ACADEMIC STAFF PERCEPTIONS OF EMPOWERMENT TRAINING PROGRAMMES INITIATED BY DURBAN UNIVERSITY OF TECHNOLOGY

Submitted in fulfilment of the requirements of the Master of Management Sciences in Administration and Information Management Degree.

In the

Faculty of Accounting and Informatics at Durban University of Technology. Durban, South Africa.

By

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August 2018

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DECLARATION

I, Luyanda Loraine Bingwa, hereby declare that this dissertation is a representation of my own work and has not been submitted at another university of technology or university. Where use was made of the work of others, it has been duly acknowledged.

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ABSTRACT

Higher education in South Africa underwent a significant change during the last decade. Lecturers may not be necessarily equipped to face all the changes that are a result of changes faced by higher education. Academic staff needs to be trained so as to strengthen their teaching competencies. Training serves as an opportunity to upgrade their qualifications. Without training, it would be challenging for academics to perform their core activities. The problem that arises is that the type of routine tasks typical of the functions of academic staff does not require only training in the form of coaching but also learning in the form of gaining knowledge and competence within the academic disciplinary context. However, hands-on training seems to be the crucial component that will ensure the correct application of routine procedures.

The purpose of this study was to identify the academic staff perception of empowerment programmes initiated by the Durban University of Technology (DUT), and the challenges involved in successfully empowering staff. This study also identified problems encountered during academic staff development process and further investigated if the academic staff were provided with reasonable opportunity to participate. In this study, a quantitative approach was used, and data was collected from academic staff, comprising of professors, head of departments, senior lecturers, lecturers and junior lecturers of the Durban University of Technology. A sample size of 132 was drawn from the population. Questionnaires were designed with both closed and open-ended questions, and were personally administered by the researcher to all academic staff members in all faculties of the Durban University of Technology.

Analysis of data revealed that the University provide academic staff with sufficient and relevant training however staff felt that they should be included in the planning of these programmes. Furthermore there was a need for follow-up to evaluate effectiveness of the training programmes and if they served the purpose for which they were intended to. This study, therefore, recommended that respective faculties should involve their staff members in planning, and that a follow-up be conducted after completion of training.
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<td>Durban University of Technology</td>
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<td>FOK</td>
<td>Funds of Knowledge</td>
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<td>PGCE</td>
<td>Post Graduate Certificate in Education</td>
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<tr>
<td>PGDE</td>
<td>Post Graduate Diploma in Education</td>
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<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>LMS</td>
<td>Learning Management System</td>
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<tr>
<td>HOD</td>
<td>Head of department</td>
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<td>TLSF</td>
<td>Teaching and learning for a sustainable future</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Science</td>
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CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction

A university is an institution with a distinct identity and has a meaningful role to play in society, and its role is to provide services such as teaching and providing study material. These services cannot be provided in the absence of qualified and trained lecturers. Education plays a crucial role in any institutional organisation of a nation and it helps to develop the country (Khalid, Irshad and Mahmood 2012:23).

Chapter one introduce the entire study presenting the background of the study, the problem statement, aim and objectives, research question and methodology and how the study was conducted of this study. This research will investigate the academic staff’s perceptions of empowerment training programmes initiated by the Durban University of Technology.

1.2 Research background

The Durban University of Technology was selected for this study. This University resulted from a merger, in April 2002, between the two technikons, i.e., ML Sultan and Technikon Natal. It was later (March 2006) named the Durban University of Technology (DUT). According to the university’s website, DUT admits approximately 23 000 students per year. It is located in the cities of Durban and Pietermaritzburg. DUT has six (6) faculties, namely, Accounting and Informatics, Applied Science, Arts and Design, Management Sciences, Engineering, Health Sciences and of Built Environment. These faculties were targeted and participated in this study.

The university not only receives products from preceding levels of education, it is usually the destination for formal teaching and learning before the ultimate launch into the wider world for employment. With new developments and changes in teaching and learning it is vital for academics to get training. Higher education lies at the heart of the knowledge society, then universities are everywhere faced with challenges and problems, undoubtedly bound to change the nature of the academic enterprise to a degree that today seems almost unimaginable (Kwiek, 2001:400).
Countries all over the world are critically engaging in the status of the university classroom. Advanced technology has not only made the world more accessible, it has also unified the debate on how technology can impact on the classroom. Kivinen and Kaipainen (2002:63) show how competition in the global market places challenges on universities because they no longer can monopolize scientific research and knowledge.

AL-Mutairi (2011) and Kang’ahi, Indoshi, Okwach and Osido (2012) state that, even though there are existing several factors that affect students’ academic performance, lecturer competence remains one of the major determinants of students’ academic achievement. Chang (2010) states that it is crucial that lecturers review their teaching competency in relation to subject knowledge, teaching skills and lecturer attitude. Thus, this study emphasises the importance of training academic lecturers to equip them with the necessary skills.

1.3 Research problem

According to Alvarez and Lopez (2013:20) empowerment involves the action of boosting ones status through literacy, education, training and raising awareness.

Without training, it would be challenging for academics to perform their core activities which includes teaching. The problem that arises is that the type of routine tasks typical of the functions of academic staff does not require only training in the sense of coaching but also learning in the sense of gaining knowledge and competence within the academic disciplinary context. If academic staff are not empowered in all these areas then they will face challenges in the classroom. However, hands-on training seems to be the crucial component that will ensure the correct application of routine procedures.

Transformation of pedagogy in higher education necessarily involves the various practices of teaching, learning and research. The tenets inherent in the scholarship of teaching and learning (vision, design, interactions, outcomes and analysis) serve as a framework for the design and support of university efforts and initiatives in academic
success (Cottrell and Jones, 2003). The current learner-centred paradigm in teaching and learning is important for understanding the concept of academic integration.

1.4 Research Aim

The aim of this study is to investigate academic staff perceptions of empowerment training programmes initiated by the Durban University of Technology in order to better inform effective teaching and learning.

1.5 Research objectives

The objectives of the study are:

- To identify academic training needs required to empower academic staff;
- To understand academic staff perception on empowerment training programmes that are initiated by DUT;
- To examine the correlation between the training needs and training programmes; and
- To recommend necessary interventions to improve teaching and learning.

1.6 Research questions

To achieve the aforementioned objectives, the following questions need to be asked:

- What are academic staff training needs at DUT?
- How do academic staff perceive academic training programmes?
- Do training programmes correlate with training needs?
- What interventions would be recommended to improve teaching and learning?

1.7 Rationale for the study

It is envisaged that the study will be beneficial to DUT management on academic staff perceptions on training programmes initiated and provided by DUT, thereby assisting the university to review training programmes that are put in place to empower academic staff.
1.8 Delimitations and limitations

The population used for this study was very small compared to the number of universities in South Africa. The target population had to be managed due to the time and budget constraints.

1.9 Research outline

Chapter 1: Introduction and motivation for the study

This chapter discusses the background to the problem, the objectives of the study, the need and motivation for the research.

Chapter 2: Literature review

This chapter reviewed the relevant literature pertinent to this study.

Chapter 3: Research methodology and design

This chapter present the methodological process applied in carrying out the study.

Chapter 4: Analysis of results and discussion

This chapter present the analysis and interpretation of data.

Chapter 5: Conclusions and recommendations

This chapter will present the conclusions and recommendations drawn from the findings and recommend suggestions for further research.
1.10 Conclusion

This chapter has provided an overview of the study by highlighting the background, research problem, aim, objectives, questions, problem statement and outline of the study.

The next chapter will present the literature review that is relevant to this study.
CHAPTER: TWO LITERATURE REVIEW

2.1 Introduction

Chapter one provided an introduction to this study. The research problem, aim of the study, research objectives and critical questions were identified. This chapter discusses the literature relevant to the study. Chapter two will shed light on the importance of training and development of academic staff. To address the topic, this chapter therefore looks at previous theories and studies.

Mills (2012:2) is of the view that a country is not poor because its people do not work hard but struggling mainly because of the low productivity which is linked to lack of employee’s skills development. Brown (2009:1) acknowledges that employee skill development are now the main drivers of economic competitiveness and are indeed the future prosperities of developing countries today.

Lack of skills among lecturers is still a cause for concern (DHET, 2013). According to Mgijima (2014:359) low throughput rates, high dropout, low progression and completion rates among students is a symptom of ineffective teaching and learning that is complicated by ineffective skills development strategies.

2.2 Training

Education is a progression that is not limited to a classroom and it should be transferred to other generations to come by academics who embody all the knowledge (Akinfolarin, 2014).

Fernández (2013:350) explains that all lecturers are required to be graduates from higher education institutions. They are also required to have broad subject knowledge, a good knowledge of teaching, the skills and competencies required to guide and support learners, and an understanding of the social and cultural dimension of education. However, realistically, the pool of highly qualified staff available to any educational institution is limited and it will always be necessary to develop these skills amongst new and existing staff on an ongoing basis. Training must, therefore, be a continuous activity in every organisation and needs to be given special priority when major problems arise in the organisation, because it is the faculty members who must
take the necessary actions to turn the enterprise around. Training needs to cover the relevant skills, knowledge and attitudes an individual requires in order to overcome problems as well as to avoid creating new problem situations (Hosein, 2008).

Lingham, Richley and Rezania (2006) believe that measurement of the effectiveness of training has to be based on the ability of trainees to put to action the skills obtained, and recommend the importance of applicability of training programmes. They further indicate that education and training should be viewed as crucial ongoing practices in support of organisational growth and advancement, providing a medium for communication of new organisational strategies, new tools, values and new improved ways of performing academic work. Apart from the need to provide training aligned with organisational goals and vision, training focused on career development should also be tailored to the career needs of individuals.

Training assists current staff to be updated in their field of specialisation and improve their work performance. Furthermore, achievement of current and future work standards of organisations can be achieved and maintained by well-trained staff members (Sewdass, 2004).

Training forms part of strategic planning of most organisation since the employee requirements undergo constant changes (Karthikeyan, Karthi and Graf, 2010). These researchers also found that training effectiveness depends largely on the training process which, in turn, depends on establishing a relationship between the subject matter experts and human resource development professionals. Nowadays, employee training is becoming a necessity for every organization, especially since employees are often entrusted with new and different roles and responsibilities during their time of employment.

Williams and Williams (2011) claim that attending capacity workshops and engagement in research activities, attainment of knowledge of five key ingredients, namely, environment, method, content, teacher and students can positively impact students and they are also important vehicles for developing lecturers’ capacity to exercise professional judgment in the classroom and to attain acknowledged teaching and learning goals. Therefore, the importance of providing capacity building opportunities
An effective, quality, training programme is one that adequately addresses the various training needs of employees within the organisation and should evaluate the outcome of the training programme (Nanda, 2009). Bras and Rodrigues (2007) are of the same view that in order to achieve desirable outcomes, learning process organisations should offer ongoing support programmes to staff. Human resource management, whose primary responsibility is to offer support, can assist in integrating all personal activities with each other and strategically with organisational objectives, thus first serving the organisational interest and making training an investment rather than a cost to the organisation (Karthikeyan et al., 2010:80).

2.2.1 E-learning

One of the most important challenges in academic staff development currently is the ever-increasing importance of e-learning and how to ensure that staff become empowered in this field. Technology improvements in education have created new methods, opportunities and challenges for teaching and learning. This is a challenge for lecturers not trained for this mode of course delivery. Thus, this study also seeks to investigate technology empowerment training programmes designed to assist lecturers in this new skill in course delivery.

E-learning can play a critical role in preparing a new generation of teachers, as well as upgrading the skills of the existing teaching force to use 21st century tools and pedagogies. Higher institutions of learning are faced with economic challenges that put pressure on their resources when it comes to finding innovative ways of developing their faculties, even though E-learning plays a crucial role in economic and educational growth of industries (Oye, Salleh and Ai.ahad, 2010). Cariaga-Lo, Worthy, Dawkins,
Enger, Schotter and Spence (2010:19) argue that “the need is to find cost-effective, yet engaging, solutions to the intractable problem of getting faculty to take seriously their own professional development with regard to new technologies for teaching and learning”.

Heirdsfield et al. (2011) state that teachers who are not familiar with new technology face the challenges in applying the new methods of teaching and end up focusing on information delivery instead of improving their teaching techniques through this medium, which leads to continuation of transmission learning. This was also found to be the case in earlier research which found that academics are often encouraged to “go online” by their institution, by either moving or supplementing teaching to an online environment, often resulting in lecturers simply attempting to replicate face-to-face teaching, in effect changing nothing – neither enhancing face-to-face teaching with the available technology nor transforming face-to-face teaching by the available technology. The approach chosen will be determined by several factors, one of which will be existing knowledge of the technological environment being used (Coldwell, 2003).

The lecturers are seen as a central factor in the success or failure of the use of information and communication technology (ICT) in education. “However, training in the use of multimedia is time-consuming and lecturers frequently complain about not having time at their disposal to leave classes or to take time out from their heavy marking schedules to attend training”, (Pooe, Makondo and Mokoena 2010:92–93). Shank (2002) is of the view that ways to overcome such barriers should be found so as to give the lectures a chance to respond to the educational needs of their students and should also be able to partake in the learning development. Training that is executed correctly includes both technical and conceptual issues that will produce increased support for merits of e-learning, and that will lead to lecturers processing appropriate facilitation skills (Shapiro, 2000). Shank (2002) argues that “facilitation skills fall into three sections, facilitating real time events, moderating online discussions, and coaching students. He argues that if lecturers do not achieve a high level of facilitation skills, and maintain these in ongoing interaction with the students, even the most effectively designed e-learning courses will be unsuccessful”.

Collaborative training team approach is effective when it allows technology training into the teaching context through informative dialogue which will complement technology skill attainment, (Friel, Britten, Compton, Schoch and VanTyle, 2009). They furthermore state that IT representatives provide one-on-one faculty support between training sessions and a hotline for immediate problem solving to help with development of technology skills.

Charlesworth (2002) discovered that lecturers find challenges with the application of technology into their lectures or teaching methods. Wilson (2001) found relevant, even to this day, that new lecturers that enter today’s information age find it easy to accept the technological advancement because they most likely would have used the computer or have access to the internet than those in previous years.

Training is, therefore, a central concern for universities, especially those implementing distance learning methods. However, Shapiro (2000) cautions that the opportunity to redesign and improve university teaching practices through e-learning must not be usurped by a focus on training lecturers how to use the hardware and software only. Inadequately trained lecturers using e-learning in educational environments can become an obstacle in a finely balanced learning process and can lead to problems in application use and in the perception of students (Volery, 2000). In contrast to traditional teaching skills, e-learning requires lecturers themselves to be committed to a constant and changing learning curve, which may involve a mixture of formal training courses in conjunction with conferences and other less formal techniques, if they are to acquire and develop the skills needed to be an effective e-learning tutor (Shank, 2000).

2.3 Transformation pedagogy (Teacher-centred paradigm towards a learner centred paradigm)

According to Morrison (2012:4), “transformation of teaching in higher education necessarily involves the various practices of research, learning and teaching, and each dimension depends on lecturers’ capabilities. Therefore, an effective lecturer has been conceptualised as one who produces desired learning outcomes in the course of his/her duty as a lecturer. The ultimate goal of education is for the student or learner to gain knowledge: how it is created, how it is understood and how it can be applied
determines the information a student will merely study, memorise and process as declarative knowledge”.

As recognised by the literature, the transformation of higher education is witnessing numerous challenges. Katz and Earl (2010:29) state that “an engaging focus challenges teacher to reconceptualise, unlearn, or make changes to existing practices and structures, legitimating the change process by making the status quo more difficult to protect”. Opfer and Pedder (2011:387) state that new experiences lead to a change in teaching habits and may influence and lead to amendments and formation of new belief systems for lecturers, and it is at the juncture of these new beliefs and experiences that lecturers make professional decisions that lead to new educational possibilities for lecturers.

According to Makondo (2011), the role of lecturers has changed from being dispensers of education to being managers of both student and environment learning. Baxter and Gray (2001) agree that lecturers have to shift to a model that enables students to be actively engaged in the learning process. Weimer (2002) states that the fundamental concern of learner-centred education is learning, and to evaluate learner-centred classroom is to promote learning and is not limited to good grades. Devlin and Samarawickrema (2010) agree that “effective teaching is broadly understood as teaching that is oriented to, and focused on, students and their learning, and that it needs to meet the requirements of the context in which it occurs”.

The Funds of Knowledge (FoK) approach links to educational fairness coordination that works on the weave of recognition of student identities and redistribution of school knowledge. When teachers demonstrate to their students that they desire to learn about them and from them, the teachers value and recognise the students’ identities and acknowledge that they are experts of their lives and that the teachers can learn from them. This approach values the students’ ways of knowing, acting and being, (Zipin, 2013:3). Zipin (2013:8) further states that when FoK is used productively in lecture rooms it establishes an educational relationship between the lecturer and student as well as a strong fundamental form of democracy.
Effective learning by students requires feedback. Students should have the opportunity to get feedback on a project or idea from their peers. According to Cho and Cho (2011), “peer assessment is an interactive learning activity that is effective for the improvement of performance, knowledge, motivation, and through peer assessment, students can learn to view their drafts from the viewpoints of other people”. Students are given the chance to communicate with lecturers about subject matter under discussion (Grosser, 2007). Morrison (2012:1) and Weimer (2002) state that, in a student-centred classroom, there is a change in roles of both the lecturer and the student, to allow for a shift of lecturers from being in charge in class to being a guide, and will help lecturers to view students as seekers of knowledge.

The role of the student has also shifted from being a recipient to being a participant in the learning process (Morrison, 2012:3). Furthermore, the researcher refers to high impact practices gained in higher education and these practices range from community learning courses and undergraduate research to flipped classrooms and problem-based education (Morrison, 2012:3). Brodie (2013:7) states that lecturers must be willing to change old practices that do not yield results in order to truly shift practices in ways that support learner improvement. Leibowitz and Adendorff (2007:113) state that, to bring about change, new teaching and learning strategies should be emphasized.

Roehl, Reddy and Shannon (2013) believe that active learning can be fairly simply achieved by integrating in-class activities alongside the traditional lecture method. In the flipped classroom, the teacher will give the instructional content as homework (Roehl et al., 2013:45). This allows students to view online the content and prepare questions to ask in class that they thought were unclear to them. Tucker (2012:82) also mentions that lecturers now video records and instructional content and place them online for students to access before and after class. Thus, the classroom now becomes a place to “work through problems, advance concepts and engage in collaborative learning”. Furthermore, the advantage of the flipped classroom is that the lesson can be rethought and revisited to cancel out any misunderstandings allowing for the more effective use of the one thing that is most scarce in education, i.e., time.
The responsibility for learning naturally shifts to the student in a learner-centred setting (Weimer, 2002). However, neither students nor teachers are adept at making this shift. The onus is on the faculty (lecturers) to redesign and conduct the course in a way that requires students to hold up their end of the educational contract. In a student-centred learning environment, for instance, students can be asked to make predictions about the outcome of a classroom demonstration. They then observe the experiment or demonstration, describe the results, and discuss and reflect on the observed outcome (Sharma, Johnston, Johnston, Varvel, Robertson, Hopkins, Stewart, Cooper and Thornton, 2010).

Kember and Kwan (2000) suggest that the concept of teaching can be divided into two distinct orientations. First, is the orientation towards the transfer of knowledge (teaching as knowledge transmission) and, second, is the orientation towards facilitating learning (teaching as learning facilitation). Lecturers, who belong to the first orientation, concentrate merely on having ample knowledge on the subject matter to transfer to students’ information accurately and clearly, whereas the orientation towards learning facilitation involves understanding teaching as a facilitative process designed to develop the students’ problem solving and critical thinking skills. The second approach, which is the teaching as learning facilitation, is of the view that students need to take part in their learning and should be able to question why they are doing certain tasks.

2.4 Changing technology and ‘blended learning’

Garcia Ruiz (2010) states that higher education has undergone changes in recent years and the reason for these changes, amongst others, are changes in social, political and economic contexts and massification in higher education. Morrison (2012:4) is of the view that knowledge is information that is entrenched, information that is meaningful and allows one to seek more information in order to have understanding. When one has understanding of the information they have at their disposal, they know how to make sense of it and it becomes easier for them to relate that information to their lives. Academic freedom or autonomy, as opposed to the demands of the national economy; affect knowledge production. Currently, this freedom is subjected to, and
complemented by, the employers’ views on various aspects of higher education, such as curriculum, communication skills and the use of ICT (Garcia Ruiz, 2010).

Phillips (2005) states that lecturers are seen as the part of the culture teaching in university. Academics have a teaching perception with a focus of nurturing students, and they make this possible by making personal contact with students during and after lectures. Thus, this study emphasises that institutions of higher learning should improve and supplement traditional, classroom-based courses by taking advantage of the internet and technology, and empowering lecturers to utilise and integrate technology and new teaching methods into student-centred learning practices by offering appropriate training programmes to lecturers.

Technological developments and organisational change have gradually led some employers to the realisation that success relies on the skills and abilities of their employees, and this means considerable and continuous investment in training and development (Khan, Khan and Khan, 2011).

According to Ertemer and Ottenbreit-Leftwich (2010) the change in lecturer belief is recommended as a crucial part for the facilitation change in relation to technology use. To formulate collective beliefs that lecturers can be motivated to work on a technological environment that allows for dialogue, debate should be apparent in organisations (De Liddo and Buckingham, 2010). Mansfield and Volet (2010) state that the procedure of creating collective beliefs should include the examination of existing beliefs, filtering prior beliefs, alignment and conflict of ideas; all these were found to be important when developing a set of beliefs related to classroom teaching.

Irwin, Ball and Desbrow (2012) explain ‘blended learning’ as integrating a variety of media to deliver teaching material to students, and point to its increasing prevalence in university education. Blended learning is often associated with the use of web tools such as email, lecture recordings, blogs, discussion boards, and a dedicated university learning management system. It is also sometimes called ‘hybrid’ learning as it seeks a compromise between conventional classroom lectures and pure e-teaching (Henrich and Sieber, 2010). It may also involve the use of mobile technology.
Some of the challenges associated with the use of mobile technology are that they must be aligned with the course objectives and make educational sense; that the instructors must be equipped with the required technical skills in order to know how to use the mobile devices; organisational practice should assist lecturer's applications; and should be designed in a way that enables students to easily use mobile devices in an educational context (Menkhoff and Bengtsson, 2010).

Powell (2010) believes in the idea of putting each faculty member in the position of online student by running online workshops giving faculty members direct experience of online learning. Pooe, Makondo and Mokoena (2010:92–93) “highlighted the importance of E-learning by noting that the unparalleled knowledge boom that has defined the present century makes it essential that lecturers and students alike acquaint themselves with the technological innovations that have overhauled the teaching and learning domain”. Heirdsfield, Walker, Tambyah and Beutel (2011) state that Learning Management Systems (LMS) such as Blackboard (Blackboard LearnTM, 2009) are currently being used innovatively in teaching and learning in higher education.

According to Salawudeen (2010), technology allows users a wider reach for education in many countries world-wide and more flexibility in learning. The use of mobile learning means using wireless electronic technology to deliver and receive skills that have been practised in developing nations (Ayodele, 2010). Encouraging student engagement is an important factor in the implementation of e-learning because students learn when they feel like they are fully engaged in their learning (Parsons and Taylor, 2011:17-36)

Perkins and Saltsman (2010) state that the desired outcome is a transformation of faculty and development of a culture of innovation in higher education. Bearing in mind the development of institutional faculties for the future, Brooks (2010) is of the view that expectations on the use of new technology increases with technological advancement, so faculty members may need timeous assistance to overcome technological-related problems.

De George- Walker and Keeffe (2010) state that the success of blended learning is not only the result of simple integration of ICTs with the face-to-face approach. When one has a large number of students, this type of learning provides a greater opportunity to
comprehend the knowledge presented (Osguthorpe and Graham, 2003; Singh, 2010). The use of blended learning may produce changes in learning patterns and practices. Lei (2010) states that blended learning reinforces students’ understanding of the subject in question, thereby enhancing and supporting the learning process.

The possibility of having interaction has proved to be a factor that increases motivation by creating positive attitude towards learning and leading to higher marks being awarded (Donnelly, 2010; Woltering 2009). In addition, learning materials provide reinforcement to the understanding acquired in class and motivate students, thereby improving and supporting their learning process (Lei, 2010). Wang, Shen, Novak, and Pan (2009) believe that blended learning enables students to become more involved in the learning process.

2.5 Academic qualifications

A teaching qualification can be defined as those academic and professional degrees that enable a person to become a registered, professional and qualified teacher in primary or secondary school or in higher institutions, particularly in the faculty of education. Such qualifications include, but are not limited to, the Masters in Education, Postgraduate Certificate in Education (PGCE), the Professional Graduate Diploma in Education (PGDE) and the Bachelor of Education (Teachers Registration Council of Nigeria, 2010). Possession of such a qualification has been shown to have a positive effect on teacher success in higher education.

University teachers need to be in possession of qualifications based on their competence and responsibilities in different teaching and learning aspects. Ideally, they should also have their competency regularly tested. Kurshid (2008) states that there’s a presumption that lecturers with required qualifications are able to achieve good performance. Part of the duties of a lecturer is that they transfer knowledge, advance skills and character in addition to other duties as they act as managers, facilitators, coaches and become role models for students (Sidek, 2010).

Syde Najmuddin et al. (2011) are of the view that lecturing is no longer the central task of lecturers anymore. With the new development and transformation in teaching in the
education system, lecturers are expected to be more of cultivators, inspirators and
providers of encouragement to students. In 2001, a “competence model” was provided
by Westera who demonstrated that a teacher’s performance depends on the teachers’
knowledge, comprising both subject matter and general pedagogy, which is directly
linked to the teacher’s ‘competencies, characteristics and attitudes’.

Fah and Osman (2011) state that qualification, characteristic and competency of
lecturers are directly related to the quality of teaching they provide in the classroom
and their overall academic performance of the lecturer. Makondo (2010) is of the
opinion that lecturers’ qualifications should be questioned and improved. On this point,
Weinstein (2010) also notes that the lecturer’s motivational skills and subject
knowledge are essential. Weinstein adds that students are, in most cases, motivated
by the knowledge of the subject matter of their lecturers, their quality of teaching,
motivational skills they possess and the level at which they challenge students
intellectually, engaging them in class and their ability to always provide them with
academic help outside of the classroom. If all of this is to be achieved and sustained,
then lecturers will need to acquire further qualifications, develop new qualities and
continue to grow and evolve as role models for students (Celikoz, 2010).

2.6 Performance and performance management

As the teacher is the heart of classroom instruction, he/she should be aware of the
different teaching approaches available and must have a good understanding of
students, increasing the need to train university teachers in order to achieve
professionalization of the teaching body.

Mathefane (2007) describes training as an act of increasing the knowledge and skills
of an employee so that he or she can do a job adequately. Mathefane furthermore
states that the essential component of high performance in the work system is training,
as this system relies on employee’s skills, knowledge and initiative to identify and
resolve issues. For this training to be possible, a skilled and motivated workforce with
knowledge and capacity is needed to perform these essential tasks.
Sahan (2009), in his discussion of competency-based teacher education theory, argues that there is a link in all areas of performance in which performance of teachers can be assessed. He furthermore states that teachers' proficiencies are observable constructs, i.e., they can be measured and assessed using teachers' performance. Kingdon (2006) examined the effects of teachers’ attributes on their students in all subjects through the variation approach in India. The study discovered that teachers with Master's Degrees in Education and pre-service training in education will positively influence students’ achievement levels. Therefore, it should be concluded that academic qualified teachers play a major role in students’ performance.

According to Pongatichat and Johnston, as cited by Yasin and Gomes (2010), performance measurement is considered to be an important aspect of management. This critical organisational process provides the basis for an organisation to assess how far it is progressing towards its planned and targeted objectives, helping to identify areas of strength and weakness, and facilitating future initiatives aimed at improving organisational performance.

With respect to a lecturer’s “performance”, this can be defined as the ability level attained in planning, implementing, and evaluating throughout the teaching-learning process (Mundarti, 2007). It involves lecturers’ efficacy in doing or completing a teaching job. Unlike other types of performance, lecturers’ performance has been understood as requiring different dimensions. For instance, the study by Fah and Osman (2011), in assessing the overall performance rating of lecturers, uses two dimensions: most effective and best educator. Similarly, Halim (2009), in measuring the performance of university lecturers, adopted an objective approach. He noted that lecturers’ performance is often based on the three key aspects of their professional responsibility, which are: education and teaching; research; and community service. He sees education and teaching as including achievement in the full range of teaching activities, from preparation to conducting evaluations. He also notes that, to effectively examine lecturers’ performance in education and teaching, students should be involved as respondents, since they are the only ones who can effectively evaluate their lecturers’ performance. Ganyaupfu (2013) states that teaching skills of lecturers can be measured on the lecturer’s abilities around comprehension and transformation of knowledge concepts to be imparted to learners.
An empirical study conducted by Amin and Khan in (2009) evaluated teachers’ performance through a survey questionnaire approach and concluded that teachers’ personal characteristics strongly affect performance. The study provided a list of positive personal characteristics such as maturity, creativity, integrity, self-confidence, intellectual ability and intelligence. Another later study conducted by Fah and Osman (2011) also found that lecturers’ characteristics were highly correlated with their overall performance.

Adunola (2010) highlighted that the teaching methods implemented by lecturers should be aligned to the subject content and specific outcomes in order to effectively enhance transmission of knowledge and information from the lecturer to the students.

2.7 Motivation and de-motivation

Beyond creating and managing the learning environment, making use of appropriate learning activities, and communicating effectively, successful teaching entails motivating learners and understanding ways of learning that can be accomplished by a motivated lecturer. Motivation is the “willingness, drive or desire to engage in good teaching” (Michaelowa, 2002). Working for externally determined rewards is ‘extrinsically motivated behaviour’ while people’s desire to learn in order to satisfy their curiosity and to feel competent is ‘intrinsic motivation’. Intrinsic motivation is often necessary for persistence of motivated behaviour (Arif, 2003).

Poor working conditions and lack of motivational mechanisms can result in low morale amongst staff members, which, at the end, will result in poor student performance, as lecturers play the role of mentors for their students. Seeing that motivation is a valuable contribution, different authors have explored issues relating to motivation of lecturers in higher education as it impacts greatly on lecturers’ performance and their involvement in particular activities (Muhammed, 2010).

The ability for trainees to learn a skill is not enough; motivation and desire to learn is vital. A way to assess if trainees have the motivation to learn is through staff
involvement on their jobs and careers, (Berdin and Russell, 2013:284). According to Bain and Fedynich (2010) students reported that the importance of having a mentor is not limited to guiding them professionally, but the lecturer must also possess comprehensive understanding of the academic programme to guide the in a proper direction. Universities should, for instance, not continue to have inexperienced lecturers, without a good publication record and teaching modules such as research methodology.

Motivation is also a critical element of successful training programmes (Bernadin and Russell, 2013:284). Their study indicated that if trainees do not see the value of training, they will be unlikely to learn new techniques or to use them successfully in their work. Trainees should, therefore, be informed in advance about the benefits that will result from training as this may strengthen their motivation to learn, practise and remember the new practices taught. It has also been shown that people need to teach each other in order for them to learn and be educated effectively themselves (Fah and Osman, 2011).

Koerselman (2013) also finds that motivation is important for everyone. He identifies that motivation is a function of performance and performance is one’s own capacity to perform or complete a job. Pedro (2013) defines motivation as the hope, desire, impulse, or urge to achieve something. Motivation is also defined as an attitude (accept/reject) related to interest, ability, skill, or strength. Motivation is also understood as the ability, skill, or strength a person possesses to perform a task which then becomes his/her responsibility.

Haddock (2010) defines morale as the general level of confidence or optimism experienced by a person or group of people, especially if it affects discipline and willingness. Conversely, high morale suggests that an individual will participate with enthusiasm and sense of commitment (Finger, 2005:66; David and Gary, 2010:56).
Millet (2010) mentions the following six reasons why staff morale is important:

- Improved productivity;
- Increased quality of work;
- Higher attention to detail;
- Improved performance and creativity;
- A safer workplace; and
- Reduced number of leave days taken by employees.

According to Mazin (2010:59), it is evident that morale of employees is crucial in any organisation and, if not effectively managed, it could lead to adverse effects on productivity and the overall performance of the organisation.

Kaczmarczyk and Murtough (2002:170) indicate that there are measures which employers can put in place to avoid low morale of employees. Those measures include, amongst others; praising employees for good performance could boost their morale and give them a sense of belonging; and give employees freedom in their jobs as that enables them to perform their work with confidence.

According to Kheng (2011), individual attributes, traits and qualities contribute to the performance of a lecturer. Empirical studies conducted by this researcher affirm that both psychological and demographic factors affect individual performance. Similarly, Lucky (2011) found that individual qualities played a major role in an educator’s performance. Robbins and Judge (2007) argue that ‘trait theory’ differentiates leaders from non-leaders by focusing on their personal characteristics, attributes or qualities. The theory differentiates between teachers and non-teachers by looking at their personal or individual characteristics. Schilling and Koetting (2010) state that competency-based theory stresses that specific competencies and personal characteristics influence teachers’ effectiveness and performance. Straydom (2011) is of the view that reactions, conduct and behavioural patterns are influenced by one’s attitude and feelings. How staff conduct themselves is presumed to have a direct effect on how they present themselves.
According to Hussin (2011), job satisfaction is affected in the working environment by various factors. Herzberg’s ‘motivation-hygiene theory’ understands that job satisfaction emerges from various factors (Tan and Waheed, 2011). This theory holds that ‘motivators’ exist in the workplace and that these play a positive role among staff. Berghe (2011) states that levels of satisfaction changes with the absence of motivators. Khalifa and Troung (2010) state that the predator role stipulates that, in any workplace, job satisfaction has a direct relationship with lecturers’ outcomes. This coverage theory gives attention to external factors, or content factors, such as supervision schedules, salary and the policies of the workplace as well as to the interpersonal relationships which exist in the workplace. Dhanapal, Alwie, Subramaniam, and Vashu (2013) consider intrinsic factors as job content, self-image and individual characteristics. The outcomes in this theory are that salary, good work conditions, status and security emerge as key to providing job satisfaction.

Olorunsola (2012) sees job satisfaction as one of the fundamental factors that is linked to staff performance and also results in staff involvement. Gebremichael and Rao Prasada (2013) state that staff needs, and job satisfaction should not only be considered but also improved. Higher institutions of learning should be aware of factors that keep staff satisfied or results in increased levels of satisfaction and should be able to offer them in time so as to increase effectiveness of staff. Kellison and James (2011) attest that the occurrence of these inner feelings motivates staff to be more effective in relation to their work. It is a necessity for universities to provide primary and principal needs of staff (Lamptey, Boateng and Antwi, 2013).

“Education – in all its forms and at all levels – is seen not only as an end in itself but also as one of the most powerful instruments for bringing about the changes required to achieve sustainable development. Teachers, of course, are vital actors in this process and consequently have been given special attention.” (UNESCO, 2010).

2.8 Training programmes

A sound, quality, training programme is the vehicle that best ensures that all employees are adequately prepared to perform their jobs in accordance with stated human
resource requirements. Defined as the systematic acquisition of skills, rules, concepts or attitudes that result in improved performance, training has become an established part of organisational learning and change, employee evaluation, and career development while the evaluation of training has become one of the most important practices in the field of human resource development. There is more pressure today than ever before to prove the results and effectiveness of training investment (Joyce and Lowinson, 2005).

Training is imparting a specific skill to do a particular job while development deals with general enhancement and growth of individual skill and abilities through conscious and unconscious learning (Cole, 2002). The main purpose of training and development is by improving employee competencies so that the organisation can maximise efficiency and effectiveness of their human asset (Meyer and Smith, 2000).

According to Sabir, Akhtar, Azzi, Sawar, Zulfigar and Irfan (2014), training is necessary to ensure adequate supply of staff that is technically and socially competent and capable of career development into specialist departments or management positions. There is, therefore, a continual need for the process of staff development, and training fulfils an important part of this process. Training should, therefore, be viewed as an integral part of the process of total quality management.

Lingham et al. (2006) state that, for lecturers to cope with the rapid changes, and compete in today’s unpredictable environment, organisations are challenged to develop meaningful training programmes for their employees. Pfeffer, as cited by Lingham et al. (2006), argues that training can be seen as a source of competitive advantage when wisdom is used by organisations. Prahalad, as cited by Lingham et al. (2006), attests that training should, in any organisation, be part of developing careers of employees and managers and it should include both the analytic and experiential sides of trainees. Katz, as cited by Lingham et al. 2006), cautions that, although organisations spends billions on training of employees, effective learning is usually minimal, even though it is deemed necessary and crucial for organisations to conduct evaluation after training so as to ensure the efficient use of organisations’
resources. There are studies that have been conducted on evaluation of training and its usefulness for the organisations and employees (Mathefane, 2007). According to Wickramasinghe (2006), it is important to assess how trainees behave outside the training programme, the fruitfulness of the training programme and also assess whether the training programmes yield the desired outcomes. Furthermore, the researcher states that amongst other ways of measuring the effectiveness of training is the ability of trainees to apply and maintain the skill, knowledge and abilities gained to the work environment. When determining the extent to which training is successfully received in the workplace, the post-training environment plays a crucial role.

A formal training programme is an effort by the employer to provide opportunities for the employees to acquire job-related skills, attitude and knowledge, (Rahman, Ng, Sambassivan and Wong, 2013). This means that for any organisation to achieve its objectives of its training programme, the design and implementation should be planned and systematic, and tailored towards enhancing performance and productivity.

Macdowall and Saunders (2010) state that, if employees are to experience flexibility and effectiveness on the job, they need to acquire and develop knowledge and skills, and if they are to believe that they are valued by the organisation they work for, then they need to see visible signs of management’s commitment to their training and career. Training and development are the processes of investing in people so that they are equipped to perform well. These processes are part of an overall human resource management approach that hopefully will result in people being motivated to perform (Macdowall and Saunders, 2010 and Elnaga and Imran, 2013).

2.9 Conclusion

It can be assumed that staff members will always want to develop meaningful career paths which require opportunities to learn and develop if they want to attempt new and challenging kinds of work, to grow and to expand their abilities. However, the literature reviewed above indicates that the effect of training on job performance and the output of employees, as well as the determination of whether or not there is a difference between pre- and post-training job performance need to be further explored.
The chapter also focussed on academics’ motivation, because successful teaching entails creating and managing the learning environment and making use of appropriate learning activities to enhance learning, communicate effectively, motivate learners and understand ways of learning that can be accomplished by themselves as motivated instructors. The chapter also discussed academic staff performance and qualifications, as a lecturer with the required qualifications and the right characteristics is assumed to be able to achieve a better performance, and his/her performance depends largely on the requisite knowledge base and, hence, on effective training. The transformation of classrooms from teacher-centred to student-centred approaches was also discussed, effective teaching currently being broadly understood as teaching that is oriented to, and focused on, students and their learning; that meets the requirements of the context in which it occurs; and, lastly, that encompasses changing technology where each faculty member is put in the position of an online student. The latter was seen as necessarily involving running online workshops that provide faculty members with direct experience of online learning.

The next chapter discusses the research design, including the target population, sampling and data collection. The chapter further discusses ethical considerations and reliability and validity issues within the scope of the study.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the design and methodology that was used to acquire data in this study. It begins with a description of the research design, research population and sampling method. The data collection, measuring instrument and data analysis are outlined here, followed by a discussion of the reliability and validity of instruments, as well as the ethical considerations that apply to this study.

3.2 Research design

According to Khan (2008:69) and Malhotra (2011:16), research design provides a structure or proposal for conducting the research study by providing a specific process necessary for obtaining the required information needed to solve the research problem.

Creswell (2009:3) explains that research designs are strategies and procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis. Pannersevlam (2004:12) adds that the research design provides complete guidelines for data collection and its purpose is to specify a plan for generating empirical evidence that will be used to answer the research questions. It is important to match the question to an appropriate design since there are many types of research questions and many types of research designs (McMillan and Schuhmacher, 2006:21).

According to Mcmillan and Schumacher (2010:490), a research design is the plan that describes the condition and procedures for collecting and analysing data.

According to Blumberg, Cooper and Schindler (2014:152) research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or programme of the research.

According to Sekaran and Bougie (2013) research is simply the process of finding solutions to a problem after thorough study and analysis of the situational factors. They add that a research design is the arrangement of conditions for the collection, measurement and analysis of data in a manner that indicates the relevance to the
research purpose which ultimately forms the conceptual structure within which the research is conducted. It includes the outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data (Dhawan, 2010).

In order to achieve the aims and objectives of this study, a questionnaire was distributed across all DUT faculties mainly to the academic staff sample and a follow-up was also done.

3.3 Research methodology

Leedy (2010:93) states that research methodology enables one to extract meaning from data. Ghauri (2011:85) defines methodology as a systematic, focused and orderly collection of data for the purpose of obtaining information from them to solve or answer research problems or questions. The term, in a literal sense, means the science of the study of methods. Methods are specific techniques used in social research whereas, although strictly meaning studies of methods, the term, “methodology” is usually employed to indicate the sets of conceptual and philosophical assumptions that justify the use of particular methods (Payne, 2010:148).

There are three types of research designs: quantitative, qualitative and mixed methods (Creswell, 2009:3; McMillan and Schuhmacher, 2006:22). Qualitative design is an approach of testing theories by examining the relationship amongst variables which can be measured, and quantitative design is an approach of testing theories by examining the relationship amongst variables which can be measured (Creswell, 2013:4). In this study quantitative research method was adopted as it allowed the researcher to distance him/herself from the respondent so as to avoid personal bias.

3.3.1 Quantitative research method

Teddlie and Tashakkori (2009) define quantitative research as the technique associated with gathering, analysis, interpretation and presentation of numerical data. Martin and Bridgmon (2012) add that quantitative research involves the interplay among variables after they have been operationalised; this type of research examines
variables that typically vary in quantity (size, magnitude, duration or amount). The results or data obtained from these measurements are usually numerical scores that can be summarised, analysed and interpreted using standard statistical procedure (Gravetter and Forzano, 2012). In this study data was entered in a spreadsheet and coded in order to give meaning to the data and a descriptive statistical analysis was used to summarise data, percentages were used to express a set of scores.

In this type of research, researchers typically pose specific, narrow questions and collect a sample of numerical data from participants in the hope that they will yield unbiased results that can be generalized to a larger population. According to Creswell (2013:150), in quantitative research, many terms must be clearly defined and delineated in the study so that the researcher may share common and consistent definitions with his/her peers.

3.4 Population

The target population is the complete group of objects or elements relevant to the research project. They are relevant because they possess the information the research project is designed to collect (Hai Jr, Wolfinbarger, Money, Samouel and Page, 2011:165). Blumberg, Cooper and Schindler (2014:174) describe population as the total collection of elements about which one wishes to make some inference. Research population refers to the group of proposed individuals or elements with specific characteristics under which the study takes place and is of interest to the researcher, (Jha, 2014:183). Academic staff from the DUT formed part of the target population. The target population for this study is 200 and the sample size 132.

Population, as defined by Johnson and Christensen (2012), is the larger population to whom the study is to be generalised. They further add that generalising from a sample of individuals to the larger target population is carried out by defining the larger target population of individuals of interest and then randomly selecting a sample of individuals from this target population.

The primary method of data collection in this study was carried out using questionnaire that was administered to academic staff of DUT across six campuses. Denscombe
(2010) agrees that questionnaires are at their most productive when used with large numbers of respondents and when what is required tends to be fairly straightforward information. A survey is a systematic method for gathering information from (a sample of) entities for the purposes of constructing quantitative descriptors of the attributes of the larger population of which the entities are members (Groves et al., 2009).

According to Sekaran and Bougie (2010:295), the population size of 200 should have a sample size of 132. The reason for targeting academic staff was to get their perceptions on training programmes initiated by DUT. The technique of probability sampling was adopted for this research because this technique gives all the individuals equal chances of being selected (Sekaran & Bougie, 2010).

### 3.5 Sampling

According to Sekaran and Bougie (2010:266), sampling is the process of selecting sufficient number of right elements from the population, so that a study of the sample and understanding of its properties or characteristics make it possible for one to generalise such properties or characteristics to the population elements. They add that it is, therefore, imperative that the right individuals, objects or events are selected as representatives for the entire population (Sekaran & Bougie, 2010).

A sample is a highly representative unit from the universe or whole lot, i.e., it is a part of a population or a subset from a set of units, which is provided by some process or the other, usually by a deliberate selection with the object of investigating the properties of the parent population or set (Sontakki, 2010).

Cohen, Manion and Morrison (2007) highlight that the researcher needs to make the correct judgement in terms of the four key factors in sampling, which are: sample size; representatives and parameters of the sample; access to the sample; and the sampling strategy to be used. Sekaran and Bougie (2013) add that the major steps in sampling are population definition, determining the sample frame, sample size and executing the sample process. For this study systematic sampling approach was adopted as sample was arranged in order and selected at regular intervals from the list, systematic sampling ensures that population is evenly sampled. The sample range was chosen
from academic personnel ranging from professors, head of departments, lecturers, senior lecturers and junior lecturers of the Durban University of Technology.

Bless, Higson-Smith and Kagee (2006:73) note that formally-structured organisations may be used as the units of analysis in social research. However, the questions that need to be answered may relate to certain employees from different organisational structures and individuals are the most common elements for analysis chosen because they belong to a certain group.

3.5.1 Sampling design

According to Vogt, Gardener and Haeffele (2012), there are two main categories of sampling, i.e., probability and non-probability sampling. They state that, in probability sampling, each respondent has a known probability of being selected for inclusion in the study and, because the sample probabilities are known, inference statistical techniques are used to make generalisations about the population. They also define non-probability sampling as probability of inclusion is unknown and, therefore, the use of inferential statistics is inappropriate because the sample probabilities are unknown. Blaxter (2012) states that the most widely used form of probability sampling is that of random sampling where every individual or object in the group or population has an equal chance of being chosen for the study.

Populations are often defined in terms of demography, geography, occupation, time or some combination of the above (Simon, 2008: para.1). Bless, Higson-Smith and Kagee (2006:73) further point out that the population could be an entire group that can be compared to another group.

Durrheim (2006:49) refers to the process of sampling as the selection of research participants, and involves decisions about which people, settings, events, behaviours and/or social processes that need to be observed. Further, sampling is defined as a process of selecting units (organizations) from a population of interest so that by studying the sample one may fairly generalize one’s results back to the population from which they were chosen (Trochim, 2006: para. 1).
It is believed that, if sampling is done carefully using the correct procedure and is representative of the population, it is possible to generalize the results to the entire research population (Dawson, 2002:47).

Blumberg, Cooper and Schindler (2014:180) state that probability sampling is based on the concept of random selection, a controlled procedure that ensures that each population element is given a known non-zero chance of selection. Simple random sampling is the simplest form of probability sampling. Simple random sample is considered a special case in which each population element has a known and equal chance of selection.

The researcher considered probability sampling to be appropriate to address the objectives of the study and to ensure that sufficient data were collected to meet the study aim and objectives.

### 3.6 Data collection

According to Dlabay and Scott (2011:442), data may be placed into two categories: primary and secondary data. Secondary data are disseminated through some media like external reports, newspaper, hand books, magazines or websites, scholarly journal articles and books (Srivastava and Rego, 2011:5). Primary data are collected by the investigator directly from study participants by in-person or telephone interviews, mail survey, or computerised questionnaires to address a specific research issue or hypothesis (Velentgas, Dreyer, Nourjah, Smith and Torchia, 2013:109).

Quantitative data in this study was gathered by means of open and closed questionnaire administered to DUT academic staff across six campuses. Once the researcher identified the methods of data collection, a sample was the drawn from the target population. Maftoon and Rezaie (2013:12) states that open-ended questions encourage a more meaningful negotiation as it promotes for more interaction and multifaceted answers, while closed-ended questions does not reflect genuine communication as they encourage short answers. The researcher adopted both open-ended and closed-ended questionnaire as the use of open-ended questions allows
respondents to give more information which includes their understanding of the subject, while close-ended questions makes it easier for the researcher to compare responses.

A data collection plan defines all the details concerning data collection, including how much and what type of data is required and when and how it should be collected (Tooling University, 2008: para.1). Leedy and Ormrod (2005:196) highlight that questions such as, what data is needed? how will the data be secured? and how will the data be interpreted? need to be answered.

In this study, a quantitative approach was adopted and data was collected from academic staff, comprising of professors, heads of department, senior lecturers, lecturers and junior lecturers from six campuses across DUT, namely; City, ML Sultan, Ritson, Steve Biko, Riverside and Indumiso. Quantitative research tends to focus on what is now, that is, on what respondents intuitively know and have the facts of including what the respondents have done (Pellissier, 2008:19-20).

In this study, the researcher used a combination of both primary and secondary data, first conducting secondary research to understand the theory and framework of this study by reading scholarly journal articles and books. This was then followed by the use of primary data, using appropriate data collection instruments.

### 3.6.1 Data collection instrument

Sekaran and Bougie (2010:180) state that primary data refer to information obtained first-hand by the researcher on the variables of interest for the specific purpose of the study and secondary data refer to information gathered from sources that already exist. Data collection is a fundamental and integral aspect of the research design. Both primary and secondary data sources were considered in the collection of information relevant to this study. Research methods are tools used to collect data (Dawson, 2002:27).

There are various types of data collection instruments, which include questionnaires, interviews, observation, focus groups, telephone surveys and more. The most
common types, however, are questionnaires and interviews. Kirakowski (2000) highlights that a questionnaire is a method for the elicitation, recording, and collecting of information. A questionnaire is a printed document listing a series of questions pertaining to the problem under investigation and is addressed to a statistically significant number of subjects; the investigator requires answers to these questions and sufficient space is provided for responses from respondents through self-completion (Payne and Payne, 2004:186; Answers.com, 2007).

### 3.6.2 Questionnaire

Data collection instruments include questionnaires, which may be structured or unstructured. With a structured questionnaire, there is a list of questions written down and asked to every sample in the same manner. With an unstructured questionnaire, the researcher probes and finds more views on the study because the person being interviewed is not limited by questions when giving his/her views. Rossouw (2005:129) says that questionnaires may form the basis of larger-scale national opinion polls.

Bless and Higson-Smith (2010:156) describe a questionnaire as an instrument of data collection consisting of a standardised series of questions relating to the research topic, to be answered in writing by respondents chosen for a study. In this study questionnaires was used in the collection of information, which will consist of close-and open-ended questions.

Charlesworth and Morley (2000:139) describe a questionnaire as a series of questions designed to provide accurate information from every member of the sample. To help achieve this provision, the questionnaire should be clear and unbiased, easy to understand and should maintain the respondents’ interest, and motivation.

Bless, Higson-Smith and Kagee (2006:132) advise that, once the data have been collected and before coding the data, the researcher has to make sure that each question has been answered and the answers are properly recorded. The completeness of each questionnaire is often essential to decide whether to discard the questionnaire. Further, Sekaran (2003:302) discusses the handling of blank responses as not all respondents will answer every item in the questionnaire for reasons of not
understanding the question, not knowing the answer, or simply not willing to answer. In this study the researcher checked each questionnaire to ensure that there were no blank questionnaires and blank questionnaires found were rejected.

3.8 Pilot study

A pilot study is a smaller scale version of the main study and is designed to check that the design is doing that which it is designed to do (Hall, 2008:79).

All data gathering instruments should be piloted to test how long it takes to complete them, to check that all questions and instructions are clear and to enable one to remove any items which do no yield usable data (Bell, 2010). He adds that the purpose of the pilot study is to get the bugs out of the instrument so that respondents in the main study will experience no difficulty in completing it.

Andres (2012) adds that the purpose of this testing is to: ensure that the level of language used in the questions is appropriate and understandable to the audience; assess whether the questions are understood as intended; test different versions of a question; and to determine whether the order of questions is logical, and instructions are correct.

Dawson (2002:95) stresses that, once the questionnaire has been constructed, it should be piloted (test it) to check that it is going to function effectively. A suitable comparison made is just like any manufactured product; the questionnaire needs to go through quality testing (Gatech.edu, 2008: para. 39). This entails administrating some questionnaires to the type of target population, preferably those that are not targeted for the study.

Pilot studies are preliminary studies done on small samples to help identify potential problems with the research design (Van der Riet and Durrheim, 2006:94). Pre-testing can help one determine the strengths and weaknesses of one’s survey concerning the format, varied meaning of items, wording and order (Colorado State University, 2008:
Sharma (2011:291) believes that the pilot study provides a synopsis that the study will follow, and pre-testing of questionnaire allows for adaptation of designed questions.

Pilot testing the questionnaires, therefore, enable the researcher to make all necessary revisions before administering questionnaires to the main sample. A pilot study involving open-ended and closed-ended questions was conducted with 10 participants from the Durban University of Technology staff in order to establish if the questions will be able to yield the expected results and to also to determine the effectiveness of the questions. Participants that were included in the pilot study were not included in the main study.

3.8 Administration of questionnaire

According to Sekaran and Bougie (2010:197), administering questionnaires to a large number of individuals at the same time is less expensive and consumes less time than interviewing; equally, it does not require as much skill to administer a questionnaire as it does to conduct an interview. It also enables quick administering and collection of data.

According to Andres (2012), self-administered questionnaires allow the respondent to complete the questionnaire unaided by an interviewer. Sekaran and Bougie (2010) concur that a personally administered questionnaire is a good way to collect data when the survey is confined to a local area. They add that the advantage of a personally administered questionnaire is that all completed responses can be collected in a short period of time. They state further that the researcher is able to clarify any doubts or answer any questions that the respondent may have, on the spot.

The researcher is also able to introduce the research topic and motivate the respondents. However, the disadvantages are that the researcher may exhibit bias by explaining questions differently to different respondents and this type of administration may take a lot of time and effort (Sekaran and Bougie, 2013). The researcher disseminated the questionnaires personally by dropping them off to the respondents
and ensured that respondents were briefed about the purpose of the research and the respondents were asked for consent to participate in the study, as the consent letter was attached in all questionnaires. The responses remained anonymous and were treated with the highest confidentiality as no reference was made to any respondent in the reporting of the study. The respondents were also assured that only the researcher and her supervisor would have access to the information provided. The questionnaires were locked away in the filing cabinet with other confidential documents in the department.

Questionnaires were distributed to a sample size of 132 academic staff with the assistance of departmental secretaries across six campuses. The completed questionnaires and consent forms were dropped in a box created by the researcher in various departments across the campuses. This procedure retained the respondent’s anonymity, and follow-up was done through emails and calls. Basit (2010:94) states that follow-up calls, and emails usually result in returned questionnaires.

The advantage of a personally-administered questionnaire is the presence of the researcher when the questionnaire is handed out so that: the researcher can establish rapport and motivate respondents; doubts can be clarified; and almost 100% response rate is ensured while the anonymity of respondents is high. The disadvantage of personally-administered questionnaires is that organizations may be reluctant to give up company time for the survey with groups of employees assembled for the purpose (Sekaran and Bougie, 2009:212).

3.9 Covering letter

A covering letter was included to inform respondents of the nature and purpose of the research. It was also used to inform the respondents that their contributions are valuable, and confidentiality was maintained as participants remained anonymous. It also informed respondents with details of the researcher should they be required.

Silverman (2010:155) states that “research participants must participate in a voluntary way, free from coercion. Consent has to be freely given for the research to be valid”. This condition was guaranteed, as part of the process of securing ethical clearance.
The imposition of deadline for respondents was intended to assist the researcher to collate the responses as soon as possible.

3.10 Ethics

The term ‘ethics’, as defined by Vogt, Gardner and Haeffele (2012) refers to good conduct toward others and also refers to the branch of philosophy that studies good and bad conduct and the moral obligations or responsibilities one has towards others. They also state that ethics is a matter of commitment and behaviour guided by certain values. This involves making decisions and choices about which principles should apply and what kind of conduct is ethical in certain situations. They also emphasize that the norms of research ethics may be legal or moral or both. Ethical considerations are important in all stages of research from initial formulation of the research question though to design, sampling and analysis.

Ethical considerations apply to each stage of the research process, regardless of the methodologies adopted and applied in the study. The most prominent principles in research ethics, according to Silverman (2010:153), are voluntary participation and the right to withdraw; the protection of the research participants; the assessment of potential benefits and risks to participants; obtaining informed consent; and doing no harm.

Miller, Birch, Mauthner and Jessop (2012:14) define ethics as moral deliberation, choice and accountability on the part of researchers throughout the research process.

The conduct of ethically informed research should be a goal of all researchers as it revolves around privacy, informed consent, anonymity, secrecy being truthful and the desirability of the research. In this study respondents were informed that they do not need to put their names on the questionnaire in order to ensure respondents anonymity and to maintain confidentiality of information provided.

In this study, the researcher considered ethical issues from the beginning of the research project and applied for permission to conduct research at DUT via the University Research and Postgraduate Support Office. After obtaining permission, the research proposal, which was approved by the Faculty Research Committee, was
submitted, together with each of the data collection instruments, covering letter, consent forms, and letter of permission to the Institutional Research Ethics Committee (IREC) for ethical clearance. Furthermore in this study respondents participated anonymously.

After it was approved by the IREC for ethical clearance, the researcher conducted a pilot study to test the reliability and validity of the research instrument, so as to make effective changes before disseminating the final research instrument to the respondents. The outcome of the pilot study was submitted to both the supervisor of this study and the IREC for full clearance before data gathering for the main study.

The participants in the study were clearly informed of all the outcomes and consequences of the study before signing consent form. They were also informed that participation was voluntary and that they had the right to withdraw from the study at any time. This research did not expose participant to risks, medical examinations or any situation that could be harmful either mentally or physically.

3.11 Reliability and validity

Hair, Celsi, Oritinau and Bush (2013:165-6) state that reliability is a measure of consistency in measurement. Random error produces inconsistency in scale measurements that leads to lower scale reliability. However, the researcher can improve reliability by carefully designing scaled questions. In this study a pilot study was conducted and there were no changes made to the questionnaire.

Lancaster (2005:72) states that reliability, relates to the extent to which a particular data collection approach will yield the same results on different occasions. Remenyi (2012:127) agrees that reliability of an instrument addresses the questions of whether the instrument, in this case the questionnaire, will produce consistent results if it is re-used. Hair, Celsi, Oritinau and Bush (2013:166) further state that, since scales are not necessarily valid, researchers also need to be concerned about validity. Scale validity assesses whether a scale measures what it is supposed to measure.
Sekaran and Bougie (2013) define reliability as a test of how consistently a measuring instrument measures whatever concept it is measuring. Cohen, Manion and Morrison (2007) explain that reliability in quantitative research is a synonym for dependability, consistency and replication over time, over instruments and over groups of respondents is concerned with precision and accuracy. According to Drost (2011), the typical methods to estimate test reliability are: test-retest reliability; alternative forms; split-halves, inter-rater reliability; and internal consistency. There are three main concerns in reliability testing: equivalence; stability over time; and internal consistency.

Drost (2011) further states that validity is concerned with the meaningfulness of research components and indicates that there are four types of validity that researchers should consider: statistical conclusion validity; internal validity; construct validity; and external validity. According to Jackson (2011), validity is measured by using correlation coefficients. She adds that there is no established criterion for the strength of the validity coefficient, but what is important is that they are statistically correct at the .05 or .01 level which means that the results are most likely not due to chance.

The author further states that validity may be checked by asking the respondent about the same issue but using a different form of question wording and then comparing the answers. This method allows comparability between responses; it is uniform in structure and its deployment may often be associated with particular forms of expertise.

Cronbach’s Co-Efficient Alpha is a reliability co-efficient that indicates how each of the items in a set is positively correlated to others. Cronbach’s Alpha is computed in terms of average inter-correlations among the items measuring the concept and the closer Cronbach’s Alpha is to 1, the higher the internal consistency reliability (Sekaran, 2006:307).

For this study the reliability and validity scores for most sections exceed the recommended Cronbach’s alpha value of 0.600 for a newly developed construct. This indicates a degree of acceptable, consistent scoring for these sections of the research. A pilot study was conducted to test the reliability and validity of the research instrument, so as to make effective changes before dissemination of final research instrument to respondents.
According to Lancaster (2005:71), validity relates to the extent to which the data collection method or research method describes or measures what it is supposed to describe or measure. Ghosh and Chorpa (2003) define validity as an absence of self-contradiction.

### 3.12 Data analysis

Durrheim (2006:51) defines data as the basic material with which researchers work. Hofstee (2006:117) explains that, once your data is collected, one has to analyse them to convert them to information. According to Cody and Johnson (2008: para. 1), one of the first and most important steps in any data processing task is to verify that one’s data values are correct or at least conform to some set of rules. Powell and Connaway (2004:89) advise that, after data collection, the data should be checked for completeness, comprehensibility, consistency and reliability. As completed questionnaires are received, each should be opened, scanned and assigned an identification number (Babbie and Mouton, 2001:260).

Sekaran (2003:303) advises the use of a coding sheet as opposed to flipping through each questionnaire to avoid confusion. However, in this study, closed questions were designed with each option pre-coded for easy data capturing. Data analysis is the application of reasoning to understand the data gathered (Zikmund and Babin, 2010:59).

According to Bless, Higson-Smith and Kagee (2006:163), once data collection and checking of questionnaires have been completed, the process of data analysis begins. This process detects consistent patterns within the data to draw results and conclusions.

For both qualitative and quantitative data analysis, researchers go through the steps of: exploring and preparing data for analysis; analysing and representing the data; interpreting the analysis and validating the interpretations (Cresswell and Clark, 2011). Quantitative data analysis is the analysis of numeric data using a variety of statistical
techniques (Teddlie and Tashakkori, 2009). Bernard (2013) adds that this process is done to find and interpret patterns in this data. Quantitative data analysis was applied to data gathered from the responses of DUT staff questionnaires.

Acknowledging Cresswell and Clark (2011), the researcher converted the raw data into a form that is useful for data analysis, which means the data were scored by assigning numeric values to each response, cleaning any data entry errors and creating special variables, e.g., recording items on instruments with inverted scores. This coding procedure is a set of rules stating that certain numbers must be assigned to variable attributes (Neuman, 2011).

According to Welman and Kruger (2012:199), after research has been conducted, the obtained results must be interpreted. According to Mountain (2011:26), analysing data involves two steps. Firstly, the researcher must make sure that data collected are practicable, identifying patterns and themes. Once data processing has been completed, the use of tables, graphs and figures should be used to present and summarize data collected.

In this study, data gathered from questionnaires were coded and interpreted using Microsoft Excel and Statistical Package for the Social Sciences. Tables and graphs were used to illustrate the findings.

Dawson (2002:121) mentions that the quickest and easiest way to analyse data is by using computer software, for example, the Statistical package for the social sciences (SPSS), which is compatible with Microsoft Excel. Dawson (2002:123) highlights that such software packages are able to produce professional graphs, tables and pie charts, which can save a lot of time and effort.

3.13 Conclusion

This chapter outlined the methodology and sampling technique used in conducting the study and presented a brief explanation of the different research instruments available to researchers. Questionnaires were administered with the assistance of the departmental secretaries to collect data from the participants. Ethical clearance was
sought and granted by the Institutional Research Ethics Committee in order to ensure that the research was conducted in an appropriate ethical manner.

The following chapter will provide an analysis of the input data and the discussion of the results of this study.
CHAPTER 4: FINDINGS, INTERPRETATION AND DISCUSSION OF THE PRIMARY DATA

4.1 Introduction

This chapter presents and discusses the findings obtained from the questionnaires in this study. The questionnaire was the primary tool that was used to collect data and was distributed to Durban University of Technology staff members, who ranged from professors, head of departments, senior lecturers and junior lecturers. The data collected from the participants were analysed with SPSS version 24.0. The results present the descriptive statistics in the form of graphs, cross tabulations and other figures for the quantitative data that were collected. Inferential techniques include the use of correlations and chi square test values, which are interpreted using the p-values.

4.2 Factor analysis

According to Saunders, Lewis and Thornhill (2012), factor analysis attempts to identify underlying variables or factors that explain the pattern of correlations within a set of observed variables. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance that is observed in a much larger number of manifest variables. Factor analysis can also be used to generate hypotheses regarding causal mechanisms or to screen variables for subsequent analysis (Saunders, Lewis and Thornhill 2012).

A researcher may want to know if the skills required to be a decathlete are as varied as the ten events, or if a small number of core skills are needed to be successful in a decathlon. One 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 summarised table that reflects the results of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (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 should be less than 0.05. In all instances, the conditions are satisfied which allow 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.

4.3 Reliability statistics
The two most important aspects of precision are reliability and validity. Reliability was computed by taking several measurements on the same subjects. A reliability coefficient of 0.60 or higher was considered as “acceptable” for a newly developed construct. Cronbach’s alpha for the independent variable which is, on average 0.60 and above, is acceptable in most research scenarios (Drost, 2011).

Table 4.1  KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>Section</th>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>Bartlett's Test of Sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Approx. Chi-Square</td>
<td>df</td>
</tr>
<tr>
<td>B Training</td>
<td>0.715</td>
<td>287.341</td>
</tr>
<tr>
<td>C Transformation pedagogy</td>
<td>0.647</td>
<td>45.014</td>
</tr>
<tr>
<td>D Changing technology</td>
<td>0.549</td>
<td>35.289</td>
</tr>
<tr>
<td>E Academic qualification</td>
<td>0.546</td>
<td>46.823</td>
</tr>
<tr>
<td>F Performance</td>
<td>0.512</td>
<td>5.902</td>
</tr>
<tr>
<td>G Motivation</td>
<td>0.545</td>
<td>9.860</td>
</tr>
<tr>
<td>H Training &amp; Transfer programmes</td>
<td>0.744</td>
<td>81.590</td>
</tr>
</tbody>
</table>

Except for section F, all of the conditions are satisfied for factor analysis, that is, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy value should be greater than 0.500 and the Bartlett's Test of Sphericity sig. value should be less than 0.05. The result indicated that there are sufficient items for each factor. The two test support the appropriateness of the principal component technique (See appendix)

4.5 The research instrument
The research instrument consisted of 44 items, with a level of measurement at a nominal or an ordinal level. 132 questionnaires were distributed and 129 were returned. The questionnaire was divided into 8 questions which measured the following themes:
A Biographical data;
B Training;
C Transformation pedagogy;
D Changing technology;
E Academic qualification;
F Performance;
G Motivation; and
H Training and transfer programmes.

Table 4.2 reflects the Cronbach’s alpha score for all the items that constituted the questionnaire.

Table 4.2: Cronbach alpha score for questionnaire items

<table>
<thead>
<tr>
<th>Section</th>
<th>Number of Cronbach's Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Training</td>
<td>11 of 11</td>
<td>0.640</td>
</tr>
<tr>
<td>C Transformation pedagogy</td>
<td>3 of 4</td>
<td>0.619</td>
</tr>
<tr>
<td>D Changing technology</td>
<td>3 of 4</td>
<td>0.410</td>
</tr>
<tr>
<td>E Academic qualification</td>
<td>3 of 4</td>
<td>0.489</td>
</tr>
<tr>
<td>F Performance</td>
<td>3 of 4</td>
<td>0.277</td>
</tr>
<tr>
<td>G Motivation</td>
<td>2 of 3</td>
<td>0.314</td>
</tr>
<tr>
<td>H Training &amp; transfer programmes</td>
<td>5 of 5</td>
<td>0.663</td>
</tr>
</tbody>
</table>

The reliability scores for most sections exceed the recommended Cronbach’s alpha value of 0.600 for a newly developed construct. This finding indicates a degree of acceptable, consistent scoring for these sections of the research.

Sections D, E, F and G had scores lower than the acceptable standard. Amongst the reasons for these scores are the small number of variables tested within each section.
Section A: Biographical Data
This section summarises the biographical characteristics of the respondents.

Figure 4.1: Gender distribution

The findings of this study show that 70 (54.3%) of the respondents were females and 59 (45.7%) were males. Overall, the ratio of males to females is approximately 6:7 (45.7%: 54.3%). There is no significant difference by gender in the sample \( p = 0.333 \). Researcher purely used gender as part of biographical data and therefore does not form part of study objectives, therefore does not influence the phenomena in question.
The findings of the study show that 40 (31%) of the respondents were from Ritson campus, 35 (27.1%) were from ML Sultan campus, 31 (24.1%) were from City campus, 14 (10.9%) were from Steve Biko and 9 (7.0%) were from Pietermaritzburg.

There was a significant difference in the numbers of participants per campus (p<0.001).
Two thirds of the respondents were African (67.2%). There is a significant difference in the racial composition ($p < 0.001$). This is not a reflection of the population. Researcher purely use race as part of biographical data and therefore does not form part of the study objectives, thus it does not influence the phenomena in question.
Table 4.3: Cross Tabulation: Nature of employment and job classification

Overall, the ratio of full-time to part-time to contract employment is approximately 8.5: 0.5: 0.85 (86.8%: 4.7%: 8.5%).

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Count</th>
<th>% within Job Classification</th>
<th>% within Employed</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Lecturer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
<td>41.7%</td>
<td>4.5%</td>
<td>3.9%</td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td></td>
<td>31.6%</td>
<td>77.7%</td>
<td>67.4%</td>
</tr>
<tr>
<td>Professor</td>
<td></td>
<td>89.5%</td>
<td>15.2%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.0%</td>
<td>2.7%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Within the lecturer category, 91.6% were full-time employed. Within the category of full-time employed, 77.7% were lecturers. This category of full-time Lecturers formed 67.4% of the total sample. Within the senior lecturer category, 89.5% were full-time employed. Within the category of full-time employed, 15.2% were senior lecturers.

This category of full-time lecturers formed 13.2% of the total sample.

Within the junior lecturer category, 41.7% were full-time employed. Within the category of full-time employed, 4.5% were junior lecturers. This category of full-time lecturers formed 3.9% of the total sample. Within the professor category, 100% were full-time employed. Within the category of full-time employed, 2.7% were professors.

This category of full-time lecturers formed 2.7% of total sample.

These findings indicate that the majority of the target population were full-time lecturers. There were significant differences in the composition in each of the two categories which are nature of employment and job classification (p < 0.001). The findings of the
study shows that majority of the respondents that attended training were full-time lecturers

**Figure 4.4: Respondents’ faculties**

The results in figure 4.4 show that the largest proportion of the respondents were from the Faculty of Accounting and Informatics (42.6%), followed by the following faculties: Management Sciences (22.5%); Arts and Design (16.3%); Engineering and the Built Environment (10.9%); Health Sciences (7.0%); and the lowest proportion of the respondents were from the Faculty of Applied Sciences (0.8%). Overall, figure 4.4 illustrates that all six faculties were not fairly represented. The numbers per faculty were not similar (p, 0.001).
<table>
<thead>
<tr>
<th>Faculties</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting and Informatics</td>
<td>55</td>
<td>42.6</td>
<td>42.6</td>
</tr>
<tr>
<td>Applied Sciences</td>
<td>1</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Arts and Design</td>
<td>21</td>
<td>16.3</td>
<td>16.3</td>
</tr>
<tr>
<td>Engineering and the Built Environment</td>
<td>14</td>
<td>10.9</td>
<td>10.9</td>
</tr>
<tr>
<td>Health Sciences</td>
<td>9</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Management Sciences</td>
<td>29</td>
<td>22.5</td>
<td>22.5</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
This question on training (statement 4.5.1.1) was aimed at finding out if there are academic training programmes offered at the Durban University of Technology. Encouragingly, 61.7% agreed that there are academic training programmes offered by the institution, while 28.1% strongly agreed and only 5.5% of respondents were neutral. 3.1% of the respondents strongly disagreed, while only 1.6% of the respondents disagreed.
With the university making significant efforts to encourage academic staff to attend training, it is encouraging to the management that respondents agree to the above statement.

Respondents were asked (statement 4.5.1.2) if DUT academic staff should be informed of the training programmes offered. It is encouraging to note that the findings show that the majority (61.7%) of the respondents agreed, while only 33.6% strongly agreed and only 4.7% of the respondents seemed to be neutral.

These findings show that the respective departments need to inform the staff about training prior to the training.

Statement 4.5.1.3 indicates that more than half (54.7%) agreed that there is a need for training programmes while 36.7% strongly agreed and only 8.6% were neutral. The results show that there is need for DUT to offer its staff members with training in order to empower them.

These findings affirm that there is a need for the institution to offer training although it is concerning that 8.6% of the respondents were neutral.

When asked that offering of training should apply to all staff members (statement 4.5.1.4), 39.4% of the respondents agreed, followed by 33.1% of respondents who strongly agreed, while 22% were neutral and only 5.5% of the respondents disagreed that training should not apply to every staff member.

The findings of the study reveal that the highest percentage of the respondents agreed that training should apply to all staff members. However, it is evident that there were respondents who were neutral, because they might be unsure or might not have enough time to attend these training sessions or might feel that the programmes offered are not aligned with their scope of teaching.

Respondents were asked whether training programmes offered are user-friendly (statement 4.5.1.5). The findings illustrate that 43.3% of the respondents were neutral, 35.4% agreed while 11% strongly agreed that training programmes are user-friendly. 8.7% of the respondents disagreed and only 1.6% strongly disagreed that training programmes are not user friendly.
The findings of the study raise concerns because a high percentage of the respondents were neutral and 8.7% disagreed that the programmes offered are not user-friendly. The researcher believes the institution needs to pay urgent attention to this aspect of the training programmes.

When asked if the training programmes offered by DUT are effective (statement 4.5.1.6), 44.9% agreed, 37% were neutral and 11% strongly agreed that training programmes are effective, while 5.5% disagreed and only 1.6% of the respondents strongly disagreed.

It is encouraging that more than half of the respondents believe that the institution is making sure that programmes offered are effective. However, it is concerning that 37% of the respondents were neutral.

Respondents were asked if training activities offered by DUT were designed to be interesting (statement 4.5.1.7). A significant percentage (42.5%) of respondents were neutral, followed by 33.9% of respondents who agreed that training programmes are interesting while 13.4% of the respondents strongly agreed. Only 9.4% of the respondents disagreed and also 0.8% strongly disagreed.

Probably the reason why the respondents were neutral to the statement is because the workshops in most cases are not specifically designed for a specific field of expertise.

Respondents were asked if training programmes cover areas with which they need to be familiar (statement 4.5.1.8) The findings illustrate that 37.8% agreed, closely followed by 30.7% of respondents that were neutral while 17.3% of the respondents strongly agreed that training does cover vital areas with which staff need to be familiar. About 13.4% of the respondents disagreed and only 0.8% strongly disagreed.

Even though highest percentage of respondents agreed that training programmes cover areas with which staff needed to be familiar, the institution cannot ignore the fact that 13.4% of the respondents disagreed and 0.8% that strongly disagreed that these training programmes do not cover certain areas. Therefore, an intervention needs to be made in order to ensure that all areas are covered.
Respondents were asked if staff should be involved in the planning and implementation of training programmes (statement 4.5.1.9) indicates that the majority (53.1%) of the respondents strongly agreed that it is of paramount importance that staff members be involved in the planning phase, followed by 31.3% that also agreed, while 13.3% of the respondents were neutral. 1.6% of the respondents disagreed and only 0.8% strongly disagreed.

These findings should be an eye opener to those involved in the strategic planning and implementation of these programmes in the respective departments that there is a dire need to include staff as the majority (53.1%) of the respondents felt the need to be included in the planning phase of these programmes. Employee involvement in decision making serves to create a sense of belonging among the workers as well as a congenial environment in which both the management and the workers voluntarily contribute to healthy industrial relations (Noah, 2008).

Respondents were asked if follow-up is done after completion of training programmes (statement 4.5.1.10). Findings reveal that 25.2% of respondents disagreed, followed by a 24.4% of respondents that were neutral, while 19.7% of the respondents strongly disagreed that no follow-up is done after completion of training. 17.3% of the respondents agreed that there is follow-up done and only 13.4% strongly agreed that follow-up after completion of training is done. Previous studies emphasise the importance of conducting a follow-up after completion of training so as to see if the programmes that are offered by the respective departments are effective or not. According to Brown and Sitzmann (2011, cited in Saks and Burke, 2012:119), evaluation is an effective method of determining the effectiveness of a training programme and facilitates decisions regarding future training programmes.

Respondents were asked if training should be on-going (statement 4.5.1.11). The findings indicate that the majority of the respondents (59.8%) strongly agreed that training should be on-going, while 29.9% also agreed that training should be on-going. On the other hand, 7.1% of the respondents were neutral, only 2.4% respondents disagreed and 0.8% strongly disagreed that there is no need for training to be ongoing.
It is evident that the majority of the respondents (59.8%) felt that training should be ongoing probably due to the fact that they found training to be beneficial, and informative, or simply because it will afford the chance to those that missed training to attend the next training session.

**Figure 4.6: Transformation pedagogy**

4.6.1 Paradigm shift in the roles of academics.

Respondents were asked if there has been a paradigm shift with regards to the role of academics (statement 4.6.1.1). The findings show that the majority (60%) of the respondents agreed, followed by a 28% of respondents that strongly agreed that there is a paradigm shift, while 8.8% of the respondents were neutral. 1.6% of the respondents disagreed and 1.6% strongly disagreed that it was not evident that there is a shift.

With these findings the researcher believes that the institution or respective departments should offer more specific area of expertise related training to academic
staff so as to bridge the gap and also academically empower staff members as there is fundamental change in approach or way of doing things.

Respondents were asked if the incorporation of different teaching and learning styles would transform the university classroom (statement 4.6.1.2). The findings indicate that more than half (60.3%) of the respondents agreed, while 32.5% strongly agreed with the statement that incorporation of teaching methods would transform the university classroom and only 7.1% of the respondents were neutral.

It is encouraging that the majority of the academic staff agreed and are willing to embrace change by incorporating new teaching techniques. The onus is on the respective departments to assist staff with the necessary skills.

Respondents were asked if lecturers should be able to select appropriate learning methods that ensure students are actively involved in learning (statement 4.6.1.3)

Findings reveal that 46.8% of the respondents agreed with the above statement, while 38.1% of the respondents strongly agreed that lecturers should be able to select appropriate learning methods that will be able to ensure that students are actively involved in the learning process and only 15.1% of the respondents were neutral.

The findings show that the majority (46.8%) of the respondents felt they should be allowed to choose appropriate learning methods that will enable students' involvement in learning. These findings are in line with the study by Sywelem, Harbi, Fathema and Witte (2012) who state that, to ensure that staff perform better academically, they should be allowed to use their own learning styles.

The findings of the study wanted to underpin the difference in teaching and learning styles and learning methods for students, as teaching styles is teacher centred and learning methods looks at development of students and student’s engagement in their studies.
Changing technology

4.7.1 Respondents were asked if higher education institution of learning have undergone changes in recent years with regards to technological advancement.

More than half of the respondents (65.1%) agreed with the statement, while 26.2% of the respondents strongly agreed that higher institutions of learning have undergone changes with regards to technological advancement and 7.1% of the respondents were neutral. 0.8% of the respondents strongly disagreed and 0.8% also disagreed that the institution has not been any technological changes.

The findings of the study reveal that more than half of the respondents agreed that higher institution of learning has truly undergone changes. Therefore, it is clear that respective departments should take the initiative to equip academic staff with necessary skills in order for the academics to confidently teach students using for example e-learning. Morley (2010) states that, in order for academics to effectively make transition to become online teachers, they need to develop new ICT skills.
Therefore it is important to offer educational technology training to academic staff in order to equip them with necessary skills.

Respondents were asked if lecturers are expected to integrate technology into the curriculum (statement 4.7.1.2). The findings reveal that 54.8% of the respondents agreed, followed by 31.7% that strongly agreed that lecturers are expected to integrate technology into the curriculum, while 12.7% of the respondents were neutral and only 0.8% disagreed.

It is concerning that 12.7% of respondents were neutral when asked if lecturers are expected to integrate technology into their curriculum as there has been a change in the way teaching and learning is conducted in higher institutions. Jackson and Fearon (2013) state that having a well-designed course that is educationally focused, and the academics’ understanding of different online learning strategies is not enough. It is imperative that institutions market the educational benefits of online learning with practice so that academics can relate and be encouraged to use the e-learning technology.

Respondents were asked if E-learning plays a critical role in teaching and learning (statement 4.7.1.3). 47.6% of the respondents agreed, followed closely by 43.7% of respondents that strongly agreed, while 8.7% of the respondents were neutral.

The findings of the study are in line with the study by Alvarez, Martin, Fernandez-Castro and Urretavizcaya (2013) who state that, in the modern day, LMSs has become an essential tool in education. Islam (2012) attests that whether one chooses to focus on classroom-based education or long-distance education, most, if not all, universities are adopting LMSs to support and improve learning and teaching processes. They further state that implementation of LMSs by educational institutions has promised a better quality and learner-centred learning.

Respondents were asked if the respective departments offer technological assistance timeously (statement 4.7.1.4). 36% of the respondents agreed, while 20.8% were neutral and 20% of the respondents disagreed. 14.4% of the respondents strongly agreed that they do get the assistance timeously and 8.8% of the respondents strongly disagreed.
According to Folley (2010), Donahue and Glodstein (2013), the traditional method of teaching has changed when compared to the modern-day teaching, where e-learning has become the medium for delivery of education. Furthermore, the researchers state that the strategy to understanding students’ needs is dependent on lecturers’ understanding of diversity in the virtual class.

**Figure 4.8 Academic qualification**

4.8.1 Respondents were asked if qualification of staff members plays an important role in teaching and learning.

Stronge, Ward, and Grant (2011:4) suggested four dimensions for determining the qualifications of an effective teacher. These are effectiveness of teaching, evaluating student learning, positive learning environment, and the teacher’s personal qualifications. An effective teacher is one who has the ability to motivate, determine
high standards, intellectually challenge and also encourage students to learn on their own, (Darling-Hammond, 2012:4).

The findings for statement 4.8.1.1 indicates that more than half (59.2%) of the respondents agreed and 24% strongly agreed that staff qualification plays a vital role in teaching and learning, while 16% of the respondents were neutral and only 0.8% disagreed that having a qualification does not necessarily impact on teaching and learning.

The neutrality of 16 % of the respondents, when asked if qualification plays a vital role in teaching, is of concern.

Respondents were asked if possession of a qualification portrays competency in different teaching and learning aspects (statement 4.8.1.2). A significant percentage of respondents (62.9%) agreed that having a qualification depicts one’s competency in teaching and learning, while 17.7% of the respondents were neutral and 12.1% of the respondents strongly agreed with the above statement on the other hand, only 6.5% of the respondents disagreed and 0.8% strongly disagreed that competency is not portrayed by qualification.

It is encouraging that a high percentage (62.9%) of respondents agreed. With the institution encouraging postgraduate studies, it was expected that the majority of the respondents would agree with the above statement. It is also concerning that 17.7% of the respondents were neutral. Probably, they do not have the time to pursue their studies because of heavy workload and having to care for their families.

Respondents were asked if academics who do not have the necessary qualification may not have the comprehensive understanding of the subject material (statement 4.8.1.3). 52.5% of the respondents agreed, and 19.2% strongly agreed with the statement above, while 19.2% of the respondents were neutral. Only 5.6% of the respondents disagreed and 0.8% strongly disagreed that academics’ understanding of the subject material is not dependant on their qualification.

These findings reveal that the majority of the respondents agreed that education can bring a greater depth of understanding of subject material.
Respondents were asked if lecturers with strong academic skills perform better (statement 4.8.1.4). More than half of the respondents (55.2%) agreed while only 24.8% strongly agreed that lecturers with academic skills do perform better and 16.8% of the respondents were neutral. On the other hand, 3.2% of the respondents disagreed with the above statement.

**Figure 4.9 Performance**

4.9.1 Respondents were asked if the essential component of high performance is training.

The findings for statement 4.9.1.1 reveal that the majority of the respondents (66.1%) agreed and only 21.8% strongly agreed with the statement that training is a component
of high performance while 11.3% of the responses were neutral and only 0.8% of the respondents disagreed.

Respondents were asked if the performance of lecturers impacts on the students’ performance (statement 4.9.1.2). The above findings reveal that more than half (59.2%) of the respondents agreed and 22.4% of the respondents strongly agreed that how lecturers perform may have a significant influence on students’ performance. While 16% of the respondents were neutral, only 2.4% of the respondents disagreed with the above statement. These findings are in line with the study by Chang (2010), each individual learner interprets and responds to questions in a unique way. Furthermore, Chang states that it is, therefore, important for lecturers to regularly review their teaching competencies in respect of subject knowledge, lecturer attendance, teaching skills and lecturer attitude.

Respondents were asked if rewards systems are used to compensate good performance or attendance in training programmes (statement 4.9.1.3). 34.4% of the respondents were neutral and 32.8% of respondents agreed that there are reward systems in place to compensate good performance. On the other hand, 13.6% of the respondents disagreed with the above statement, while 12.8% strongly agreed that there are rewards for those that attend training and only 6.4% strongly disagreed with the statement.

Dash (2005:55) indicates that leadership style, lack of incentive schemes, vague promotion guidelines, allocation of bonuses, lack of communication, unsafe work environment, dissatisfaction with salaries and unclear policies are other factors which could lead to morale problems in the workplace. Thus offering incentives would motivate academic staff to attend training programmes offered by Durban University of Technology.

Respondents were asked if being rewarded for good performance would motivate one to do more (statement 4.9.1.4) findings reveal that 42.4% of the respondents agreed that rewarding good performance does motivate staff to do better, while 26.4% of the respondents were neutral, and 20.8% of the respondents strongly agreed with the above statement. Only 9.6% of the respondents disagreed and 0.8% strongly
disagreed that being rewarded for good performance does not necessarily act as a motivator for lecturers.

These findings are in line with the study by Torrington, Hall, Taylor and Atkinson (2009:163-164) define skills-based pay as an output-based payment system in which employees receive pay for the skills or competencies which they acquire. This system gives an employee the opportunity to influence their pay by acquiring more skills that lead to pay increase. Skills-based pay encourages multitasking and flexibility, which, in turn, enables the organisation to respond faster and more effectively to the needs of the customers.

Figure 4.10 Motivation

4.10.1 Respondents were asked whether there are motivational mechanisms in place to motivate academic staff.

Findings for statement 4.10.1.1 show that 42.9% of the respondents agreed while 21.4% of the respondents were neutral and 19.8% of the respondents disagreed that
there are no mechanisms in place to motivate staff. 11.1% of the respondents strongly agreed that there are mechanisms for motivating staff and 4.8% of the respondents strongly disagreed.

Respondents were asked if lack of good working conditions and motivation mechanisms could translate into lecturers' low morale (statement 4.10.1.2). The findings indicate that the majority of the respondents (64.3%) agreed and 19.8% of the respondents strongly agreed that lack of good working conditions translate into low morale amongst staff, while 11.9% of the respondents were neutral and 2.4% strongly disagreed. These findings are in line with the study by Beardwell and Claydon (2007:491) state that motivation, in the context of work, is a psychological process that results from the interaction between an employee and the work environment and it is characterised by a certain level of willingness. The employees should increase their work effort in order to obtain a specific need or desire that they hold.

Respondents were asked if motivating learners and understanding ways of learning can be accomplished by motivated lecturers (statement 4.10.1.3). The findings illustrate that more than half of the respondents (63.2%) agreed, 29.6% strongly agreed that motivation of students can be accomplished by motivated lecturers, while 7.2% of the respondents were neutral.

Torrington, Hall, Taylor and Atkinson (2009:276) state that motivation is the desire to achieve beyond expectation, being driven by internal rather than external factors, and to be involved in a continuous striving for improvement.

Since the term motivation is derived from the Latin word 'movere' which means to move, the word motivation implies to move, push or persuade towards satisfying a need which is a basic psychological process (Khan, Farooq and Khan, 2010).
4.11.1 Respondents were asked if academic staff training programmes improve their teaching techniques.

Findings for statement 4.11.1.1 indicate that a significant percentage (67.2%) of the respondents agreed, 26.4% strongly agreed that the training programmes offered by DUT improve staff teaching techniques, while 5.6% of the respondents were neutral, and only 0.8% of the respondents disagreed that training does not improve one’s teaching technique.

The findings of this study show that the highest percentage of respondents (67.2%) agreed that training provided by the institution is effective in that it improves their teaching techniques.

Respondents were asked if academic staff training programmes positively influence transformation of teaching and learning (statement 4.11.1.2). It is encouraging to note...
that the majority of the respondents (69%) agreed with the statement, 18.3% of the respondents strongly agreed, while 11.9% of the respondents were neutral and 0.8% of the respondents disagreed that staff training does not positively influence transformation.

With the university making significant efforts to ensure academics are equipped with necessary skills it is expected that a 69% of the respondents agree to the above statement.

Respondents were also asked if academic staff programmes provide world class teaching and learning methods (statement 4.11.1.3). The findings reveal that 43.2% of the respondents agreed, while 36% of the respondents were neutral and 15.2% of the respondents strongly agreed that staff training programmes do provide the best teaching methods. On the other hand, only 5.6% of the respondents disagreed that staff programmes do not necessarily provide world class teaching methods.

The findings of this study reveal that 36% were neutral. John (2005) and Krosnick, Holbrook, Berent, Henamann, Kopp and Conaway (2002) state that the neutral responses option enabled people who were ignorant about or indifferent to a subject to select no option or neutral instead of being forced to choose a response that did not reflect their true beliefs.

Respondents were asked if academic staff training positively influences students’ pass rate (statement 4.11.1.4). 54.8% of the respondents agreed that training of staff does influence students’ pass rate, 23.8% of the respondents were neutral while 19% of the respondents strongly agreed that students pass rate can be influenced by the level of trained academic staff. On the other hand, 1.6% of the respondents disagreed with the above statement and only 0.8% strongly disagreed.

The neutrality of 23.8% of the respondents shows that respondents may not have the necessary information in order to decide or they just avoid picking a side. According to Nowlis, Kahn and Dhar (2008), picking a neutral option allows people to avoid the cognitive effort needed to choose between their positive and negative feelings on an issue.
Respondents were asked if the training programmes offered by DUT improves staff’s intellectual capacity (statement 4.11.1.5).

A significant percentage of respondents (58.4%) agreed that training programmes offered by DUT improve staff intellectual capacity, 20.8% of the respondents were neutral, while 14.4% of the respondents strongly agreed with the statement and only 6.4% disagreed with the above statement.

These findings reveal that, even though a significant percentage of respondents (58.4%) agreed that training improves one’s intellectual capacity, the 14.4% of the respondents that were neutral signals that there are respondents who might not see training adding any value at all.

4.12 Content analysis on open-ended questions was created from the results of questionnaire.

The last part of the questionnaire included the following open-ended questions:

4.12.1 What are your perceptions on training programmes offered by DUT?

✓ Course/Material

Respondents felt that the course was well planned and covered lessons that makes one’s life easier. The respondents further stated that course material in these programmes set a good foundation that can be applied practically, as they are extremely useful, eye opening, very interactive, and a necessity to all staff members as it helped with methods that lecturers would like to use daily. The information is current and relevant, but needs to be offered more often to support staff as well as academic staff. Respondents felt that exercises were very instrumental in making one think, very challenging, practical, appropriate and valuable as the instructor was willing to answer questions.

✓ Effectiveness

Respondents felt that training offered by DUT is very effective and thorough; they are of importance especially to lecturers. Respondents felt these programmes are a positive initiative, and they help them move to a more learner-centred teaching model, and training also helps respondents to apply the techniques into practice. Some of the
respondents felt that training programmes in the form of induction are more than sufficient for junior academic staff.
On the other hand, other respondents felt that the impact of these training programmes is minimal, and are not effective as they are too broad, too theoretical, not aligned to business of teaching, learning, assessment and research, and that there is no correlation between training needs and training programmes offered. The programmes are not properly channelled. The further stated that they are outmoded and not related to their field of study.

Respondents indicated that more needs to be done, and that these programmes offered need to be more informative towards subject discipline. Respondents further stated that the audience for when they are designed are not matched well to the methods, e.g., competent ICT users are mixed with less competent ICT users.

✓ Not attended training

Some of the respondents stated that they have never attended training and others were not aware of any training programmes.

4.12.2 Recommend necessary interventions in order to improve training programmes

✓ Staff involvement

Majority of the respondents felt that they should be involved in the planning phase of these training programmes as more of the input from the academic staff who actually experience real classroom challenges could help in the prior design of training programmes, in relation to identifying staff academic needs. On the other hand, some respondents felt that it would help if the intended audience for training is grouped in terms of their academic needs, and thorough research could help in determining the academics needs, so that grouping audience with similar academic needs becomes easier. Respondents also stated that training should be based on needs analysis and be job specific at the same time.
Advertising of training programmes

Some of the respondents felt that proper advertising should be done before training and pitching it to appropriate levels would help in improving awareness.

Follow-up/Offering training

Respondents felt that, after completion of training, there should be follow-up done and departments should have steps in place to monitor these training facilities. On the other hand, other respondents were of the view that there should be a refresher course offered to staff and that training programmes offered by the respective department/faculty should be ongoing. The respondents had the following suggestions pertaining to offering training:

- Training should be offered on weekends/test week;
- Training should be offered after lecture periods;
- Training should be conducted twice a year to allow those staff members who missed the first training to attend; and there should be more co-inside time.

Research should always be used to inform if necessary training is beneficial to staff. Where necessary, such training should be made compulsory to all staff members.

Training programmes

Respondents stated that more training should be offered. Respondents also suggested that training should be in-house so that they understand first (as lecturers) our students and their needs. Thereafter, lecturers can determine what is needed to improve staff skills in accordance with students’ needs. After all, lecturers are here to service students. Some of the respondents felt that training should be lecturer-centred and that more training on E-learning is needed. Pertaining to E-learning, the following suggestions were made:

- Training on using ITSS system;
- Training on various online assessment methods;
- Training on E-learning teaching style;
• Use rewards for staff that completed the E-learning training programmes; and Visibility of E-Learning programmes on all departments.

Respondents also mentioned that more consultation visits by training departments are needed.

✓ Not attended training

Minimal number of the respondents stated that they did not have the chance to attend training.

4.12.3 Do the training programmes offered meet your expectations?

Majority of the respondents agreed that training programmes offered by the department are useful even though there’s more that can be improved. While some of the respondents felt that training programmes were not beneficial and only few of the respondents were neutral.

The purpose of the open-ended questions was to obtain suggestions on training programmes offered by the institution. Some respondents offered useful suggestions and answered the questions eagerly.

4.13 Conclusion

This chapter presented and discussed the findings of the study. It highlighted the academic staff perceptions of empowerment training programmes initiated by the Durban University of Technology. The study revealed that there is a need for DUT to involve staff in the planning phase, a need to do follow-up after completion of training programme and to have these programmes to be on-going.

The findings of the study indicated that respective departments were working hard to ensure that academic staff are equipped with the necessary skills needed, and that training programmes offered served the needs of the staff.

The next chapter presents the conclusions relating to the objectives of the study and offers recommendations arising from the analysis of the findings.
CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter analysed the demographics which highlighted the age, race and experience of participants. Chapter 4 was used to underpin the findings of the study; the researcher presented the data analysis of findings by using bar graphs and frequency tables. This chapter presents the conclusions and recommendations of the study and suggests possible areas for future research.

5.2 The study objectives were:

• To identify academic training needs required to empower academic staff;
• To analyse the staff perception on the academic training programmes that are initiated by DUT;
• To examine the correlation between the training needs and training programmes; and
• To recommend necessary interventions to improve teaching and learning.

5.3 Summary of findings

The study focussed on staff perceptions on empowerment training programmes initiated by DUT. This study revealed that DUT has training programmes in place to empower academics and that DUT embraces the changes and promotes staff involvement. This research will contribute to the existing body of literature and further conclude with recommendations for further research.

5.4 Key findings

This study used the quantitative research design and questionnaires were used to collect data. The target population for the study was staff members from the Durban University of Technology and the participants ranged from professors, head of departments, senior lecturers and junior lecturers. The probability sampling was chosen for this study. A sample size of 132 respondents was drawn from the population size of 200 and questionnaires were designed with both close-ended and open-ended questions in which participants were asked to state their views.
The questionnaires were personally administered and were hand-delivered to all campuses of the Durban University of Technology, namely, ML Sultan Campus, Ritson Campus, Steve Biko Campus, Indumiso Campus and Riverside Campus. The data were analysed by a statistician using the statistical programme (SPSS). Frequency tables and bar graphs were used in the presentation of data.

5.5 Findings from the research

The following findings emanated from this study:

- The majority of the academic staff members that are employed full-time are lecturers;
- Respondents felt that training programmes offered by DUT are a positive initiative;
- The Durban University of Technology does offer training programmes to academic staff;
- The training programmes offered are not properly advertised;
- Staff expressed the need to be involved in the planning phase of the training programmes;
- Training programmes are not aligned to teaching, learning, assessments’ and research;
- Staff qualification plays a major role in teaching and learning; and there is no follow-up after completion of training.

5.6 Primary findings related to literature review

Respondents were asked if follow-up is done after completion of training programmes. 25.2% of respondents disagreed and 19.7% of the respondents strongly disagreed that no follow-up is done after completion of training.

Saks and Belcourt (2006) state that organisations hardly incorporate follow-up activities into their training programmes.

Improvement in training effectiveness can directly be facilitated by the following: employee’s awareness of objectives of training courses; continuity of training; application of training in the work place; and proper implementation of the programme.
A well designed and executed training will facilitate participants’ involvement in attitudinal changes which provide the opportunity for application of new skills and knowledge in workplace, job commitment, and employees’ alignment to organizational visions and strategies (Shahrooz, 2012).

Bates and Davis (2010), state that the usefulness of a training programme is dependent on the trainee’s ability to put into practice what he/she learnt in the training by doing it in the actual workplace. Karthik (2012) states that training objectives tell the trainee what is expected from him/her after completion of training.

Respondents felt that there is no correlation between training needs and training offered.

The corporate system can identify employees' training needs such as skill gap analysis, training needs assessment, performance appraisal, counselling session and job evaluation. For training to be very useful, it must be directly related to the core business activities. The best means of identifying employee skill gap is to rigorously match the job specification activity by activity with the personal profile of the employee using an organizational modelling human resources management package. Through this package, training needs can be clearly revealed (Poulet, 2008).

The researcher believes that if the above package is implemented there will be a correlation between training needs and training that is provided.

Findings of a previous study that was conducted by Asfaw, Argaw and Bayissa (2015) shows that training and development have a positive correlation on the output of employees' performance and effectiveness. Ni and Wang (2015) confer that organisations should have a concern about development and self-realisation of employees. Similarly, Quartey (2012) found a moderately strong relationship between employee training and organisational performance.

Ivancevich (2010) states that interviews, surveys, reviews of records, observation and discussions with management and subject matter experts are methods used to conduct training needs’ identification or assessment. These methods of data and information gathering provide the basis for what type of training would be needed, who should be selected for training, when the training must be done and, finally, whether training is the solution to the deficiency identified and, therefore, the solution.
Findings for statement 4.5.9 reveal that the majority (53.1%) of the respondents strongly agreed that it is of paramount importance that staff members be involved in the planning phase. Employees must be involved if they are to understand the need for creativity and if they are to be committed to changing their behaviour at work, in new and improved ways (Singh, 2009; Kingir and Mesci, 2010). According to Kleinknecht (2014), involving employees in the strategy process will prevent companies from taking excessive risks.

Respondents were asked if lecturers are expected to integrate technology into the curriculum. The study reveals that 54.8% of the respondents agreed, followed by 31.7% that strongly agreed that lecturers are expected to integrate technology into the curriculum, while 12.7% of the respondents were neutral and only 0.8% disagreed. According to Sulaiman, Mohamed and Afendi (2011), lack of motivation amongst lecturers is one of the barriers that had been identified by the authors in teaching and learning using online tools. Schifter (2000) notes that motivators include previous technology training, personal motivation, and scholarly pursuit and reduced teaching loads.

Thus, this study emphasises the importance of equipping academics with necessary skills. It is encouraging to note that the findings indicate that the Durban University of Technology does provide these training programmes, even though it is evident that a lot still has to be done to improve these programmes.

Respondents were asked if motivating learners and understanding ways of learning can be accomplished by motivated lecturers. (63.2%) agreed and 29.6% strongly agreed that motivation of students can be accomplished by motivated lecturers, while 7.2% of the respondents were neutral.

Respondents were asked if the performance of lecturers impacts on the students’ performance. The findings reveal that more than half (59.2%) of the respondents agreed and 22.4% of the respondents strongly agreed that how lecturers perform may have a significant influence on students’ performance. A study conducted by Olantunji and Nuvadeens (2010) concluded that there is a strong correlation between teachers’ attributes and students’ academic performance, in terms of knowledge subjects.
This study revealed that 59.2% of the respondents agreed that having a qualification plays a vital role in teaching. Kingdon (2006) attests that a pre-service teaching and having a Master's Degree qualification raises students’ achievement by one-fifth of a standard deviation. Although this deviation is small, it has a statistically significant effect.

5.7 Achievement of objectives on key findings

Objective 1: To identify academic training needs required to empower academic staff

The Durban University of Technology offers training programmes even though there are still areas that need improvement. There is no needs analysis conducted prior to training and there is no refresher course given to staff members. Training programmes are offered during lecturing times resulting in staff members not attending training and these programmes are not often repeated. Findings reveal that there is no follow-up after completion of training and that staff members felt that they were not involved in the planning of these programmes.

It is recommended that the DUT implements an effective feedback programme to employees, which could be achieved by verbal or written communication, and this could only be achieved if follow-up is done to evaluate the success or failure of the programme offered.

It is suggested that training programmes be offered twice a year to give an opportunity to staff members that missed the first training session to attend the next session. It is recommended that proper advertising or communiqué be done prior to training and, to improve awareness. Email reminders should be sent to every staff member a month before commencement of training and have staff commit themselves by signing a disclaimer stating that they will attend.

This study recommends that respective departments should involve staff members when planning these training programmes, as staff involvement could give direction about areas of importance. With staff involvement, staff commitment increases,
and staff members work extra hard to reach the set goal if they were involved in planning.

The Durban University of Technology should ensure that the training and development section ensures that systems are in place for all employees to attend a refresher training related to their work.

- **Objective 2: To analyse the staff perceptions on the academic training programmes that are initiated by DUT**

Respondents felt that training programmes offered are too broad and too theoretical. They also stated that there were no groupings of audience for intended training in the design of training. Some respondents felt that the impact of training programmes is very minimal as some of the programmes can be found online for free. Respondents stated that there is no sufficient training offered to academics and that the ones available do not allow staff members to be more hands on. Respondents felt that very few training programmes are offered on E-learning/online assessments and on the use of ITSS. Respondents were asked if qualification of staff members plays an important role in teaching and learning. Findings for statement 4.8.1 indicate that more than half (59.2%) of the respondents agreed.

The institution or respective departments should offer more specific area of expertise related training to academic staff so as to bridge the gap and also academically empower staff members as there is fundamental change in approach or way of doing things.

It is imperative that the training covers the content in depth in order to improve staff capabilities.

This study, therefore, recommends that training sessions should target staff members with similar academic needs.
It is proposed that, before a training programme is offered, respective departments should be aware on the type of training that is needed and allow staff to be more hands on.

Academic staff should be encouraged to pursue their postgraduate studies which have a positive impact on teaching and learning. Such qualifications not only benefit the department, but also give staff an opportunity to specialise in their field of study and advance their knowledge.

➢ Objective 3: To examine the correlation between the training needs and training programmes

Respondents felt that there is no correlation between training needs and training programmes offered and that training programmes are not informative towards subject discipline, or aligned to teaching, learning, assessment and research. Respondents felt that institutional E-learning seminars are sometimes not subject specific and not related to the field of study in which one specialises.

The researcher recommends that a needs analysis be conducted prior to planning training programmes so that programmes offered will be beneficial to both staff members and departments. In so doing, the Durban University of Technology and respective departments would be able to see to what extent the identified needs and objectives were achieved by the programme, or to what extent staff objectives were achieved and, lastly, what commitment the staff made about learning, and if they were going to implement what they learnt into their work.

It is recommended that the DUT provides training on research to assist academic staff to write research articles. It is also recommended that departments have training that is necessary towards the department. Departments should offer training on teaching methods.
5.8 Future research

The following recommendations are suggested for further research:

- Further research should be conducted to determine factors at the DUT that may promote training transfer;
- Investigate the impact of staff involvement on planning of training programmes;
- Examine if there is a correlation between staff academic needs and training offered;
- Further studies should be done on impact of training on support staff.

5.9 Limitations

It should be noted that, even though this study makes a significant contribution, there are some limitations that point to important avenues for future research.

The data gathered for this study were limited to the selected university and, therefore, generalisations cannot be made. Any significant result emerging from this study may not reflect a similar situation at other universities of technologies in South Africa. However, the results may be used as a guideline to understanding academic staff perceptions pertaining to training programmes to empower academics more especially in enhancement of teaching and learning. Empowering academics will enable them to be more receptive to growth. Harpell and Andrews (2010) see teacher empowerment as giving teachers the confidence or power to make appropriate instructional decisions that will improve the quality of education for students.

5.10 Conclusion

In light of the above study findings, it can be concluded that need for training arises due to advancement in technology, and also from the need to improve performance of employees. Training is efficient and beneficial to the employees as it makes them highly competitive, knowledgeable and enhances their skills. Training and development programmes are extremely important to the growth of the institution as well as to meet the organisational objectives.

The study acknowledges the input that the university has provided in supporting and developing academic staff. The researcher acknowledges the support given by staff who eagerly participated in the study.
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APPENDICES

APPENDIX 1: WRITTEN PERMISSION FROM DUT

15th August 2016

Ms Luyanda Bingwa
C/o Department of Information and Corporate Management
Faculty of Accounting and Informatics
Durban University of Technology

Dear Ms Bingwa

PERMISSION TO CONDUCT RESEARCH AT THE DUT

Your email correspondence in respect of the above refers.

I am pleased to inform you that the Institutional Research Committee (IRC) has granted full permission for you to conduct your research “Academic staff perceptions of empowerment training programmes initiated at Durban University of Technology” at the Durban University of Technology.

We would be grateful if a summary of your key research findings can be submitted to the IRC on completion of your studies.

Kindest regards,
Your sincerely

[Signature]

PROF. S. MOYO
DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT
24 October 2017

Ms L L Bingwa
63 Kingston
35 Park Street
Durban
4001

Dear Ms Bingwa

Academic staff perceptions of empowerment training programmes initiated by Durban University of Technology
Ethics Clearance Number: IREC 129/15

The Institutional Research Ethics Committee acknowledges receipt of your Safety Monitoring and Annual Recertification report.

I am pleased to inform you that the study has been approved to continue.

Please note that ethical approval has been extended till 26 October 2019, if the research is not complete within this time, you will be required to apply for recertification three months before the expiry date.

Yours Sincerely

[Signature]

Professor J K Adam
Chairperson: IREC
APPENDIX 2: LANGUAGE EDITOR CERTIFICATE

Flat 1211
Kensington
311 Peter Mokaba Road
Morningside
4001

Cell: 0822677192
Email: garbharranhl@gmail.com

DECLARATION CERTIFICATE OF ENGLISH LANGUAGE EDITING

This is to certify that I have edited the dissertation:

*Academic staff perceptions of empowerment training programmes initiated by Durban University of Technology*

Candidate: Luyanda Loraine Bingwa

Dr H.L. Garbharran
B.A., Honours, M.P.A., D.P.A.

DISCLAIMER

Whilst the English language editor has used electronic track changes to facilitate corrections and has inserted comments and queries in the right-hand column, the responsibility for implementing changes in the final, submitted document, remains the responsibility of the candidate in consultation with the supervisor/promoter.
APPENDIX 3: LETTER OF INFORMATION

Dear Participants.

I, Luyanda L Bingwa (Student Number 21125254) am a registered student in the department of Information and Corporate Management for Masters: Management Sciences in Administration and Information Management at the Durban University of Technology.

Kindly assist me by completing the questionnaire. Your response will be COMPLETELY ANONYMOUS. NB: DO NOT put your name on the questionnaire.

Your assistance will be greatly appreciated, and your confidentiality is assured.

Title of the Research Study: Academic staff perceptions of empowerment training programmes initiated by Durban University of Technology

Principal Investigator/s/researcher: Bingwa Luyanda Loraine,

Masters: Management Sciences in Administration and Information Management

Co-Investigator/s/supervisor/s: Dr K.S Ngwane,

D Admin Degree

Brief Introduction and Purpose of the Study: The study seeks to identify the academic staff perceptions of empowerment programmes initiated by Durban University of Technology (DUT),

This study will also try to identify problems encountered in the training process, for the preparation of effective training of staff, and investigate if the academic staff are given the time to take on the opportunity to take part in the training of academics and the effects of training on job performance, to establish if academic staff see the difference between pre- and post-training with regards to their performance.

The aim of this study is to investigate academic staff’s perception of empowerment training programmes initiated by the Durban University of Technology in order to ensure effective teaching.
The objectives of the study are:

• To identify academic training needs required to empower academic staff.
• To analyse the staff perception on the academic training programmes that are initiated by DUT.
• To examine the correlation between the training needs and training programmes.
• To recommend necessary interventions to improve teaching and learning.

The target population in this study according to six faculties of academic staff at Durban University of Technology is 200, and sample size is 132. The reason for targeting academic staff is to get their perception on training programmes initiated by DUT. For this study a quantitative research method will be used and a stratified random approach will be used where everyone will have an equal opportunity to be selected.

Questionnaires will be the research instrument that will be used in the collection of information. This basic research study sought to use a suitable research approach to address the aims and objectives of the study and analysis of results will be carried out by means of SPSS (Statistical Package for Social Sciences) and also organised using Microsoft Excel. Graphs will be used to present data.

Outline of the Procedures:

The researcher will hand out the questionnaires and explain to the participants the purpose of the study and that participants can at any given time pull out of the process should they feel uncomfortable, participants will then be given two days to complete the questionnaire and completed questionnaires will be given to each respective department secretary for the researcher to collect.

Risks or Discomforts to the Participant:

Participants can at any given time pullout of the process should they encounter any discomfort related to the study.

Benefits:

Assist the universities review training programmes that are put in place in order to empower academic staff. This research will result in M-Tech Dissertation. An articles and journals will be published from this research. This research will result in book chapters.

Reason/s why the Participant May Be Withdrawn from the Study:

Participants may withdraw at any given point should they feel uncomfortable to continue with the research and there will not be any adverse consequences to their actions.

Remuneration:

Participants will participate freely as they wish as the will not be any remuneration for participating in this research.
**Costs of the Study:** Participants will not be expected to cover any cost towards the study.

**Confidentiality:** Confidentiality of participants is guaranteed as the participants will not be requested to fill in their names or contact details.

**Research-related Injury:**
The researcher will be covered by the Durban University of Technology indemnity as the researcher is a full-time student at DUT.

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

For more information or query please contact

Supervisor: Dr K.S Ngwane,
Tel: 031 373 5660,
Cell: 081 019 8535
Email: ngwaneks@dut.ac.za

Researcher: Bingwa Luyanda Loraine
Cell: 078 586 9538/081 885 4808) Email:
21125254@dut4life.ac.za

or the Institutional Research Ethics administrator on 031 373 2900. Complaints can be reported to the DVC: TIP, Prof F. Otieno on 031 373 2382 or dvctip@dut.ac.za.

**General:**

Potential participants must be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population e.g. isiZulu.
APPENDIX 4: CONSENT

Statement of Agreement to Participate in the Research Study:

• I hereby confirm that I have been informed by the researcher, Bingwa Luyanda Loraine (name of researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: REC 129/15,

• I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.

• I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis 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.

Please tick (x) the box below as an indication of your consent to participate in this study.

☐

I, Luyanda Bingwa herewith confirm that the above participant has been fully informed about the nature, conduct and risk of the study.
APPENDIX 5: QUESTIONNAIRE

SECTION A: BACKGROUND INFORMATION

PLEASE MARK YOUR RESPONSE TO EACH QUESTION (FOR PAPER SURVEYS, MARK WITH AN X)

1. GENDER: Female [ ] Male [ ]

2. CAMPUS: City [ ] M L Sultan [ ] Riverside [ ]
   Ritson [ ] Steve Biko [ ]

3. RACE: African [ ] Coloured [ ]
   Indian [ ] White [ ]
   Other, Please Specify ...........................................................................................................................

4. EMPLOYED: Full-Time [ ] Part-Time [ ] Contract [ ]

5. AT WHAT LEVEL WOULD YOU CLASSIFY YOUR JOB:
   Junior Lecturer [ ]
   Lecturer [ ]
   Senior Lecturer [ ]
   Head of Department [ ]

6. FACULTIES: Accounting and Informatics [ ]
   Applied Science [ ]
   Art and Design [ ]
   Engineering and Built Environment [ ]
   Health Science [ ]
   Management Science [ ]
## SECTION B: TRAINING

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<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<td>1.</td>
<td>There are academic training programmes offered in Durban University of Technology.</td>
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<td>2.</td>
<td>Academic staff should be informed of training programmes offered by DUT.</td>
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<td>3.</td>
<td>There is a need for training programmes.</td>
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<td>4.</td>
<td>Training programmes should apply to every staff member</td>
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<td>5.</td>
<td>Training programmes offered are user-friendly</td>
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<td>6.</td>
<td>Training programmes are effective</td>
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<td>7.</td>
<td>Training activities are designed to be interesting</td>
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<td>8.</td>
<td>Training programmes cover areas that staff members need to be familiar with</td>
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<td>9.</td>
<td>Staff should be involved in the planning and implementation of training programmes</td>
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<td>10.</td>
<td>Follow-up is done after completion of training programmes</td>
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<td>11.</td>
<td>Training should be on-going</td>
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### SECTION C: TRANSFORMATION PEDAGOGY

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<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>There has been a paradigm shift with regards to the role of lecturers/academics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>The incorporation of different teaching and learning styles would transform university classroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14.</td>
<td>Lecturers should be able to select appropriate learning methods that ensure students are actively involved in learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>15.</td>
<td>An incorporation of different teaching and learning styles has the potential of transforming the university classroom.</td>
<td></td>
<td></td>
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### SECTION D: CHANGING TECHNOLOGY

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<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
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<tr>
<td>16.</td>
<td>Higher education institutions of learning have undergone changes in recent years with regards to technological advancement</td>
<td></td>
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<td></td>
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<tr>
<td>17.</td>
<td>Lecturers are expected to integrate technology into the curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>18.</td>
<td>E-learning plays a critical role in teaching and learning</td>
<td></td>
<td></td>
<td></td>
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</table>
When faced with technological challenges, respective departments offer assistance timeously

SECTION E: ACADEMIC QUALIFICATION

<table>
<thead>
<tr>
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<th>Statement</th>
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<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
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<tr>
<td>20</td>
<td>Qualification of our academic staff play an important role in teaching and learning</td>
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<tr>
<td>21</td>
<td>Possession of qualification portrays competency in different teaching and learning aspects</td>
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<tr>
<td>22</td>
<td>Academic staff that do not have the necessary qualification may not have comprehensive understanding of subject material.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Lecturers with strong academic skills perform better</td>
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SECTION F: PERFORMANCE

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<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>24</td>
<td>Essential component of high performance is training</td>
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<tr>
<td>25</td>
<td>Performance of lecturers’ impact on students’ performance</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>26</td>
<td>There are reward systems that are used to compensate good performance or attendance in training programmes</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
27. Being rewarded for good performance would motivate you to do more

SECTION G: MOTIVATION

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
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<th>Agree</th>
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<th>Disagree</th>
<th>Strongly Disagree</th>
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</thead>
<tbody>
<tr>
<td>28</td>
<td>There are motivational mechanisms in place to motivate academic staff.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>29</td>
<td>Lack of good working condition and motivation mechanism could translate into lecturer’s low morale.</td>
<td></td>
<td></td>
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<tr>
<td>30</td>
<td>Motivating learners and understanding ways of learning can be accomplished by a motivated lecturer</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

SECTION H: TRAINING PROGRAMMES

<table>
<thead>
<tr>
<th>No</th>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Academic staff training programmes improve my teaching techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Academic staff training programmes positively influence transformation of teaching and learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Academic staff programmes provide world class teaching and learning methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Academic staff training positively influence student pass rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>Academic staff training programmes offered by DUT improves my intellectual capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION I: QUALITATIVE QUESTIONS

PLEASE ANSWER THE FOLLOWING QUESTIONS IN THE SPACE PROVIDED

1. What are your perceptions on training programmes offered by the Faculty of Accounting and Informatics at DUT?

   [Blank space for response]

2. Recommend necessary interventions in order to improve training programmes.

   [Blank space for response]

3. Do the training programmes offered meet your expectations?

   [Blank space for response]

Thank you for your participation and your time in completing this questionnaire
APPENDIX 6: ROTATED COMPONENT MATRIX AND COMPONENT MATRIX

Table 4.3  Rotated Component Matrix: Training

Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 6 iterations.

Table 4.4  Component Matrix: Transformation pedagogy

Component Matrixa

<table>
<thead>
<tr>
<th>Transformation Pedagogy</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paradigm shift</td>
<td>1</td>
</tr>
<tr>
<td>Incorporation of teaching methods</td>
<td>0.756</td>
</tr>
<tr>
<td>Appropriate learning methods</td>
<td>0.738</td>
</tr>
<tr>
<td>Transforming classroom</td>
<td>0.747</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.  
a. 1 components extracted.
### Table 4.5 Rotated Component Matrix: Changing technology

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological changes in higher education</td>
<td>0.274</td>
<td>0.808</td>
</tr>
<tr>
<td>Integrating technology into curriculum</td>
<td>0.811</td>
<td>-0.046</td>
</tr>
<tr>
<td>Role of E-learning</td>
<td>0.772</td>
<td>0.045</td>
</tr>
<tr>
<td>ITS offers assistance timeously</td>
<td>-0.274</td>
<td>0.813</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 3 iterations.

### Table 4.6 Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of qualification in teaching</td>
<td>0.884</td>
<td>-0.179</td>
</tr>
<tr>
<td>Qualification portrays competency</td>
<td>0.727</td>
<td>0.427</td>
</tr>
<tr>
<td>Impact of not having qualification</td>
<td>0.277</td>
<td>0.647</td>
</tr>
<tr>
<td>Lecturer with strong academic skill perform better</td>
<td>-0.197</td>
<td>0.839</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 3 iterations.

### Table 4.7 Rotated Component Matrix: Performance

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training as component of high performance</td>
<td>0.469</td>
<td>-0.436</td>
</tr>
<tr>
<td>How lecturers impact students pass rate</td>
<td>0.073</td>
<td>0.851</td>
</tr>
<tr>
<td>There are rewards for good performance</td>
<td>0.734</td>
<td>-0.119</td>
</tr>
<tr>
<td>Rewards motivate staff to do better</td>
<td>0.681</td>
<td>0.334</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 3 iterations.
### Table 4.8 Component Matrix

<table>
<thead>
<tr>
<th>Training Programmes</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training improves teaching techniques</td>
<td>0.675</td>
</tr>
<tr>
<td>Training positively influence transformation of teaching</td>
<td>0.690</td>
</tr>
<tr>
<td>Training programmes provide world class teaching methods</td>
<td>0.679</td>
</tr>
<tr>
<td>Staff training positively influence student pass rate</td>
<td>0.713</td>
</tr>
<tr>
<td>Training programmes improve intellectual capacity</td>
<td>0.526</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.  
1 components extracted.

### Table 4.9 Component Matrix: Training programme

<table>
<thead>
<tr>
<th>Component Matrix&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Programmes</td>
</tr>
<tr>
<td>Training improves teaching techniques</td>
</tr>
<tr>
<td>Training positively influence transformation of teaching</td>
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<tr>
<td>Training programmes provide world class teaching methods</td>
</tr>
<tr>
<td>Staff training positively influence student pass rate</td>
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<tr>
<td>Training programmes improve intellectual capacity</td>
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</table>

Extraction Method: Principal Component Analysis.  
1 components extracted.
### APPENDIX 7: CHI SQUARE

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<tr>
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<tr>
<td>Race</td>
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<td>Employed</td>
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<td>Job Classification</td>
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<td>Faculties</td>
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<td>5</td>
<td>0.000</td>
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<tr>
<td>B1</td>
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<td>62.453</td>
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<td>Training programmes provide world class teaching methods</td>
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<td>Staff training positively influence student pass rate</td>
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<td>H35</td>
<td>Training programmes improves intellectual capacity</td>
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