B13
I was offered experience specifically in OMT	38,667	4	0,000		B14
I had personal contact with university mentor and workplace supervisor	19,378	4	0,001		B15
Was there any direct contact between your university mentor and workplace supervisor?	0,123	1	0,725		B16.1
Teamwork ability.	74,243	4	0,000		B17.1
Ability and willingness to learn.	34,405	2	0,000		B17.2
Good communication Skills.	33,583	2	0,000		B17.3
Emotional intelligence.	13,405	2	0,001		B17.4
Individual initiative.	25,973	2	0,000		B17.5

APPENDIX G: CORRELATIONS

Correlations

			My work placement was suitable	I had adequate support from the university throughout my placement	I performed course related duties in my WIL	When I had problems my workplace supervisor was always there to help me solve them	I consider mentorship as a significant aspect of WIL.	I considered the quality of mentorship in the workplace during WIL to be satisfactory.	I considered the quality of supervision provided by the university during WIL to be satisfactory.	Generally, I was pleased with Work Integrated Learning.	I was offered experience specifically in OMT	I had personal contact with university mentor and workplace supervisor	Teamwork ability.	Ability and willingness to learn.	Good communication Skills.	Emotional intelligence.	Individual initiative.
Spearman's	My work placement was suitable	Correlation C	1,000														
		Sig. (2-tailed)															
		N	76														
	I had adequate support from the university throughout my placement	Correlation C	0,213	1,000													
		Sig. (2-tailed	0,065														
		N	76	76													
	I performed course related duties in my WIL	Correlation C	.572**	0,181	1,000												
		Sig. (2-tailed	0,000	0,117													
		N	76	76	76												
	When I had problems my workplace supervisor was always there to help me solve them	Correlation C	.397**	0,112	.463**	1,000											
		Sig. (2-tailed	0,000	0,335	0,000												
		N	76	76	76	76											
	I consider mentorship as a significant aspect of WIL.	Correlation C	0,051	-0,019	0,161	0,141	1,000										
		Sig. (2-tailed	0,664	0,872	0,167	0,227											
		N	75	75	75	75	75										
	I considered the quality of mentorship in the workplace during WIL to be satisfactory.	Correlation C	0,187	-0,024	0,114	.275*	.438**	1,000									
		Sig. (2-tailed	0,111	0,839	0,332	0,018	0,000										
		N	74	74	74	74	74	74									
	I considered the quality of supervision provided by the university during WIL to be satisfactory.	Correlation C	0,096	.270*	-0,040	0,158	0,179	.394**	1,000								
		Sig. (2-tailed	0,414	0,019	0,734	0,175	0,124	0,001									
		N	75	75	75	75	75	74	75								
	Generally, I was pleased with Work Integrated Learning.	Correlation C	.545**	0,188	.476**	.604**	0,209	.412**	.337**	1,000							
		Sig. (2-tailed	0,000	0,106	0,000	0,000	0,072	0,000	0,003								
		N	75	75	75	75	75	74	75	75							
	I was offered experience specifically in OMT	Correlation C	.401**	.328**	.412**	.482**	0,121	0,215	0,156	.592**	1,000						
		Sig. (2-tailed	0,000	0,004	0,000	0,000	0,300	0,066	0,180	0,000							
		N	75	75	75	75	75	74	75	75	75						
	I had personal contact with university mentor and workplace supervisor	Correlation C	0,164	.439**	0,212	.275*	.333**	0,145	0,169	.270*	.447**	1,000					
		Sig. (2-tailed	0,163	0,000	0,070	0,018	0,004	0,219	0,149	0,020	0,000						
		N	74	74	74	74	74	74	74	74	74	74					
	Teamwork ability.	Correlation C	0,205	0,099	0,172	.287*	.374**	0,172	0,123	.339**	.331**	.295*	1,000				
		Sig. (2-tailed	0,079	0,400	0,143	0,013	0,001	0,146	0,296	0,003	0,004	0,011					
		N	74	74	74	74	74	73	74	74	74	73	74				
	Ability and willingness to learn.	Correlation C	0,105	-0,025	0,119	0,169	-0,021	0,206	0,188	.261*	0,213	0,165	.234*	1,000			
		Sig. (2-tailed	0,374	0,830	0,314	0,149	0,856	0,080	0,108	0,025	0,068	0,163	0,045				
		N	74	74	74	74	74	73	74	74	74	73	74	74			
	Good communication Skills.	Correlation C	-0,018	-0,100	-0,011	0,026	0,218	0,169	0,097	0,057	0,065	0,127	0,229	.629**	1,000		
		Sig. (2-tailed	0,884	0,403	0,928	0,825	0,066	0,159	0,420	0,636	0,590	0,292	0,054	0,000			
		N	72	72	72	72	72	71	72	72	72	71	72	72	72		
	Emotional intelligence.	Correlation C	0,005	-0,093	0,084	0,117	.268*	.297*	0,183	.230*	0,058	0,169	.408**	.465**	.515**	1,000	
		Sig. (2-tailed	0,965	0,432	0,475	0,322	0,021	0,011	0,118	0,049	0,623	0,152	0,000	0,000	0,000		
		N	74	74	74	74	74	73	74	74	74	73	74	74	72	74	
	Individual initiative.	Correlation C	0,086	-0,010	0,078	0,180	.251*	.329**	0,114	.338**	.252*	.237*	.461**	.454**	.342**	.591**	1,000
		Sig. (2-tailed	0,464	0,933	0,507	0,124	0,031	0,005	0,331	0,003	0,030	0,043	0,000	0,000	0,003	0,000	
		N	74	74	74	74	74	73	74	74	74	73	74	74	72	74	74

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).