



**ACADEMICS' PERCEPTIONS OF COMMUNITY ENGAGEMENT AT
A SELECTED UNIVERSITY OF TECHNOLOGY IN SOUTH AFRICA**

by

TERSLINA PATCHAPPAN

Submitted in fulfilment of the requirements for the Degree of

**MASTERS IN MANAGEMENT SCIENCES
SPECIALISING IN**

BUSINESS ADMINISTRATION

in the

Department of Entrepreneurial Studies and Management

Faculty of Management Sciences

at the

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SUPERVISOR: PROF I. G. GOVENDER

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**SUPERVISOR:
PROF I. G. GOVENDER
DPA (UKZN); MBA (UDW)**

DATE

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ABSTRACT

The South African society is unambiguously in a flux, plagued with wicked challenges such as increased levels of poverty, youth unemployment and an extensive public health crisis, which have become the societal norm. Increased prominence exists for university programmes to alleviate these challenges and sustain the South African landscape. This study aimed to investigate the perceptions of community engagement amongst academics at a selected University of Technology, namely the Durban University of Technology in KwaZulu-Natal, South Africa. Academics' perceptions towards community engagement are significant for the institutionalisation of engagement at the university. Against this backdrop, the main objectives of this study were to evaluate academics' understanding of community engagement; assess the extent of their initiatives; determine their enablers and constraints to undertake such initiatives; and recommend strategies that could lead to an improved community engagement experience.

The research design adopted was the quantitative paradigm, which entailed the distribution of a structured open and closed-ended questionnaire to the respondents. Against a Five-Point Likert Scale, the questionnaire comprised of six sections, each under a specific main theme related to the research topic. The simple random sampling technique achieved a sample size of 80 respondents from a target population of 102 academics. The sample respondents returned seventy-four questionnaires. This represented a high response rate of 93%, through the attribution of a personal method of data collection. Furthermore, the data collected was analysed using the Statistical Package for the Social Sciences (SPSS) Version 24.0 for Windows. Upon completion, the entire dissertation was verified against plagiarism through the Turnitin programme and achieved a 10% rating. The study found that workload demand and time are main inhibitors of community engagement. The researcher recommended that DUT should consider offering rigid empowerment and support structures for academics. Lastly, the research project concluded with directions for future research based on the insights of academics into community engagement in South African higher education.

LIST OF ACRONYMS

ANC	African National Congress
CBPAR	Community-Based Participatory Action Research
CE	Community Engagement
CBR	Community-Based Research
CHE	Council on Higher Education South Africa
DUT	Durban University of Technology
HE	Higher Education
HEI	Higher Education Institution
IREC	Institutional Research Ethics Committee
NGOs	Non-Governmental Organisations
NRF	National Research Foundation
NSFAS	National Student Financial Aid Scheme
PAR	Participatory Action Research
SA	South Africa
SL	Service Learning
SMME	Small, Medium, and Micro Enterprises
SPSS	Statistical Package for Social Sciences
STATS SA	Statistics South Africa
UCE	University-Community Engagement
UDF	United Democratic Front
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UoT	University of Technology

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Firstly, I thank my universe for giving me the strength to complete this study ॐ.

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Lastly, I sincerely thank the academic staff from the Faculty of Management Sciences at the Durban University of Technology for providing their valuable insights and perceptions, required towards the completion of this study.

DEDICATION

To my parents, Mr Sugendheran and Mrs Vidya Patchappan.

DECLARATION

I, Terslina Patchappan, declare that the dissertation, which I hereby submit for the Degree of Master's in Management Sciences, specialising in Business Administration in the Faculty of Management Sciences at the Durban University of Technology, is my own original work and has not been submitted at any previous institution of higher education. All the sources that I have acknowledged are accurately cited and referred to in the bibliography list.

Terslina Patchappan

Student No: 21414595

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Higher education (HE) occupies an instrumental position within sustainable development that influences the route in which future generations will engage with the social challenges that lies ahead (Barth, Adomßent, Fischer, Richter and Rieckmann, 2014:4). Therefore, it is paramount for universities to create sustainability programmes, which provide graduates the competencies to contribute towards resolving challenging societal problems that will maintain a sustainable future (Wiek, Bernstein, Foley, Cohen, Forrest, Kuzdas, Kay and Keeler, 2015:242). Blanco-Portela, Pertierra, Benayas and Lozano (2018:2) predict that an increased engagement of academics as agents of change leads to an effective service function that the university can provide to its society. According to Wilson (2013:1), there is an advance for higher education institutions (HEIs) in South Africa (SA) to elevate the status quo of their teaching and research and to increase levels of community engagement (CE).

Moreover, the acceleration of the Fourth Industrial Revolution (4IR) has intensified the collaboration of HEIs both locally and globally (Lazarus, Erasmus, Hendricks, Nduna and Slamet, 2008:66) to break down silos and improve mobility as a knowledge base (Raman, 2018). These evident expectations that lie against a competitive era for educational accountability have mandated the transition of the public purposes of HE towards a renewable commitment beyond the classic ivory tower. In terms of being firmly rooted more closely within the soil of communities, Silapanad (2018) shares the vision for the future of sustainable education through the lens of increased collaboration. The assertion made by Professor Robert Hollister as portrayed by MacGregor (2014:1) states that the existence of a current global presence of CE is a central prioritisation within the institutional culture of HEIs. According to

Millican and Bourner (2014:7), the international significance of CE programmes reflects graduate employability, citizenship and social justice.

With the expansive globalization of HE, the United Nations Educational, Scientific and Cultural Organization (UNESCO) highlights an escalation of 594.1 million student enrolments by the year 2040 (Calderon, 2018:1). An increased stimulation of “real-world” learning experiences for students, such as service-learning (SL), internships and community-based research (CBR), require intensification (Gruber, 2017:1). At a societal level, this transition is a systematic innovation that involves academics who have significant proximity within the academic mission of HEIs (O’Meara, Sandmann, Saltmarsh and Giles, 2011:83), each with their own values, preferences and perceptions of the future. However, Albertyn, Botha, Van der Merwe, Roux and Coetzee (2010:24) proclaim that this global perception has created a sustained image of a privileged ivory tower for many universities, which are significantly alienated from the needs of their immediate communities.

In a South African higher educational context, the effectiveness of CE emanates from the United Nations Development Programme (UNDP) Human Development Report of 2010. The classification of the UNDP reflects the economy of SA within the medium human development category, through the occupation of 110th from a total complement of 169 countries (Coetzee, 2012:1-2). It is significantly deducible that in the existence of challenges, solutions are emerging. The appalling rates of indigence, unemployment, challenges for rural communities and people living with disabilities institute an extensive contribution by HEIs towards the civilization of society. Therefore, a multi-sectoral approach, such as university-community engagement (UCE), requires significant collaboration between the university and its external stakeholders to diminish the unequal divide that prevents the creation of reciprocal opportunities and the traditional enrichment of the HEI.

1.2 BACKGROUND TO THE STUDY: CONTEXT OF THE SOUTH AFRICAN HIGHER EDUCATION SYSTEM

1.2.1 Pre-1994: The Apartheid Context

The South African HE environment has undergone major changes over the last three decades. According to Badat (2008:2), the massive exclusion of the black population under colonialism intensified political and economic discrimination, which has significantly influenced the HE sector. Badat (2010:4) recognises the fragmented South African HE system, which is deeply submerged within racial and social inequalities. A meritocracy selective criterion for HE admission restricted student access and participation based on social background (Mzangwa, 2019:6), underpinned by large student to teacher ratios and unqualified academics (Sayed and Kanjee, 2013:7), resulting in unequal learning outcomes for the black population. Furthermore, Gallo (2020:21) states that the effects of Bantu education crippled the educational curriculum for an improved economic and employment relevance for students' quality tertiary education.

The imbalances created by these discriminatory practices required an urgent social transformative policy (Fomunyam, 2017:170). According to the perspective of Mugabi (2015:21), the 1962 UNESCO conference on the Development of Higher Education in Africa mandated South African HEIs to be perpetually synchronised with society and provide teaching and research applications towards relevant problems of the country. Reddy (2006:1) states that the algorithm used to transform HEIs into a socially responsive institutional culture prevailed in the deepening and rebuilding of the South African democracy. This recreation necessitated the philosophy of Ubuntu, in which the relationship shared between all individuals and communities are reciprocal, interdependent and mutually beneficial (Oviawe, 2016:3).

1.2.2 Post-1994: A Predominant Democratic Context

The year 1994 signified the triumph of academic freedom in SA, in which the National Student Financial Aid Scheme (NSFAS) received an allocation of twenty-million-rand towards the bursaries of previously disadvantaged students (Lefa, 2014:5). Moreover, in February 1995, then elected President Nelson Mandela appointed the National Commission on Higher Education (NCHE) to ensure that government birth an effective policy that signifies a common definition and vision of HE (Lefa, 2014:7). The establishment of the Higher Education Act 101 of 1997 advocated co-operative governance as a mechanism for the governance and legalization of this system (Department of Higher Education and Training (DHET), 1997). Therefore, the birth of CE can be traced to the advent of White Paper 3 of 1997, which challenged HEIs to “demonstrate social responsibility and their commitment to the common good by making available expertise and infrastructure for community service programmes” (Department of Education (DET), 1997:14).

This transformation and development of the African nation promulgated the redress of apartheid discriminatory practices and the formation of a responsible citizenry deeply grounded in the democratic constitution and the development of a knowledge skills base for society (DET, 1998:29). The implementation of the new system of governance advocated institutions to have a code of conduct for the specification of behaviour practices. The contextualisation of the new leadership complexity can be understood by the viewpoint of Jansen (2003:32), in which the appointment of Post-apartheid Education Minister Professor Kader Asmal resulted in an interventionist policy that enabled the merging of post-secondary institutions across universities, colleges of education and technical colleges. In March 2001, a new landscape for HE functionality was pioneered, which reflected the ethos of a democratic country (Arnolds, Stofile and Lillah, 2013:2).

Considerable transformation of the HE sectors was also reported in Canada (Arnolds, Stofile and Lillah, 2013:2), Australia and the United Kingdom (Healey, Jenkins and Lea, 2014:7), the Netherlands (Cai, Pinheiro, Geschwind and Aarrevaara, 2015:2), China (Cai and Yang, 2015:2), Norway (Bolbanabad, Mosadeghrad, Arab and Majdzadeh, 2017:518) and Denmark, Finland and Sweden (Liu, Patton and Kenney, 2018:101). In SA, thirty-six HEIs merged, either unbundled or incorporated to form eleven research universities, six comprehensive universities and six Universities of Technology (UoTs). According to Badat (2010:6), the core functions of HE became structured to disseminate knowledge through the production of critical-thinking graduates and a structured method of learning, teaching, research and CE that contributes to the economic development and new democracy of SA. Erasmus (2014:102) states that this national emphasis on CE has compelled institutions to ensure that their core activities are responsive towards social responsibility challenges for the compliance of knowledge transfer objectives of the HE sector.

Mugabi (2015:21) reinforces this change by the authentication of Pouris and Inglesi-Lotz' (2014:3) work, which utilised Statistics South Africa (Stats SA) to support the conception of universities as the main repository of knowledge. Stats SA reflected the value added by the HE sectors to the South African economy as significantly higher than the contribution obtained from the forestry, textile, clothing, hotel and restaurant industries. Moreover, the merging of old technikons led to the culmination of the former Technikon Natal and M.L. Sultan Technikon merging. This merger had transpired in a new institution in 2002, called the Durban Institute of Technology (DIT), now known as the Durban University of Technology (herein after referred to as DUT). Since this inception, DUT has grown as an academic pillar in KwaZulu-Natal and South Africa (DUT, 2008). DUT has six academic faculties, which the Faculty of Management Sciences is the largest to receive increased emphasis from the Department of Higher Education (DHE) for postgraduate output (Hlengwa, 2017:218). Therefore, the National Research Foundation (NRF) objectives has enhanced government funding for research indicators within the faculty (Singh, 2015:185).

Against this remarkable transition, Bender (2008:81) observes the existence of a deficiency in a distinct conceptualisation of CE, with the gap between the academe and those outside it shrinking (Demas, 2018:1). Moreover, the National Development Plan (NDP) condemns that SA has not yet overcome the education inequalities submerged within the apartheid era, in which the relevance of graduates are “disturbing”. In the words of the NDP, as cited in Hall (2015:166), “*South African universities are mid-level in terms of knowledge production, with low participation, high attrition rates and insufficient capacity to produce the required levels of skills. They are still characterised by historical inequities and distortions*”. Therefore, the submerged pressure for the quantitative performance of HEIs has created a concentration of academics that exert a significant proportion of their time on the instillment of learners to pass their examinations, in comparison to the effective development of intellectual competencies (CHE, 2014:7).

This has led Le Grange (2007:11) to advocate for the salience of UCE, as the mere education of students on the socio-economic challenges of the country can be “dangerous” because of students’ learning perception to pass their examinations, without addressing any social challenges. For the enhancement of graduate employability, the recommended attributes by the HE Framework for Institutional Quality Enhancement is for graduates to be personally, professionally and socially adaptative to society (Council on Higher Education (CHE), 2014:4). At this forefront, the relevance of HEIs in SA is underpinned. The legacy that apartheid has imprinted requires, “universities to being increasingly challenged in their responsiveness and relevance to societal needs” (Subotzky, 1999:17). University academic constituents form the direct responsibility parties for the presentation of this ‘relevance’ into the classroom, and whose perceptions are significantly correlated to the success of community-university partnership programmes (Kearney and University, 2015:35).

1.3 PROBLEM STATEMENT

The successful implementation of “third-stream” initiatives for an HEI is significantly dependant on the entrepreneurial spirit of its staff, and the cultural and organizational conditions that support this spirit (Koryakina, Sarrico and Teixeira, 2015:319). The manifestation of this encouragement within faculty members creates a benchmark of opportunities for students to embrace civic engagement. Against this backdrop, CE is increasingly recognised and implemented as the third core academic function at the DUT. The importance of engagement is proclaimed within the core functions of the university, namely teaching, learning and research. As a UoT, the strategic plan of DUT highlights engagement with the local industry; to continue supporting the development of the economy for the improvement of quality life for people; and the engagement with communities to build a strong interconnectedness between the university and its social context (DUT, 2015:5).

Traditionally, the inception of universities comprised teaching, with further advancements leading to research, and the ultimate “addition” of engagement. According to Govender, as portrayed by Mutero (2018), a challenging problem arising within this domain lies with the current competing academic workloads at DUT, which creates time constraints for many academics to being effectively involved in outreach initiatives. Therefore, it is contended by the researcher that a lack of engagement between academics and communities is distinct, which emerges from present operating barriers within the university context. Despite government’s mandate for learning institutions to pursue CE, the challenge with such an implementation often lies in the lack of financial resources (Gorski and Mehta, 2016:111) to support multiple workload demands (Kearney, 2015:32) that are shared amongst the production of publications (Adekalu, Krauss, Turim and Ismail, 2017:91) and lecturing and research (Adekalu, Ismail, Krauss and Suandi, 2017:105).

In conjunction, Tremblay, Lalancette and Roseveare (2012:16) state that an intense pressure exist from the current generation of students that seek an education which stimulates job opportunities academically and practically. In addition, there is an uncertainty to “add” CE within the existing academic framework, since it is perceived as a service in relatedness to teaching, learning and research (Albertyn and Daniels, 2009:412). Moreover, this “add on” activity (Sall, Lebeau and Kassimir, 2003:144; Bender, 2008:81) create a difficult out-of-class learning experience, as student quality is limited towards a formal classroom setting. This is a result of the teacher to large class quantity ratio in South African HE, which pose implications for the socio-economic development status (Hornsby and Osman, 2014:711). As a result, a conducive improvement of the South African learning environment is required (Murtin, 2013:18).

Therefore, it becomes paramount to establish how academics are meeting student expectations through CE. The CHE (2007:4) identifies students as significant CE agents for the transformation of SA. However, the capability of students to contribute towards this transformation is significantly dependent on purposeful civic learning and the effectiveness of students’ preparation for engagement with communities (Fourie and Bender, 2007:164). Academic staff are consistently responsible for this preparation. Therefore, the need to investigate academics’ perception emerges. This perception seeks to provide a potential mechanism for the DUT to ensure that its academics are at a position of prominence in producing professionals that are equipped to address the challenges of the country. However, the argument of Fourie and Bender (2007:64) cannot be accepted in a developing country such as SA, whereby Laing (2016:1) cautions that a majority of universities have an increasingly competitive and self-interested climate.

Therefore, the challenge made by government transcends to HEIs to endorse innovative and effective ways to develop, transmit and apply their knowledge for the public good. As a result, Mugabi (2015:22) argues convincingly that CE endures mere institutionalisation within the budgets, teaching, learning and research activities at a majority of South African universities. This leads universities to be defined as problematic and complex, as Snyman's (2014: iv) findings indicate that many universities have an enabling infrastructure for CE, but there is inadequate emphasis for distinct monitoring and evaluation practices. To illuminate this complex functionality, it is of interest to the researcher to establish whether the DUT adequately allows its academics to engage in community engagement.

1.4 AIM OF THE STUDY

The aim of this study is to gain insight into the academics' perceptions of community engagement at a selected University of Technology, namely the Durban University of Technology.

1.5 RESEARCH QUESTIONS

To meet the above objectives, the following research questions were formulated for the study:

- What do academics at the DUT understand by community engagement?
- To what extent do academics at the DUT integrate community engagement with their students and communities?

- What are the factors that enable academics from undertaking community engagement activities at the DUT?
- What are the factors that inhibit academics to undertake community engagement activities at the DUT?
- What strategies can be implemented towards the successful implementation of an improved community engagement experience for academic staff at the DUT?

1.6 OBJECTIVES OF THE STUDY

To meet the above aim, this study addresses the following objectives:

- To evaluate the understanding of community engagement by academics at the DUT;
- To assess the extent of community engagement by academics in the DUT;
- To determine the enablers for academics to undertake community engagement at the DUT;
- To determine the constraints for academics to undertake community engagement at the DUT; and

- To recommend strategies that could lead to improved community engagement for academics at the DUT.

1.7 SCOPE OF THE STUDY

The study is confined to the South African HE sector, with a distinct reference to merged Universities of Technology as providers of quality tertiary education. The coverage of this study is on a selected University of Technology, namely the Durban University of Technology (DUT), located in KwaZulu-Natal in South Africa, with a total academic staff complement of 691 employees. In the new merged Universities of Technology in the higher education sector, the Durban University of Technology prevailed as the only merged UoT in KwaZulu-Natal. Although Mangosuthu Technikon based in KwaZulu-Natal also became categorised as a UoT, it remained as a separate entity that did not merge with any other tertiary institution and is therefore excluded from the study. Moreover, this is an in-house investigation that is delimited and does not include other traditional and comprehensive universities within the higher education sector in KwaZulu-Natal. In addition, the study is limited to the academic departments within the Faculty of Management Sciences at the DUT as the inclusion of other departments will make the study too longitudinal in nature. The study variables, namely academic motivation, constraints and institutional effectiveness, also examines the state communal imperatives aligned to these constructs, which finds a systematic applicability at the DUT. On this basis, the DUT as a people-driven institution was preferred as a strategically selected UoT for this study.

1.8 SIGNIFICANCE OF THE STUDY

The envisaged significance of the study is an academic contribution within the field of CE in the HE UoT sectors. The significance of this study is to make a unique contribution towards the existing body of community inclusiveness knowledge for the DUT. The study attempts to ascertain perceptions, concepts and practices as applied within the public sector. Furthermore,

the exploration of motivation is against an efficient CE implementation in UoTs, with specific reference to the DUT. The study formulation of theoretical constructs and paradigms reflect focal lenses which seek adaptability in the maintenance of CE at the DUT. The focus of the current study is not primarily restricted to the constructs of academics to undertake CE, but also a representation and realization of community inclusiveness within the management of DUT.

The researcher contends that the findings from this study can enable pertinent recommendations to the DUT on how academic staff perceive CE from the reflection of their current working environment. General guidelines will also be highlighted that can serve as enhancement for CE quality improvement and policy-making protocols at the DUT. Furthermore, the study may assist Heads of Departments (HODs) within the Faculty of Management Sciences with the specification of measures that inspire academic development within respective departments, through an advocacy of a research-based enquiry strategy on service quality challenges and management practice at the DUT. In the current study, the image of CE reflects a multi-dimensional approach from the shared interactions between academics, their students and local communities.

1.9 LITERATURE REVIEW OF THE STUDY – A BRIEF OVERVIEW

A literature review involves the systematic identification, location and analysis of documents that contain information related to the research problem (Robson and McCartan, 2016:52). Against the research problem statement outlined above, it is evident for South African HEIs to mandate their roles against an influx of social disparities that constrain its local environment. As such, it is paramount that CE occupies equilateral prominence amongst the university's roles of teaching and research. The associated responsibilities of CE are facilitated by academics, which is regarded as the process of student preparation through a principled curriculum implementation, a place-based experience and interaction with the community (Hamilton, 2019:11). An assembly of authors have provided significant insights into academics' facilitation for the successful implementation of engagement that enhances the

university. However, in the same vein, authors have highlighted various concerns that restrict the successful implementation of efficient engagement in a knowledge-based sector. This is presented below in a synthesised overview of the literature review of the study.

1.9.1 The Foundations of Community Engagement

The foundations of community development frameworks are well documented in the studies of Lee (1993:35); Fawcett, Paine-Andrews, Francisco, Schultz, Richter, Lewis, Williams, Harris, Berkley, Fisher and Lopez (1995:680); and Fook, Ryan and Hawkins (1997:408). The concept of CE, as applied in the public health sector, was researched extensively by Bogue, Antia, Harmata and Hall (1997:1054); Benson, Leffert, Scales and Blyth (1998:140); and Lindsey and McGuinness (1998:1107). Branch Environmental Conservation (1998:65), Topping (2000:11) and Sheppard, Shaw, Flanders, Burch, Wiek, Carmichael, Robinson and Cohen (2011:403) extended the theories of CE to the environmental sector. The incorporation of CE principles into the HE sector are supported by research conducted by Fitzgerald and Peterman (2005:13); Saltmarsh, Hartley and Clayton (2009:7); Kimball and Thomas (2012:23); and Pinheiro, Langa and Pausits (2015:228). The field of CE can be comprehended as the emergence of HE assistance in the probe for ‘relevance’ of an informed reflection that graduates require for active citizenship submerged in the diverse needs of communities (Fourie, 2006:7). This implies an extensive knowledge of its existing challenges and enablers. Fitzgerald, Bruns, Sonka, Furco and Swanson (2016:224) consider CE as a university’s core value for a stronger, wealthier and more equitable country.

1.9.2 The Relationship between Higher Education and Community Engagement

HE disposition towards community sustainability is valued by Hart, Bell, Lindenfeld, Jain, Johnson, Ranco and McGill (2015:10) and McNall, Barnes-Najor, Brown, Bernick and Fitzgerald (2015:1). However, the previous examination of this disposition is limited, as Ramsbottom, O’Brien, Ciotti and Takacs (2018:2) found the existence of a gap between the

interactions of institutions and communities. To fill the exclusiveness in this literature gap, Holzer and Kass (2015:120) attribute poor relationships, whereas Pinto, Spector and Rahman (2019:2) shift this to the cultural differences that exist within the academic and service spheres. Ahmed, Young, DeFino, Franco and Nelson (2017:310) predict that gaps in communication exist from a lack of knowledge by newcomers. Weerts and Sandmann (2008:81) concluded from their study that power imbalances between academics and the community, inhibit the successful acceleration towards engagement. Moreover, existing research has also outlined challenges within the internal governance and management of institutions (Koryakina, Sarrico and Teixeira, 2015:317).

It can be conceived from Jacob, Sutin, Weidman and Yeager (2015:3) that the relationship between HEIs and the communities in which they reside is “unbalanced and one-sided”. Furthermore, Ibrahim, Awang, Rahim and Abdullah (2012:7) figuratively describe the HEI as an “exclusive vicinity surrounded with high fencing and strict security examination at the main entrance”, making it inaccessible for the public to utilise university amenities, therefore impeding the relationship between the community and university. Furthermore, Smerek, Pasque, Mallory and Holland (2005:7) argue the emphasis for increased collaborations on engagement partnerships between universities and communities, whilst Fitzgerald, Bruns, Sonka, Furco and Swanson (2016:248) present a case against it. The argument of Smerek, Pasque, Mallory and Holland (2005:7) is not completely valid as partnerships can only be viable if the university policy and practice encourage a scholarship in engagement that accommodates an evaluative criterion of its reward process.

1.9.3 Research on Academics and Community Engagement in South African Higher Education

A study conducted by Pinheiro, Benneworth and Jones (2015:151) concluded that the political revolution in SA has influenced academics to be involved in courses and research that are more technical, as opposed to their theoretical backgrounds. However, Cole, Howe and Laird (2016:19) found that faculty within the business field encouraged civic engagement more and

find it naturally transpiring to make the transition of embedding civic issues into their course content. Therefore, it would be of special interest to evaluate academics' perception of university-community engagement (UCE) from the Management Sciences Faculty under their present operating environment and mentioned utility of the scholarship of engagement. This is probably a result of the responsibilities of academics that intersect with CE, as the pressure for greater accountability has led to the formation of benchmarks and performance indicators designed to enable universities to demonstrate their socio-economic contribution at local and regional levels. However, existing research has discovered many problems in the activities that academics are involved with in communities.

A prominent issue that surfaced from literature is the lack of coordination amongst individual academic initiatives, rather than that of a strategically planned effort (Snyman, 2014:2). As a result, the sustainability of CE initiatives becomes a challenge because it is integral for academic members to monitor and evaluate outcomes as proof of achievement. Kearny (2015:32) argues convincingly that academics have numerous workloads that are measured upon them and cannot solely perceive CE as a prime concern. However, this argument cannot be completely valid, as Fitzgerald, Bruns, Sonka, Furco and Swanson (2016:1) reveal that scholarship engagement can only be established when academics re-commit to their societal contract, which acknowledges that learning opportunities of teaching and scholarship also reside in non-academic settings. Additionally, to illuminate the magnitude of these "responsibilities" that HEIs need to employ to successfully influence their communities (Kowal, 2017:181), academics need to have transformational CE knowledge. However, this knowledge must be shared in some way with the communities they serve. In the same vein, it is integral to establish the constraints for academics when imparting this knowledge through undertaking CE within communities.

1.9.4 The Conceptualization of Academic Motivation in Community Engagement

According to Robbins and Judge (2013:202), academic motivation is the intensity that stimulates the direction and persistence of effort towards the attainment of the HE institutional goal. Therefore, high intensity require a channelled direction that benefit the institution and that is consistently aligned with its goals. According to Imhonopi and Igbadumhe (2020:1), academic CE motivation significantly acquires knowledge, experience and practical skills that is required for career advancement and professionalism. Janke and Colbeck (2008:42) reveal that academics are motivated to integrate their research, teaching and service roles within the domain of their academic work through a positive psychological assessment of capabilities. According to Darby and Newman (2014:100), cognitive goals and outcome expectancies enable the motivation to pursue outreach initiatives.

Furthermore, Stankovska, Angelkoska, Osmani and Grncarovska (2017:159) predict that the academic performance as a lecturer and researcher actively determines the quality of students learning impact and therefore positively contributes to society. However, this performance requires an internal and external process of a reflective interpretation that attributes the motivation for academic performance (Harvey and Weary, 1984:433). Hou and Wilder (2015:5) found the existence of high academic intrinsic motivation for outreach implementation against the non-conductive reward system within HE. Therefore, it is imperative to understand the complexities of academic motivation that will seek to assist academics in achieving cognized goals and outcome expectancies through the development of solutions that create a sustained engagement.

1.9.5 Inherent Constraints for Academics

Sylvester, Bianco, Greenwood and Mkanthama (2017:3) found that academics have inadequate funding and incentives to develop programmes for community members, which impedes the ability to foster and strengthen sustainable relationships with community leaders (Tindana, De Vries, Campbell, Littler, Seeley, Marshall, Troyer, Ogundipe, Alibu, Yakubu and Parker, 2015:10) and partners for an informal collaboration in face-to-face settings (Woolford, Buyuktur, Piechowski, Doshi and Marsh, 2019:86). Furthermore, the infrastructure of institutions is not systematically aligned to support CE, which can be resource-intensive and time-consuming (Joosten, Israel, Williams, Boone, Schlundt, Mouton, Dittus, Bernard and Wilkins, 2015:1646). Moreover, the current requirements and timeline for promotion in academia creates a challenge for academics to participate in community-engaged research within their early careers (Woolford, Buyuktur, Piechowski, Doshi and Marsh, 2019:86). This challenge is created from the lack of department support (Sobrero and Jayaratne, 2014:125).

1.9.6 Enablers that Support Academics

The consistent envisioning of CE for the enrichment of own research, teaching, practice or service creates a difficult experience for many academics (Palombi, 2017:4). Therefore, Darby and Newman (2014:93) highlight the importance of the identification of incentives that are desirable to faculty members in order to increase their motivation towards engagement. Moreover, Mapesela and Strydom (2004:6) recommend an effective integration between the performance management and promotion systems within HEIs, for the enablement of staff remuneration increases that will aid in academic performance. The necessity for a rigid support structure from fellow experienced staff for the co-ordination and execution of engagement programmes is also paramount. Carbonnier and Kontinen (2015:157) add that capacity buildings require expansion within the confined substantive research agenda, which will enable administrative and financial management support for academics with significant autonomy in research project management.

1.9.7 Challenges in the Monitoring and Evaluation of Community Engagement Frameworks in Higher Education

The articulation of an HEI's public mission is relatively transitional, as opposed to the assessment of the mission achievement (Collins, 2017:2). According to Harvey and Knight (1996:77), basic performance indicators are utilised for the measurement of student learning outcomes, which emphasize teaching quality rather than learning. Furthermore, Goodman, Thompson, Arroyo Johnson, Gennarelli, Drake, Bajwa, Witherspoon and Bowen (2017:3) describe qualitative evaluation as time-consuming, which restricts the evaluation of large-scale projects and the challenge of results comparison for the development of evidence-based practices. According to Yarime and Tanaka (2012:75), the quantitative evaluation of the research performance of HEIs is based on bibliometric data, such as the number of academic papers published and cited. Therefore, there is an inadequate methodology established to determine whether the community research project has achieved a significant impact on sustainability.

Furthermore, Wals (2013:4) states that the emergence of rankings to benchmark and measure performance within the Times Higher Education Index has led to increased pressure for HEIs to focus on external research funding. According to Stanton (2012:288), the importance of the evaluation of engagement research is often invariably overlooked. This is attributed to the challenge for the academic to validate work within their respective faculty and institution. According to Allais, Unterhalter, Molebatsi, Posholi and Howell (2020:143), the relevance of the HE sector has radiated scrutiny for the development of knowledge and the address of colonialism injustices towards society. Swartz, Ivancheva, Czerniewicz and Morris (2019:569) assert that South African HEIs are required to simultaneously enhance their financial pressures and status through global ranking systems; promote their brand; and perform teaching and research functions on social justice imperatives to secure the generation of government income. Against this requirement lies the rapid submergence for the demonstration of accountability from the collection of official quantitative data through audits, management by objectives, measurement-driven instruction, benchmarking, risk assessment and total quality management (Menendez, 2015:78).

1.9.8 Community Engagement Concerns

According to Wals (2013:7), it is a challenge for academics to stimulate their sustainability orientated learning within the whole university system as this process requires adaptation within concurrent educational efficient reforms, accountability, management and control, that are not consistently conducive to a re-orientation. From the extensive literature, the distinction between two significant themes emerged. Firstly, engagement initiatives in HE are perceived as less rigid than traditional forms of teaching and scholarship because of the challenging nature of assessment and the measurement impact (Vuong, Rowe, Hoyt and Carrier, 2017:250). Secondly, MacQueen, Bhan, Frohlich, Holzer and Sugarman (2015:7) state that the requirement of adaptive transformation within the partnership dynamics creates a challenge to evaluate iterative and dynamic interactions amongst all the stakeholders, with the simultaneous inclusion of academics within the CE framework and institutional level strategies. Moreover, Al-Hosaini and Sofian (2015:26) explain that the HE sector is facing pressure to bridge the gap between the skills demanded by the labour markets and skills acquired by graduates that meet the strategic objectives of HEIs. Research conducted by Cloete, Bunting and Maassen (2015:29) reveal that the South African HE sector is experiencing difficulties to deliver knowledge products that enhance national and regional development. Therefore, the mechanism development of HEIs for an assessment of CE project achievement within teaching and research practices has produced results that remain unattainable in South African academia (Khanyile, 2020:107).

1.10 RESEARCH METHODOLOGY AND DESIGN

This section of the study addresses how the research is conducted and how the data will be collected and analysed. It focuses on the following: research design, data collection, questionnaire design and data analysis.

1.10.1 Secondary Data Collection

Secondary data is referred to by Clark (2013:57) as the information that has already been collected by an individual, and which is available for the researcher to make use of. Vartanian (2011:3) is of the opinion that a large secondary data set creates an alternative to the collection of primary data, which provides the researcher access to more information that would be available in a primary data set. In support, Cheng and Phillips (2014:374) affirm that secondary data not only saves time and cost (Neelankavil, 2015:60), but such analyses could also identify potential new interventions to existing problems that can subsequently be tested in prospective studies with limited resources (Johnston, 2014:619). However, Hox and Boeije (2005:596) caution that secondary data provides the researcher with various characteristic problems, such as the researcher must locate data sources from their own research problem in which the relevant data requires obtainment for an evaluation against the quality requirements of good scientific practice for a current methodological research criterion. Secondary data for this study will be sourced from journals, textbooks, media articles, the internet, government publications, periodicals and other dissertations and theses.

1.10.2 Primary Data Collection

Walliman (2016:240) states that primary data is the source from which the researcher can obtain information by either direct, detached observation or the measurement of phenomena in the real world, which is undisturbed by any intermediary interpreter. When the research objectives cannot be attained using secondary data, Hair (2015:23) advises that primary data requires collection. However, the collection of primary data is time-consuming and can emerge as obsolete (Richter, Meißner, Strangfeld and Zink, 2016:79; Walliman, 2011:70). The primary data for this study will be collected by using an open and closed-ended structured quantitative questionnaire.

1.10.3 Research Design

Nardi (2018:8) defines research design as a plan for the translation of research objectives into measurable and valid information and therefore, it is the blueprint for the answer to the research questions and objectives (Emmanuel and Ibeawuchi, 2015:1). Adeleke (2016:15) states that the research design provides an appropriate framework assistance in the delineation of the research problem, scope and limitations of the research. Kivunja and Kuyini (2017:30-35) iterate that there are different research paradigms, namely Positivist, Constructivist, Interpretivist and Critical. The study will be conducted within the Positivist paradigm, which involves the objective exploration of scientific knowledge and judgement to establish individual perception (Antwi and Hamza, 2015:218). For the purpose of this study, a quantitative research paradigm will be undertaken. According to Njapha and Lekhanya (2017:408), quantitative research refers to the systematic empirical investigation of social phenomena through statistical, mathematical or numerical data and computational techniques. Smith (2014:103) states that the quantitative research design has a conclusive purpose that seeks to quantify the problem and understand its relevance through the establishment of the projectable results within a larger population. Yardley (2015:259) adds that the purpose of quantitative research is to identify predictable causal relationships that can be observed or replicated within different contexts. Kelly (2019:15) explains that quantitative research generally includes the frequencies of occurrences, as well as correlational and causal relationships between variables. Paulsen and Smart (2013:95) add that quantitative research creates the development of instruments and methods of measurement, such as the open and closed-ended structured questionnaire, followed by the collection of empirical data and the modelling and analysis of the data.

1.10.4 Target Population

Meyers, Gamst and Guarino (2017:9) state that a population constitutes all the entities that occupy the boundary conditions of whom or what the researcher intends to encompass within the research. The target population for this study comprised all academic staff members from

the Faculty of Management Sciences at the DUT based in KwaZulu-Natal. The target population was obtained from one staff list in departmental alphabetical order, namely an academic list. The identified target population equated to N=102.

1.10.5 Sampling Techniques

Sampling is defined as the process of selecting subjects to take part in the research investigation on the assumption that relevant information is provided for the research problem (Oppong, 2013:203). According to Ponto (2015:169), the aim of sampling approaches is to obtain a sample that is sufficiently representative of the population of interest so that the results of studying the sample can then be generalized back to the population. Acharya, Prakash, Saxena and Nigam (2013:1) predict that it is not practically feasible to study an entire population when investigating a problem in any research study. Therefore, a 'sample' is studied, which is sufficiently large and representative of the entire population. For this study, the simple random technique as a probability sampling method will be used for the quantitative research design. The sampling frame for the quantitative research design was accessed by an academic staff list.

1.10.6 Selection of the Sample

Sekaran's (2016:264) computed Table (Annexure F) for determining the optimum sample size from a given population is utilized in this study to select the sample for the quantitative research design. Using a 95% level of confidence and a 5% margin of error, the sample size is 80 respondents.

1.10.7 Questionnaire Design and Protocols

Gray (2019:370) states that the questionnaire is a research instrument in which respondents are asked to respond to the same set of questions in a pre-determined manner and is regarded as the main mode for the collection of quantitative primary data. According to Coombe and Davidson (2015:218), questionnaires enable the researcher to obtain large amounts of information from a large population in a relatively economical manner. In the quantitative research design, an open and closed-ended structured questionnaire will be used to collect data from the selected sample respondents. The questionnaire will comprise of the following, namely a covering letter (Annexure D) assuring respondents of their anonymity and a consent form. The questionnaire (Annexure E) will be developed taking into consideration guidelines which include conciseness and unambiguity (Neelankavil, 2015:160), using a justified sequence and ensuring that the questions are applicable to all respondents (Fowler, 2013:119-124). The 5-point Likert scale format was used to allow the respondents to indicate the extent to which they agree or disagree with a series of statements about the given main theme (Joshi, Kale, Chandel and Pal, 2015:397). This category of scale was chosen as it is simple to make statements that capture the essence of a specific construct that has the amplitude to measure the perceptions of respondents easily (Subedi, 2016:37) and to facilitate for robust statistical analysis (Chyung, Roberts, Swanson and Hankinson, 2017:19).

1.11 RELIABILITY AND VALIDITY

According to LoBiondo-Wood (2014:290), reliability refers to the propensity of the instrument to measure the attributes of a variable or construct invariably, whereas validity refers to the level at which the instrument measures the attributes of a concept accurately. Norkin and White (2016:43) state that validity is the degree to which a purposeful interpretation can be inferred from the measurement. Reliability can be deduced by ensuring that the measurement tool (e.g., a question in the questionnaire) utilised creates a consistency of scores on the outcomes desired for the same set of population (Salkind, 2017:39). In addition, Ary (2018:79) posits that to ensure reliability, the scale should be longitudinal by making provision for the representative

sample of the whole domain of opinions with an attitudinal focus. The researcher asserts that the concept of reliability is paramount with concerns of measuring the attitudes, opinions and values of people.

1.12 DATA COLLECTION METHODS

A structured open and closed-ended questionnaire will be utilized to collect the data. Using the personal method of data collection, the researcher will hand-deliver the questionnaire with a covering letter to the participants of the study.

1.13 ANALYSIS OF THE DATA

The responses to the open and closed-ended structured quantitative questionnaire will be captured to form a data set. The initial data will be analysed into descriptive statistics for the demographic variables. The descriptive statistics will be used to analyse the composition and characteristics of the sample and will be organised and summarised into data presented in figures. The analysis of the all the responses will be analysed using the latest version of the Statistical Package for the Social Sciences (SPSS) version 24.0 for Windows.

1.14 ETHICAL CONSIDERATIONS AND CONFIDENTIALITY

According to Sarantakos (2013:4), social research provides an intellectual tool for the researcher to probe contexts of personal or public interest, as well as search for answers to questions that are unknown to the researcher. Therefore, the goal of scientific research lies in the attainment of the balance between being a good scientist that seeks to improve knowledge and not unduly interfering in the lives of human beings (Iphofen, 2011:8). It is ordinarily strenuous to over-state the significance of ethics in the context of social research (Denscombe,

2014:5). Therefore, Cozby and Bates (2014:112), with the affirmation of Bryman (2016:125), provide a listing of significant ethical considerations that normally necessitate cohesiveness when committing to research. This listing includes the following:

- Harm to participants, including physical and developmental;
- Voluntary nature of participation and the right to withdraw partially or completely from the process;
- Lack of informed consent and possible deception of participants;
- Maintenance of the confidentiality of data provided by individuals or identifiable participants and their anonymity;
- The condonation of privacy of possible and actual participants;
- Reactions of participants in the way in which the researcher seek to collect data;
- Effects on participants in the way in which the researcher use, analyses and reports data; and
- Behaviour and objectivity of the researcher.

1.15 CLARIFICATION OF KEY CONCEPTS

The definitions introduced below are purely to present the concepts at this phase. Declarations that are more comprehensive are highlighted in the literature review of Chapter Two.

1.15.1 Perception

Perception is defined by Robbins, Judge, Odendaal and Roodt (2009:119) as a process by which individuals organise and elucidate their sensory impressions to give explanations to their environment. However, the authors recommend that what is perceived can be substantially different from objective actuality.

1.15.2 Academics

Academics have interrelated roles within a university-setting, which consists of being the teacher, the researcher and the public intellectual. A well-developed academic is meaningfully engaged with these critical functions and continues to sustain this engagement through personal development (Star, 2007:143).

1.15.3 Motivation

The concept of motivation in HE is defined by Zlate and Cucui (2015:469) as the availability of the academic to perform in a consistent manner, which ensures the achievement of the institutional CE objectives, as well as the perception that increased efforts create the realization of individual objectives.

1.15.4 Higher Education Institution (HEI)

Within the South African context, the Durban University of Technology is defined by the Higher Education Act (No 101 of 1997) (RSA, 1997:5) as:

“An institution that provides higher education on a full-time, part-time or distance premise and which is:

- merged, established or deemed to be established as a public higher education institution under this Act.
- declared as a public higher education institution under this Act; or
- registered or momentary registered as a private higher education institution under this Act.”

Furthermore, the amendment of the Higher Education Act (1997) to the National Qualifications Framework Act (NQF, 2008) declares that HE involves all learning programmes that lead to qualifications higher than grade 12 or its equivalence in terms of the NQF (1997:8) that meet the requirements of the Higher Education Quality Framework (HEQF) (RSA, 2008:2).

1.16 STRUCTURE OF THE CHAPTERS

Chapter One provides a general introduction to the main direction and purpose of the research. The chapter outlined the background from which the study is derived. It addresses the problem statement, key terminology, objectives and research questions; the significance of the study; provides a brief synopsis of the related literature; and describes the research methodological approach to the study.

Chapter Two addresses the literature review of the study in detail. This exploration consists of a local and global contextualization of engagement challenges, enablers and perceptions in HEIs and communities. The frameworks of Weiner’s model of Attribution Theory (1986) and the Vroom’s Expectancy Theory (1964) underpins the motivation for the implementation of academic engagement in the HE sector.

Chapter Three explores the research methodology and design in detail. It also includes a discussion on the selection of the sample size, the collection of data and the development of the measuring instrument.

Chapter Four presents a systematic analysis of the data obtained by the structured and open and closed-ended questionnaire completed by the respondents using SPSS version 20 for Windows. A detailed discussion of the findings is presented to the reader.

Chapter Five concludes with the prominent findings of the research and makes a listing of preliminary conclusions, with guidelines arising from the research analysis that seeks to provide directions for future research in the field of community engagement in higher education.

1.17 CONCLUSION

Firstly, this chapter served as a road map, as it provided the introduction and background to the research undertaken and introduced the chapters that follow. The purpose of the study, statement of the problem, and objectives of the study were presented. The selected methodological assumptions, research design, ethical guidelines and definition of key concepts were also presented in this chapter. Finally, a synopsis of the overview that precedes to the following chapters was introduced. In the next chapter, the researcher will provide an in-depth literature review on community engagement and academics in higher education as a phenomenon to create a distinct understanding of the attached perceptions. Amongst other variables, the chapter will look at the different meanings that various scholars, both globally and locally, attach to the concept of community engagement from an academic perspective.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION OF THE STUDY

The scholarship and practicability of community engagement in higher education has garnered scholarly recognition during the past decade. An array of authors have provided a significant body of literature that engages the institutionalisation of academics with community engagement, as a conduit for the development of symbiotic relations between HEIs and their educational community in South Africa. However, the affiliations provided by literature illustrate a lack of articulation on the perceived insights, experiences, complexities and disparate dispositions of engagement in which academics are associated. Against this transition, emerging studies have contemplated a growing absorption by scholars within the field of higher education. The research that emanates signifies the surrounding views that prevail academics to have a profound impact on the successful institutionalisation of community engagement in higher education. Therefore, the purpose of this chapter is to provide an overview of the theoretical complexity and limitations that influence the contribution by academics from the DUT, as identified in chapter one in the problem statement. The researcher has used primarily secondary sources to compile the literature review, such as, namely, textbooks, journal articles, dissertations and thesis, as well as relevant internet sites.

2.2 THE CONCEPT OF COMMUNITY ENGAGEMENT

2.2.1 Characterization of Community

MacQueen, Bhan, Frohlich, Holzer and Sugarman (2015:1) describe “community” as a group of people that interrelate a shared social identity. Moreover, the term can denote a geographical community, premised on a common need, relationship or location. Within the context of the study, “community” is seen as a conduit for the development and maintenance of meaningful symbiotic relationships between academics and the educational community, with further acknowledgment extended towards both, urban and rural KwaZulu-Natal. The “educational community” refers to the involvement of the DUT, along with its academic staff members to promote learning and social development work with its students and groups in their communities, using a range of formal and informal methods. This learning community enables the human and intellectual development of students.

2.2.2 Characterization of Engagement

Engagement is an “interactive” relationship (MacQueen, Bhan, Frohlich, Holzer and Sugarman, 2015:1) between the knowledge of universities, public resources and the service and private sectors, to enrich scholarship, research and innovation; enhance the learning and teaching curriculum; prepare educated, engaged citizens; reinforce democratic values and social responsibility, by the contribution to the public good (Bender, 2008:1163). In addition, Favish (2015:3) states that the university engages with its social partners to generate relevant knowledge in understanding the realities of its citizens and the maximum impact of the knowledge output. Bhagwan (2017:2) describes that the core function of engagement is to enable students to democratise this knowledge to be able to participate in a democratic society by being socially responsive to its broader needs.

For such an effective implementation, it is mandatory for the successful institutionalisation of engagement embedded within the change of the university system, or else, Benneworth and Sanderson (2009:3) view it to remain as being a peripheral activity to the core teaching and research activities of the university. The strategy proffered by Fitzgerald, Bruns, Sonka, Furco and Swanson (2016:247), require engagement to be aligned with the existing university functions that will form a central component of the university mission statement. This strategy is completely valid, as Byrne (2016:60) found that the inherent social interaction of engagement creates an enrichment of the learning experience for the university, its students and community members. Therefore, engagement occupies an integral component to the curriculum of the DUT, as it connects its students, academics and the faculty within a learning process that is mutually rewarding to all.

2.2.2.1 Boyer's (1990) Scholarship Model of Engagement

Boyer (1990) articulates the engaged model of scholarship as an academic conception, which integrates the intellectual assets and expertise of the HEI and public within teaching, learning and research (Holland, 2005:11). The scholarship model acknowledge the principles of reciprocity, the identified community needs, boundary-crossing and the democratization of knowledge (Beaulieu, Breton and Brousselle, 2018:5). Therefore, the scholarship of engagement is defined as the connection between the rich resources of the university, towards the significant social, civil and ethical problems for children, education platforms and the country (Boyer, 1996:32). Cruz, Ellern, Ford, Moss, and Jo White (2013:3) predict that Boyer extended the model for a scholarship of discovery, which consists of integration, application, and teaching to enhance the academic work of research, teaching and service. Boyer's scholarship model of engagement is depicted in Table 2.1 below (Garnett and Ecclesfield, 2011:7). It is recommended by Boyer that these four categories depicted in Table 2.1 below, should be systematically integrated and complemented to prevent the likelihood of division and isolation (Matthews, McLinden and Greenway (2021:7).

TABLE 2.1: BOYER’S (1990) SCHOLARSHIP MODEL OF ENGAGEMENT

Type of Scholarship	Purpose	Performance Measures
Discovery	Strengthen new knowledge through traditional research	<ul style="list-style-type: none"> ▪ Publishment in peer-reviewed forums ▪ Production and performance of innovative work ▪ Creation of infrastructure for future studies
Integration	Interpret the use of knowledge across disciplines	<ul style="list-style-type: none"> ▪ Preparation of a comprehensive literature review ▪ Writing a textbook in multiple disciplines ▪ Collaboration with colleagues for the design and delivery of the course
Application	Assist society and professions in addressing challenges	<ul style="list-style-type: none"> ▪ Serving the industry or government as an external consultant ▪ Occupation of leadership roles in professional organizations ▪ An inspiration of student leaders for professional growth

Teaching	Study teaching models and practices to achieve student optimal learning	<ul style="list-style-type: none"> ▪ Advancement of learning theory, through lecture research ▪ Development and testing of instructional materials ▪ The mentoring of graduate students ▪ The design and implementation of a program-level assessment
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Source: Garnett and Ecclesfield (2011:7). Adapted.

2.2.2.1.1 **Discovery**

According to Franz (2009:36), the discovery of new knowledge involves the active collaboration between scholars and communities in joint research, which seeks to obtain the answer to the important research questions that share mutual interest. Therefore, the scholarship of discovery is a scientific method of data consistency that enables the frontiers of human knowledge (Cronin, 2014:14). According to Mtawa, Fongwa and Wangenge-Ouma (2016:127), collaborative research is encouraged between the university and the community, in which a transdisciplinary (Cronin, 2014:14) research forms the central component for the production of CE knowledge. Stewart (2015:323) states that through this collaboration, the exchange of ideas and resources creates an extensive understanding of the different perceptions of academic expertise, which supports the implementation for intercultural learning. The sustainability of this discovery can be implemented through graduate socialization, which creates a transfer of social capital (O'Meara, 2016:42).

2.2.2.1.2 Integration

The integration of social responsibility and participatory citizenship is a key component within the curriculum and educational experience for students in the lecture room, campus and community (Woodley, 2017:11). The implicit functionality for integration is significantly dependant on the increase, interpretation and synthesis of knowledge connections between various academia disciplines (Tobin, Bordonaro, Schmidt and Hulse, 2010:6). Therefore, the convergence of cross-disciplines have an increased value (Mtawa, *et al*, 2016:127) for the transpiration of a larger interdisciplinary conversation. Moreover, the development of the original knowledge can lead to the formation of new research processes (Franz, 2009:36) for a sustained educational synergy and encouragement of different perceptions and solutions towards societal challenges.

2.2.2.1.3 Application

The scholarship of application involves the discovery of an improvement within the institutional service outputs that address societal challenges (Cronin, 2014:14). The infusion of academic and civic culture creates a climate of efficient, innovative communication, which seeks to enrich the human discourse and quality of life for the university and its educational community (Boyer, 1996:33). Moreover, the connection between theory and the practice with the needs of society encompasses scholarly activities. These activities include the relevance within the discipline of the academic, effective communication towards an extensive target group, and the acceptance of work by peers, through the conduit of document reviews and the acknowledgment by key designated authorities within the academic discipline (Vernaza, Vitolo, Brinkman and Steinbrink, 2013:85-86). Boyer recommends that the expertise, disciplinary knowledge and professional practice of the academic, should be applied with rigor and accountability towards the important community social challenges (Quinlan, Corkery and Castle, 2004:4).

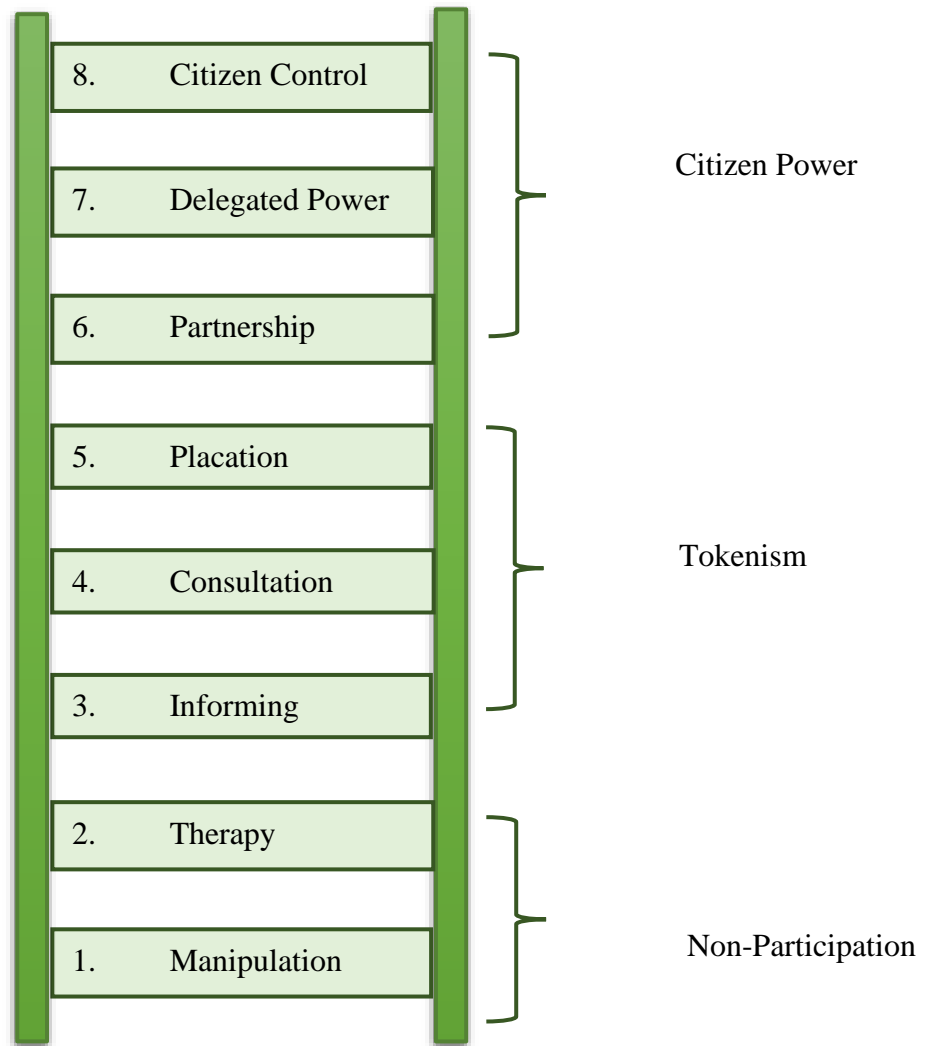
2.2.2.1.4

Teaching

According to Matthews, McLinden and Greenway (2021:7), the scholarship of teaching involves a reflective analysis on the teaching and learning knowledge for an improved student education. According to Tobin, Bordonaro, Schmidt and Hulse (2010:4) students are educated through a pedagogical practice, through articles on supervision, the process of literature reviews, and how to access learning resources. Bowden (2007:5) states that this dimension manifests on a transformative theory of learning, in which academics obtain knowledge from their reflection of the content problem, process method and basis of the problem. Through educational research and theory, the explicit knowledge of the academic is improved, which stimulates the instructional design, pedagogy and the curriculum. Therefore, the impact of scholarship teaching should be holistically integrated, to create a quality university education for students.

Furthermore, the confinement of engagement serves as the interaction established between two parties, in which mutually participates actively. However, literature, notably, Arnstein's (1969) Ladder of Community Participation as illustrated in Figure 2.1 below (Gaber, 2019:189), emancipates that participation is not distributed mutually in community decision-making, as the divisions suggest, omitting significant barriers such as resistance of certain powerholders, and the ignorance and disorganization of low-income communities (Connor, 1988:250). However, the researcher highlights that citizen participation is a different concept in comparison to CE and refers to an individualized responsibility for citizens to maintain their commitments. This can lead to the encouragement of social movements for both, democracy and social development (Mazhar, Kaveh, Sarshar, Bull and Fayaz, 2017:808).

FIGURE 2.1: ARNSTEIN'S (1969) LADDER OF COMMUNITY PARTICIPATION



Source: Gaber (2019:189). Adapted.

For Arnstein, the essence of citizen engagement lies in the ability of decision-making and the retainment of this 'control'. As a result, the different rungs that reflect on the ladder have a distinct relation to the degree to which citizens have attained decision-making power, with complete citizen control being defined as the highest point (Tritter and McCallum, 2006:157). Arnstein's framing of citizen participation can be correlated with the observation made by Williams (2006:198) six phases of the historical excursus of community participation in South Africa. According to Arnstein (1969), manipulation refers to the tactic utilised by governmental organisations to capture citizens on achieving its own predetermined course of action. Whilst these "gullible" citizens perceived their role as active in decision-making, the truth discouraged from actual reality (Arnstein, 2015:279). In contrast, Williams (2006:198) categorizes pre-1976 as a dormant participatory phase in which the largely dreamed for long-term liberation within forms of oppression and exploitation.

Therapy is categorised by Arnstein (2015:279), as an approach that decision-makers utilised citizens to participate in decision-making, as an attempt to preach on legislative shortcomings. This approach was utilised as a disguise to "cure" the perceptions and behaviours of citizens that local government did not favour. For example, according to Williams (2006:198), in the years 1977 to 1983, the need for community organization, mobilization at grassroots level and community control was transpired by the demise of Steve Biko in September 1977. This eventually led to the culmination of the United Democratic Front (UDF), after 1980. The UDF served against the apartheid state in South Africa by sustaining community forms both, at neighbourhood level, and liberatory struggles at street level. This occurred in banned liberation movements such as the African National Congress (ANC).

Informing and consultation is integral for legitimate participation as the flow of information creates the synergies for citizens' rights, responsibilities, and options (Arnstein, 2015:280). At this forefront, Williams (2006:198) states that between the years 1984 to 1989, an intensifying struggle was forged against the apartheid state within local and international arenas. This led to a range of divestment campaigns and cultural boycotts that targeted any sector connected to the apartheid state. This period transpired spaces of governability throughout South Africa. Although not considered a satisfactory method of participation, placation allowed the government to give into some of the citizens demands. As a result, the years 1990 to 1994

enabled the legitimation of liberation movements and emerging consensual politics of negotiation led to the settlement of a range of promissory spaces of participation, such as the Reconstruction and Development Programme of 1994 and the 1996 Constitution of South Africa. The former was a product of community participation, and the latter established the right for public to being involved in local government planning programmes.

In partnership, delegated power, and citizen control, citizens are considered the best people to manage these programmes and developing control to them will enable best outcomes (Arnstein, 2015:280). In Williams (2006:198) view, the years 1996 to 2000 forged the need for visible and experientially significant forms of social change that was transpired. This gave emergence to various types of development partnerships, mediated by socio-historical relations of power and trust. Therefore, resulting in largely truncated spaces of participation. The birth of a democratic South Africa in 1994 led to the birth of the Treatment Action Campaign, Jubilee 2000, and a myriad of other local initiatives. These transformative spaces seek to democratize the politically liberated spaces in South Africa.

2.3 A BRIEF OVERVIEW OF COMMUNITY ENGAGEMENT PERCEPTIONS IN HIGHER EDUCATION

2.3.1 Global Overview

This section reviews the literature related to a multitude of perceptions that reflect how CE is redefined within various HEIs. University-community engagement (UCE) requires considerable stimulation of academic involvement within Malaysia (Neubauer and Collins, 2015:73). Community involvement, internships and experiential learning are viewed as critical components to academic courses (Saltmarsh and Wooding, 2016:77), however, a survey conducted in the United States by Nokes, Nelson, McDonald, Hacker, Gosse, Sanford and Opel (2013:265) reflect an inadequate support through community-engaged scholarship in tenure, promotion and retention decisions, to sustain these efforts made in HEIs. In conjunction, Sobrero and Jayaratne (2014:124) found that this moderate support and

recognition have discouraged academics from publishing their engagement work in the North Carolina State University.

Medley's (2013:76) study found that the time and energy expended as "volunteer work" lacked articulation as priority in the evaluation of faculty and is therefore inadequately rewarded within tenure and promotion. In comparison with an Australian context, this challenge appears more straightforward, in which academics lack the ability to conceptualise engaged scholarship as a legitimate approach to their academic practices and the enrichment of their understanding of scholarship (Kearney and University, 2015:32). This perception remains an open problem in which service as a form of CE is not fully valued in relation to teaching and research and therefore is not fully integrated within the university context. This creates a ripple effect that makes up for the problem of a majority of academics being unable to distinctly articulate their individual engagement work in a scholarly format that is recognized (Smith, Else and Crookes, 2014:844).

This compels Goldberg-Freeman, Kass, Gielen, Tracey, Bates-Hopkins and Farfel (2010:1) to state that academics require institutional support that will supplement their skills to involve the community, which goes beyond the mere recognition of outreach activities. However, this argument is not completely valid, as Buys and Bursnall (2007:74) found that academics are personally reluctant to become involved in research partnerships. This can possibly be a result of the lack of respect for community knowledge; the view of community members as objects, instead of partners for research; the perception that collaborative research may lack rigour; inadequate understanding about the benefits collaboration may offer; and a lack of research mentors to conduct and inform collaborations (Ahmed, Beck, Maurana and Newton, 2004:143-144).

Surprisingly, this problem has attracted more attention for early career academics. As portrayed by Havergal (2015:1), a study conducted in the United Kingdom by Richard Watermeyer and Jamie Lewis revealed that a majority of young academics perceived that their public engagement work had damaged their profiles as a research academic. Furthermore, a significant proportion of academics have outlined a clear lack of interest for public engagement within their institutions. Hall, Escrigas, Tandon and Granados-Sanchez (2014:308) revealed that the Global University Network for Innovation reports young academics as being discouraged early from following an engaged scholarship career pathway.

2.3.2 Local Overview

According to the perspective of Kruss (2012:7), academics have resisted active interaction and engagement with South African industries. This is a result of the perception that it is inimical to their traditional work; a potential threat to their scientific credibility and integrity, as well as to future knowledge generation. Moreover, Albertyn and Daniels (2009:412) found that CE is perceived as an ‘unsafe’ terrain, as an insufficient articulation to teaching, learning and research within an academic framework exists. These perceptions highlight the problem that the activities in which universities are engaged within communities lack systematic co-ordination, thereby becoming an individual initiative, as opposed to a strategically planned effort (Snyman, 2014:2). This creates a challenge for the sustainability of community engagement initiatives, as it is integral for academic members to monitor and evaluate outcomes as proof of achievement.

Furthermore, the interest and involvement of academics within CE has been significantly contributed to by a lack of institutional support and job security (Imhonopi and Igbadumhe, 2020:2). Onwuebele (2018:33) also re-defines the lack of recognition for academic interactions between social partners within the university reward system at the Ibadan University in Nigeria. However, Pinheiro, Benneworth and Jones’ (2015:151) study provides a direction towards the political revolution in SA, which has deeply fragmented the HE system, enabling the emergence of academics being involved in lectures and research that are technical

as a consequence of being influenced by individual circumstances. Therefore, it is imperative to evaluate academics' perceptions of UCE under their present operating environment and their mentioned utility of scholarship of engagement.

2.4 CHARACTERIZATION OF COMMUNITY ENGAGEMENT IN SOUTH AFRICAN HIGHER EDUCATION

The reflection of the South African apartheid regime identifies the liberation of India, Pakistan, Ceylon and Burma in the era of the 1940s as a distinct element that transpired in community development becoming an explicit attribute of the British government in its African policy (Maistry, 2011:1). Furthermore, the year 1984 prompted the Population Development Programme, which instituted community development initiatives at a local level to enhance the calibre of citizen life. Against this backdrop, Badat (2010:4) states that social, political and economic inequalities within this era had a profound culmination on the HE landscape in SA. Therefore, it is understood by Maistry (2011:1) that the embedding of community development through the Population Development Programme, garnered views of distrust towards the government in SA. This had led to The Council on Higher Education (CHE, 2010: iii) having cast CE alongside research and teaching as one of the third (engagement) missions of the core responsibilities of higher education in SA.

CE develops new circuits of knowledge by creating education and research outside the walls of the ivory tower, which renews the civic commitment of HE to enhance its societal purposes (Brackmann, 2015:139). Sandmann, Furco and Adams (2016:10) describe teaching, learning and research as a conduit for engaged scholarship by involving “others” outside academia who possess the expertise, wisdom, insights and lived experience that are paramount to the knowledge task. In addition, the Carnegie Foundation in the United States provided a comprehensive definition of community engagement as being, “the collaboration between higher education institutions and their larger communities (local/regional/state, national, global) for the mutually beneficial exchange and resources in a context of partnership and reciprocity”. This diversion of engagement between communities and HE can be either formal or informal, encompassing the establishment of relationships, collaboration of undertakings,

academic conferences and research projects (Jacob, Sutin, Weidman and Yeager, 2015:1). Therefore, CE can be deduced as the initiatives implemented by academic staff from the Faculty of Management Sciences, through the expertise of the DUT, in the arena of teaching, research and service, which are applied to interact with the challenges relevant its immediate communities.

2.5 THE ROLE OF THE UNIVERSITY AS AN ENGAGED HIGHER EDUCATION INSTITUTION IN SOUTH AFRICA

HEIs have a mandate to answer society's questions through research and to educate its students to be active global citizens who can make the world a better place (Budgen, Callaghan, Hatt, Kurtz, Feddersen, Wiebe, More, Hamilton and Geddes, 2014:27). The role of the engaged university implements the interaction between external constituencies and communities for a mutually beneficial exchange, exploration and application of the knowledge, expertise and resources of all stakeholders. These interactions expand the institutional learning and discovery function, which is responsive towards community needs and goals (Ramaley, 2005:19). According to Costandius and Blitzer (2015:15), the evolution of the knowledge society requires the university to ensure that its curricula develops a transformative democracy through increased partnerships amongst the university, industry, business, government, Non-Governmental Organisations (NGOs) and societal communities.

The 1997 White Paper on Higher Education Transformation distinctively outlined the role of universities in South Africa. The new mandated responsibilities included intellectual development for an individual's self-fulfilment in society; to provide increased competencies for the labour market in a knowledge dependant society; to sustain a reflective capacity to review practices based on a commitment to the common good; and the evaluation of shared academic knowledge through research, teaching and learning (DHET, 1997:7-8). Therefore, it is the implicit responsibility of the university to produce and disseminate its knowledge through research and engagement that can be applied to the challenges of its society and the economy (Bunting, Cloete, Wah and Mayega, 2015:33). In the view of Penn-Edwards and

Donnison (2014:36), HEIs are specialised communities within their society and therefore should function as an integrative component that is actively dependent on society.

Prominent appeals emerge for institutions to ensure that their activities are consistent and relevant (Nhamo, 2012:4) to the implicit needs and demands reflective of their societies (Tamrat, 2019:1), who created and sustains it financially through means of tuition, government grants, contracts and partnerships (Fitzgerald, Bruns, Sonka, Furco and Swanson, 2016:245). Such an informed approach is fundamental for HEIs that exist in an unstable environment with an influx of economic uncertainty, climate change and the automation of labour against the developing South African economy (Kromydas, 2017:3). Benneworth and Sanderson (2009:1) have undergone a re-think to this influx of challenges by stating that universities need to proliferate their activities within their local and regional societies and commercialise their engagement research.

The engaged university induces significant research that is reciprocal to its society and educates its students to serve productive roles in a diverse world. This is achieved through increased collaboration and partnerships with entities outside its “tall buildings” (Fitzgerald, Bruns, Sonka, Furco, and Swanson, 2012:15). Universities are recognised by Hart, Bell, Lindenfeld, Jain, Johnson, Ranco and McGill (2015:1) to be in a focal position that is embedded within a wealth of expertise and traditional knowledge (Tamrat, 2019:1) to generate and disseminate new knowledge in solving multifaceted societal problems. As these wicked problems are deeply complex to define, it becomes paramount for the university to utilise a collective response in solving these problems that have adverse effects on itself, its students, alumni, faculty and staff that belong to the university and community systems (Fitzgerald, Bruns, Sonka, Furco, and Swanson, 2016:245)

2.6 THE ROLE OF THE ACADEMIC IN HIGHER EDUCATION COMMUNITY ENGAGEMENT

Checkoway (2013:11) states that academics have the expertise within academic disciplines and professional fields, as well as abilities to perform research projects that address significant challenges and educate students who possess an unlimited capacity for CE. Therefore, academics in HE are in a focal position for an engaged scholarship that affects the sustainability of society. Moreover, tertiary graduates have increased expectations towards being more committed with the engagement of citizenship responsibilities and national development, in comparison with an individual who has not attended university (Howard, 2014:1). Culhane, Niewolny, Clark and Misyak (2018:415) predict that academic-community partnerships have the capacity to intensify the academic scholarship through the conduit of civically engaged curricula. According to Van Schalkwyk (2015:203-204), academics are required to engage with students and external community stakeholders to exchange knowledge which will contribute to the development of society by stimulating innovation at regional and national levels.

The instillment of broad and specific sustainability approaches is imperative for the development of students to become an effective practitioner and ambassador for social change (Karwat, *et al.*, 2013:158). However, the experience of wicked socio-economic challenges in SA, create the tendency for student learning to be confined. Therefore, there is a greater divergence for engagement to occur within more processes of knowledge, which create a connection between the knowledge that is being generated and ensures that students become producers and not consumers of this knowledge. According to O'Meara and Jaeger (2016:135), it is paramount that graduates develop significant awareness on how their discipline can assist in solving real-world problems by utilizing their disciplinary knowledge to transform interactions through real contexts. In this vein, Gorski and Mehta (2016:120) re-inforce the extensive integration for an engaged scholarship into academic culture, which is significantly dependant on academic members within HEIs. Victor and Babatunde (2014:158) concur that academics in higher institutions of learning serve as mentors for students' learning achievement.

O'Meara and Jaeger (2016:138) stress that part of the responsibility of engaging with communities is ensuring that students are well-equipped with the necessary skills required for public work. Furthermore, the expectation of an engaged responsive academic, requires reflective practices that are not performed in isolation or confined to a specific discipline, but in collaboration with those that are within and outside the academic world (Bender, 2013:33). This enables the effective formation of student core process skills within the context of a theory-to-practice application in a real-world scenario (Hou, 2014:4). Bender's (2013:34) finding shows that academic engagement within diverse communities is significantly linked to personality traits, such as the academic's conscientiousness, mindfulness, altruism and agreeableness, which indicate that it is less challenging to engage the minds and hearts of only certain people, but not of others. This is probably a result of what Mchunu (2018) views as many academics pushing people into neurocentric thinking.

However, Miller, *et al.* (2019:6) advise that academics should be encouraged to participate in engagement initiatives through the adoption of various incentives, which should be sustained through adequate training and opportunities for the development, implementation and evaluation of CE as an academic pedagogy. In addition, Langworthy (2005:85) states that the employability of graduate attributes can be achieved through the implementation of a Capstone subject that enables students to reflect on their skills and abilities for the formation of lifelong career learning.

2.7 THE ROLE OF COMMUNITY ENGAGEMENT AT DUT

The proclamation made by the White Paper of 1997 in SA established the mechanism and enrichment that the DUT occupies as a functionality towards the sustained implementation of teaching and research of a profound context, locality and application for the common good (CHE, 2006:11). As stipulated by the CHE (2004:19), the Higher Education Quality Committee (HEQC) mandated the DUT to link CE with its teaching, learning and research through the allocation of resources and institutional recognition. According to Jin and Zhu (2013:23), the required mandate for a UoT, such as the DUT, is to equip its graduates with specialised competencies to perform applied research. Through the conduit of this applied

research, DUT increasingly contributes towards the local society, which attracts more local resources for the university and creates more experiential opportunities for its students.

The DUT is illuminated by Jin and Zhu (2013:23) to share the following learning attributes: The creation of social responsibility that is embedded within the education process that enables students to become qualified citizens who are responsible for themselves, their family and greater society; the instruction of students within specialised knowledge techniques by means of a systematic curricula teaching plan that is designed to meet social demands and ensure that students become qualified professionals; the provision of problem-solving skills that equip students, when faced with adversities, to adopt an initiative for the solution, apply reasonable plans and create improvements for the greater society; and teach students to acquire knowledge by their own means, through research and innovation that will fulfil their job requirements after graduation.

The social charter between the Faculty of Management Sciences at the DUT and the public includes such commitments as developing research to improve society; training students for public service; and educating students to serve the South African democracy. CE is achieved through a transactional, transitional and transformational engagement approach (Bowen, Newenham-Kahindi and Herremans, 2010:304). Transactional engagement refers to a philanthropic approach that is occasional and controlled by the institution itself (Bowen, *et al.*, 2010:518). These include the DUT community engagement showcase and pitching awards that recognize the projects initiated by academics and students (DUT, 2020:1) and the student mentor service, such as the level six EduMove campaign that seek to voluntarily assist primary and secondary school pupils (DUT, 2021:1).

Transitional engagement refers to the two-way communication, consultation and higher levels of community involvement in which “bridges are built” with communities. However, such an implementation lacks joint decision-making in comparison to transformational engagement (Bowen, *et al.*, 2010:518). These include Small, Medium, and Micro enterprises (SMME) training in which research conducted by the Retail Chair is implemented within various communities. Moreover, students are consistently encouraged towards active social participation which will improve and develop the skills of young people in townships and the local communities. This attribute is highlighted through a Community Engagement Student of the Year award (DUT, 2021:1).

Transformational engagement is a proactive strategy that encourages the institution to change society through joint decision-making, in which shared interactions and authentic dialogue sessions occur (Bowen, *et al.*, 2010:518). The DUT Community Engagement Cluster consists of academic staff, students, alumnus and the community to transpire meaningful UCE collaborations. The cluster facilitates the university as a responsible, relevant and active partner in addressing the needs of a community (DUT, 2018:1). In addition, the launch of the Retail Chair creates the consolidation of the partnership between the university and industry (DUT, 2019:1). Moreover, community engagement conferences and dialogue sessions create a value for social and epistemic justice (DUT, 2017:1).

2.8 ADVANTAGES OF COMMUNITY ENGAGEMENT FOR THE UNIVERSITY

Community engagement holds certain identified benefits for HEIs, its academics, as well as students. Bandy (2016:1) states that community engagement enables HEIs with an enhanced student retention, which also facilitates sustainable entrepreneurship intention amongst students in the university (Sendawula, Turyakira and Alioni, 2018:133-134). The Australian Universities Community Engagement Alliance (AUCEA) (2006) identified that engagement provides the basis for improved research productivity as partnerships create new research and funding sources, permitting the appointment of new staff or the acquisition of infrastructure. In Brackmann's (2015:130) view, these pragmatic partnerships enable the university to truly authenticate its service mission and access real-world experience for its students. In addition, Marino, Presti and Pellicano (2019:76) state that the university gains greater trust from the community, which re-inforces this positive impact on its reputation as a third "propeller" that can contribute towards the territory in which it resides, with a concern for societal well-being (Bhagwan, 2017:171).

Moreover, the establishment of CE seeks to enhance the position of the HEI by bringing forth innovative knowledge through the conduit of research and an improvement towards teaching and learning processes (Bernardo, Butcher and Howard, 2012:189). This process is achieved by blending the scientific knowledge of the university with the experiential knowledge within the community to establish an environment of mutual learning and reciprocity in which the university and social partners contribute to and benefit from one another. According to Brackmann's (2015:129) finding, consulting and assistance through service delivery partnerships extend the university's knowledge and transactional exchange. Furthermore, the university's intellectual resources have a strong bearing on the developmental needs, assets and perspectives of the community, which multiplies the local relevance of the university towards its external social partners (Bender, 2013:31).

According to Shelton (2016:63-64), engagement holds the following potential benefits for academics in higher education: The use of community projects can provide data and case studies for research, which contributes to the promotion file of the academic; it can provide a platform for academics to re-inforce the curriculum being taught and create a base to make necessary curriculum changes; and it can provide academics with opportunities to apply for grants through the collaborative function of service-learning. Ivey, Teitelman, Gary, Simons, Shepherd and Copolillo (2016:2) advocated the idea that academics can integrate the trinity of teaching, scholarship and service in one partnership, as opposed to managing these multiple responsibilities separately in order to enable more community-based research, focused service and an enhanced pedagogy (Crandell, Pariser, Wiegand and Brosky, 2013:76). Moreover, Perkmann *et al.*, (2013:424) state that working on common projects provides academics with strategic insights that are commercially valuable, and therefore the opportunity to co-develop inventions that can be patented.

This provides the platform to apply theory and knowledge towards local problems (Singh, 2017:5) and become better scholars (Bender, 2013:31) by mentoring and participating in collaborative learning with students, which provides a reflective practice and core value support (Crandell, Pariser, Wiegand and Brosky, 2013:76). According to Cooper (2014:425), SL informs the teaching practice of the academic and assists the academic to stay abreast of local and global issues experienced in the community, while maintaining a sustained relationship with community partners and students that are involved in the project (Cooper, 2014:423). Janke and Colbeck (2008:35) found that the immediate and sustained interaction with students creates a clear channel of communication that increases the extent for academics to impart their own successes and failures to inspire students, whilst being highly reflective about their own teaching practices (Darby and Newman, 2014:116).

Studies have shown the significant impact of engagement in enhancing students' leadership abilities (Walker and Walker, 2018:200), teamwork rapport (Shek and Chak, 2019:41), accountability (Daniel and Mishra, 2017:8), self-perceived growth and confidence (Chak, Shek, Mok, Han, Chen, Zhang, Xiao and Jiang, 2016:182; Sanders, Oss and McGeary, 2016:86), sense of initiative and entrepreneurship (Gregorova, Heinzova and Chovancova, 2016:372) and interpersonal interaction amongst lecturers (Plaut and Campbell, 2008:1; Bender, 2013:31). Additionally, these formal and informal interactions promote moral and cognitive reflection at service sites and in the lecture room (Richard, Hatcher, Keen and Pease, 2017:68). Pelco, Ball and Lockeman's (2014:63) finding show that service learning (SL) is a high impact educational strategy that facilitates students' professional growth.

Singh (2017:5) states that students effectively prepare for their careers by developing critical thinking towards their academic achievement through connecting their theory to practice as they become aware of societal problems. According to Kaya and Seleti (2013:39), the acquisition of multi and trans-disciplinary knowledge, such as cultural skills, assists students to establish a position within an extensive range of career choices by developing networks for future employment opportunities. Furthermore, engagement in service projects has shown to increase students' understanding of current challenges faced in organizations, and their future roles in them (Vizenor, Souza and Ertmer, 2017:2). Stenger (2013:1) adds that once students view that their participation is effecting change, they are likely to remain engaged during service-learning, which stems from the realisation of making a useful contribution towards the civilization of society. This ultimately leads towards an increased self-worth by being sensitive to the challenges of community livelihood and development (Kaya and Seleti, 2013:39).

2.11 COMMUNITY ENGAGEMENT CHALLENGES IN SOUTH AFRICAN HIGHER EDUCATION

2.11.1 Development of Innovative Approaches to Sustain Higher Education Relevance

According to Kaya and Seleti (2013:32), the effectiveness of South African universities lacks relevance towards the needs and concerns of its African societies. This remains in spite of a R38.7 billion budget allocation provided by the South African National Treasury (2019:279) for the period 2018 to 2019. The South African National Treasury (2019:279) exemplifies the expectations made by government to invest R20.3 billion towards NSFAS. However, Cloete (2006:279) criticises the national government student support investment funding into NSFAS. The inconsistency of state funding has undoubtedly created financial implications for many HEIs. In addition, Wangenge-Ouma and Carpentier (2018:36) proclaim that the staggering South African economy has significantly reduced the government state funding allocation by 8.1 percent between the periods 2000 to 2014. Moreover, the allocation of funding towards university budgets had decreased by thirty percent by the year 2013.

Cloete (2016:3) states that the significant sustainability of third-stream income reveals a constant reduction of the percentage of university budgets. This inconsistency of funding has pressured universities to expand funding from external sources for effective student and research support. According to Johnson (2020:94), the allocation of state subsidies are individually inclined on production outputs, which creates a competitive institutional culture that challenges the implementation of CE. To prevent the discontinuity of CE projects, many institutions prioritise outputs that provide direct income for the university, rather than the mutual benefit for all stakeholders (Khanyile, 2020:115).

2.11.2 The Enhancement of Student Attainment for a Standard level of Tertiary Education

Pineteh (2014:13) states that a significant proportion of students from previously marginalised and under-privileged communities lack the emotional and intellectual capabilities for HE. According to Nkomo (2015:247), the English medium of university content creates a lack of opportunity for African students in the Management Sciences faculties to obtain knowledge in their first language. However, the CHE (2007:42) attributes this academic “unpreparedness” of students to an insufficient articulation between secondary and tertiary education. Moreover, the lack of exposure to academic approaches becomes entrusted to university programmes. Therefore, the development of indigeneous theory building and scientific interpretation of African society creates a significant challenge for the effectiveness of universities to address the intellectual and research needs of its people (Kaya and Seleti, 2013:32). The challenge that arises in this domain requires the additional implementation of university skills development projects (Bawa, 2012:690).

The algorithm applied by Tinto (2017:5) mandates the academic first year subject demonstration that encourages student applications with relevant contexts. This early transition can enable students’ knowledge transfer against an individualized community experience. The urgency of such an implementation is underpinned against 55.2 percentage graduate unemployment, which outlines the inadequacy of the youth to address the challenges of the country (Stats SA, 2019). Barnard and Van der Merwe (2016:210-213) advise that HE sustainability requires an innovative entrepreneurial approach which enables graduates to utilize the knowledge and competencies learnt towards the fulfilment of society. However, Chetty and Pather (2015:4) found that the national concern of quality teaching excellence intersect with the imminent shortage of “inspired” academics, which has created concern against the low academic remuneration rates within HEIs.

2.11.3 Sustained Integration of Teaching, Learning and Research

According to Nkomo (2015:247), student enrolment rates are significantly higher in Management Sciences faculties, which creates an immeasurable impact on quality education and inadequate academic staff members. This rapid expansion implicates an increased teaching load and high student-to-staff ratios (DHET, 2013:35). Moreover, the mid-year population estimates for South African youth aged between eighteen to thirty-four years constitute 17.84 million, a third of the country's population (Stats SA, 2019). The massification of HE has enabled government's policy on increased promotion of CE within undergraduate and post-graduate teaching. However, this has created academics that perceive the value proposition of research and teaching within different impacts, which creates increased focus on a competitive institutional culture (Kruss, Haupt and Visser, 2016:4).

Pinheiro, Langa and Pausits (2015:242) predict that the bureaucratised enhancement of this competitiveness control relies on the constant mapping and reporting of initiatives. As a result, Lewin and Mawoyo (2014:52) state that the HE teaching curriculum lacks the effectiveness to respond to the academic needs of first-year students. Furthermore, the increased rates of students in the lecture room inhibit the ability of the academic in terms of the implementation of the monitoring and evaluation of students' academic performance (Lewin and Mawoyo, 2014:58), as increased recognition is placed on academics' research activities and outputs, as opposed to teaching and the improvement of teaching practices (Lewin and Mawoyo, 2014:59). Moreover, it is a challenge for the institutionalisation of CBR and learning as a core component within academic work to be efficiently recognised. This attribution stems from the differences of traditional teaching and research, which impedes the imperativeness for graduates' communication capacity, which in turn advances critical thinking and interpersonal respectfulness within partnerships.

2.11.4 Expansion of Methods for Knowledge Creation and Improvement of an Engaged Pathway

The intensification of academic excellence has led to the sustainability of many universities based on the productivity of publications in high impact-factor journals (Carbonnier and Kontinen, 2015:150). According to Kaya and Seleti (2013:33), the allocation of research funding is increasingly aligned to scientific consortia. Therefore, the perception of many universities enables modern knowledge to be replaced with traditional knowledge. The orthodox conceptualisation of this perception is created on the inadequate preparation of HEIs within a collaborative research effort that recognises the participant as a co-researcher and creator of knowledge. Therefore, it is a challenge for the development of CE to “buy into” local knowledge, which will identify the needs of the community and modify the perception on how academics and community members view their involvement within the institutionalisation of CE structural adaptations (Wood and Zuber-Skerrit, 2013:1-2).

This reflects the barrier of unwillingness to discover significant knowledge from the local people whom are the ultimate knowledge-holders within the local South African context. However, Ramaley (2014:14-15) states that universities should create an education that conforms to the intellectual assets and broader integration of new era demands, which propels beyond specific traditional domains. Ylikoski and Kivelä (2017:3) add that financial pressures and ICT developments create increased emphasis for regional impact and adaptability towards innovative knowledge approaches and discovery. Furthermore, regional and local impacts require urgent improvement of knowledge creation and process-orientated systems, which lack resource support (Ylikoski and Kivelä, 2017:6) to create student open-mindedness for the recognition of community challenges.

2.12 COMMUNITY ENGAGEMENT CHALLENGES IN SOUTH AFRICAN LOCAL COMMUNITIES

2.12.1 The Fragmented Environmental Context of Communities

Justo and Vaz (2016:129-133) describe informal community settlements as a difficult environment for academics and students to conform to due to the ambiguous legal and regulatory environment that is submerged within crime, theft, vandalism, jealousies and suspicions that arise from project participation, intense power relationships, political interference, contestation for job opportunities and an inadequate supply of water and electricity. Furthermore, the pollution of water in severely contaminated streams reduces the nature of highly critical engagement projects (Hamilton, 2019:8). This creates a restriction to optimize reach whilst managing resources within isolated communities (Noel, Phillips, Tossas-Milligan, Spear, Vanderford, Winn, Vanderpool and Eckhardt, 2019:93). Chianelli (2019:20) states that it is problematic to assemble the community to work together, as many community members lack a sense of security due to the identification of conflict with their jobs, xenophobia from neighbourhood crime and the existence of religious differences.

In addition, the lack of access to healthcare is a significant challenge for the improvement of community health (Ahmed, Young, DeFino, Franco and Nelson, 2017:311). Moreover, Noel, *et al.* (2019:93) argue that the interventions targeting the health disparities of high-risk communities lead to the ultimate prioritization of the individual-level factors rather than the influence of social and structural determinants of health. Community participatory budgeting is also negatively influenced by an increased emphasis on the generation of revenue, which legitimizes the corruption and greed of politics and the development of redundant community subsidies (Gupta, 2018:2). Therefore, it is required that academics intensify trust within community members, which seeks to eradicate the existing socio-economic differences (Karwat, Sherman, Cole, Badiane, Coseo and Larsen, 2013:154).

2.12.2 The Capacity of Poverty and Economic Development

According to Chifamba (2013:141), development projects within indigenous communities are more committed towards fulfilling broader economic goals, whereas basic community needs are insufficiently recognized. This creates the assumption that economic growth will withdraw to the most marginal elements of the community. However, this lack of community participation leads to poverty within the community, which intensifies the underdevelopment of the community. Bloom, Canning and Chan (2006:7) state that many communities have a lack of infrastructure that inhibits the potential for HEIs to boost their local economic growth. Structural inequality such as poverty, lack of access to services and geographical isolation creates the challenge for academics to work in these communities, which impedes competing priorities (Grunbaum, 2011:113). This burdens the HEI to empower more community members to work on the growth of infrastructure. Furthermore, Fang (2016:60) adds challenges such as the combat to inequality in distribution of welfare resources; the support for community capacity; and a strengthened resilience through asset building.

However, Musesengwa and Chimbari (2017:6) attribute this to the limited community capacity to engage with academics and the extensive existence of NGOs as opportunities for community empowerment. Chifamba (2013:139) states that the promotion of income generation initiatives are extensively difficult to control, as the dispersion of funds across different tasks make it difficult for undertakings to occur and are insubstantial. In addition, a further challenge lies in the uncertainty of land tenure systems. The unequal distribution of land and resource rights are imbedded within landownership, which prevents the occurrence of meaningful participation in community development initiatives. Therefore, the community experiences a limited CE design and planning implementation that does not make provision for inclusion within activities. This creates CE approaches that lack understanding, diversity and representation (Gilmore, Ndejjo, Tchetchia, De Claro, Mago, Diallo, Lopes and Bhattacharyya, 2020:5).

2.12.3 Transparency of Knowledge Transfer

Tindana *et al.*, (2015:9) describe the ability to reach a uniformed strategy for the implementation of research projects within marginalised communities as ‘daunting’. Bawa (2012:669) states that this is possibly a result of citizens engaging with the nature of the knowledge project at universities, prior to grappling with the effects of social diseases and the influences of technology. In the view of Ebersohn *et al.*, (2015:60), demographics, race and culture constitute a challenge in ensuring that mutual benefits exist between the university and perspectives of the community. Academics are required to ensure that CE is context-specific to the cultures, traditions and customs, social norms and collective beliefs that govern the community. This in-depth knowledge requires efforts based on social research that includes anthropological studies that will determine the knowledge gaps and existing socio-cultural barriers (Gilmore, *et al.*, 2020:7).

However, a study conducted by Harden, Sheridan, McKeown, Dan-Ogosi and Bagnall (2015:88) found that community members are not traditionally inclined to proffer their own views and solutions, and experienced difficulty with speaking out at times, even with efficient support and experience. In addition to this challenge lies the rapid expansion of a non-English population that requires control against language barriers (Merrick and Tremoulet, 2016:7). Therefore, some communities require additional time to generate connections and support structures that will enable them to articulate personal priorities in comparison to others (Lee, *et al.*, 2018:7). However, Mazhar, *et al.*, (2017:812) found that communities shared a receptive perception that focused merely on the gain of benefits. Therefore, greater awareness through education and training is required to create a sustained knowledge equilibrium.

2.12.4 Lack of Experience and Exposure within Community Participation

According to Musesengwa and Chimbari (2017:4), inevitable gaps in the lack of experience with research and low literacy levels found within the community implicates the necessity for constant feedback sessions dedicated in the research process towards establishing understanding and empowerment within the partnership. Moreover, trust implications stem from inexperienced community leaders that possess involuntarily co-operation in research that they could not readily trust. Chifamba (2013:139) states that this leads to discontent within the participatory community development that is derived from the deficiency within the decentralization of the project and the implementation mechanisms used by academics. Moreover, Karwat, *et al.* (2013:157) found that community members share increased focus on specific issues that have impacted on their daily lives through the use of an issue-based framework, which makes it difficult to incorporate a broad-based framework that is reflective of a comprehensive sustainability coverage.

Furthermore, it becomes imperative that academics adopt an assertive attitude that complies with speaking the community language; the natural identification of networks and community leaders; identification of core community problems; the encouragement of community members to share perceptions; and being able to effectively interpret these approaches (Merrick and Tremoulet, 2016:15). However, Godfrey (2016:354) states that ineffective communication and the management of general meetings are major sources of the existing strained relationships within the community. Miller, Miller, Bailey, Fletcher, France-Harris, Klein and Vickery (2019:9) add that the use of scheduling through short project time creates a lack of representation from the community, which impedes the effectiveness of time management, personal responsibility, teamwork and the assistance of fellow peers.

2.12.5 The Inflexible Governance of Communities

Chifamba (2013:145) found that community meetings have marginalized and excluded the input of community members whom are affected by the Human Immunodeficiency Virus (HIV), such as the elderly, young children, people with disabilities and women, which creates the lack of attendance to meetings. This limited involvement and interaction creates a “weak” participation that does not lead to the effective empowerment of the community. As a result, the maximisation for the reach of influence is restricted, and the results that are obtained from the project cannot be generalised as a representation for the local community as a whole (Lee, *et al.*, 2018:6). Moreover, the core purpose of CBPR is hindered and not effectively developed as the “same people” form the key voice and are committed within all forms of participation. Therefore, project associations become heavily dependent on a principal of individuals and does not effectively extend to members that form the wider community (Lee, *et al.*, 2018:7), including the younger generations that form the future leaders for a significant community transformation.

According to Godfrey (2016:346), the majority of the rural communities within a developing country such as SA lack the capacity to effectively participate in providing basic education in their schools. This has created low morale which has negatively affected community participation in the formation of early childhood development education centres. The low morale is established from a negative perception towards the participation of providing educational support for children, which stems from poverty and a lack of value for education beyond primary school. This negative perception deteriorates the ability for academics to improve the quality of education in local communities and develop effective monitoring and evaluation indicators at both macro and micro levels (Godfrey, 2016:346-347). Furthermore, poor nutrition and a lack of food consumption makes it strenuous for young children to efficiently concentrate and interact with academics, which enables community participation to have a narrow scope on the learning curriculum that academics could potentially offer towards the upliftment of the community (Godfrey, 2016:356-360).

2.13 MODELS OF COMMUNITY ENGAGEMENT IN HIGHER EDUCATION

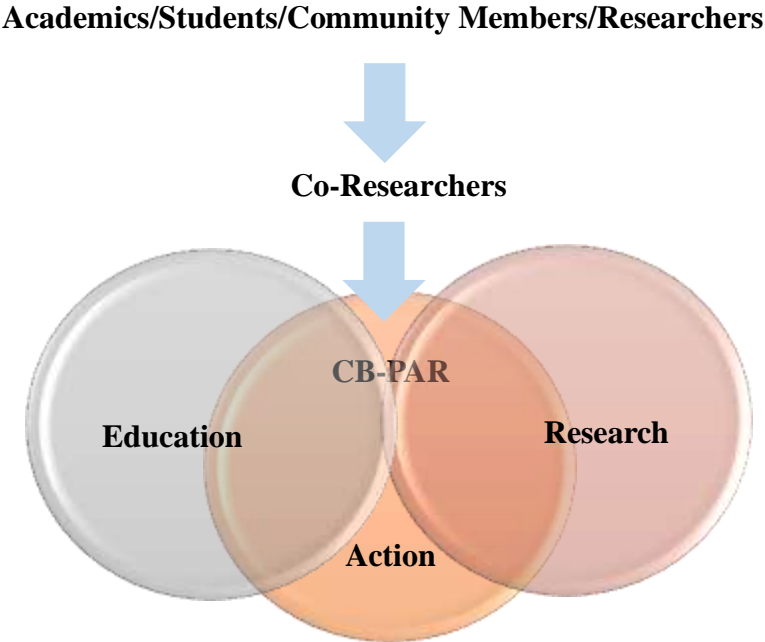
Over the years, the concept of community engagement has garnered familiarisation in South Africa. According to Chung and Coates (2016:16), the concept has evolved from ‘community-service’, ‘outreach’, ‘engagement’, ‘community service-learning’, ‘work-based learning’, ‘internship’, ‘practicum’ to ‘service-learning’ and others. As such, the definitions of CE can adopt various forms within HE, serving as an umbrella for terms such as distance education, community-based research, participatory action research and professional community service (Goodman, Thompson, Arroyo Johnson, Gennarelli, Drake, Bajwa, Witherspoon and Bowen, 2017:18).

2.13.1 Community-Based Participatory Action Research (CBPAR)

Community-based participatory action research (CBPAR) involves the engagement of academics and community members to collaborate on research for the design of a more meaningful and effective intervention (Coughlin, 2017:227). According to Maistry and Lortan (2017:124), such an implementation institutes the developmental role of universities to be simultaneously supported, whereas the traditional notion of research which academia occupies as the sole producer of knowledge is challenged. The CBPAR model has three interconnected goals, which consist of research, education and action. As illustrated in Figure 2.2. below, academics and students collaborate as co-researchers to create an infusion of practical experience and theoretical knowledge to serve the university community (Budgen, *et al.*, 2014:28). Leavy (2017:20) states that the advantage of such an approach enables the researcher and all relevant stakeholders to be equally involved in the collective identification of core community issues, problems and the generation of viable solutions to these problems.

This advantage is a representation for a theory of change as the peripheral community responds to the problem statement itself as a co-researcher (Lee, Mellor, Dilworth-Anderson, Young, Brayne and Lafortune, 2018:3). Moreover, this approach makes inclusion of the exchange between all stakeholders regarding intervention design, translation, dissemination of research findings, outcomes and power relations (Belone et al 2016:119). Therefore, a mixed and varied approach is often implemented to intensify engagement and the co-production of community participants within the research. As a result, a participatory action method for community-based research is influenced (Lee, *et al.*, 2018:3).

FIGURE 2.2: COMMUNITY-BASED PARTICIPATORY ACTION RESEARCH (CBPAR) MODEL



Source: Brydon-Miller (2001:82). Adapted.

2.13.2 Community-Based Research (CBR)

Community-Based Research (CBR) involves community members, students and higher education academics/researchers as equal partners that are focused on solving pressing community problems (Kreber, 2020:107). Tremblay (2017:19) describes community-based research as a form of scholarly research work that is positioned to achieve knowledge translation for academics and students, and the exchange of outcomes to sustain a prolonged sense of engagement with communities. According to Rice (2018:15), the CBR research model is carried out in community-settings with a research topic that is practically relevant to the lives of the community. Academic staff, students and community partners actively collaborate to share control of the research agenda by means of a reciprocal involvement in the design, implementation and dissemination of research projects. Minkler (2005:9) identifies the challenge with such a model as lying in the ability to sustain the commitment of a continued partnership with the community. McMillan, Goodman and Schmid (2016:15) add that this type of research differs from the traditional model of research consisting of students and academics, in which the researchers are involved in a much more expanded and diverse community, including partnering with an external community partner.

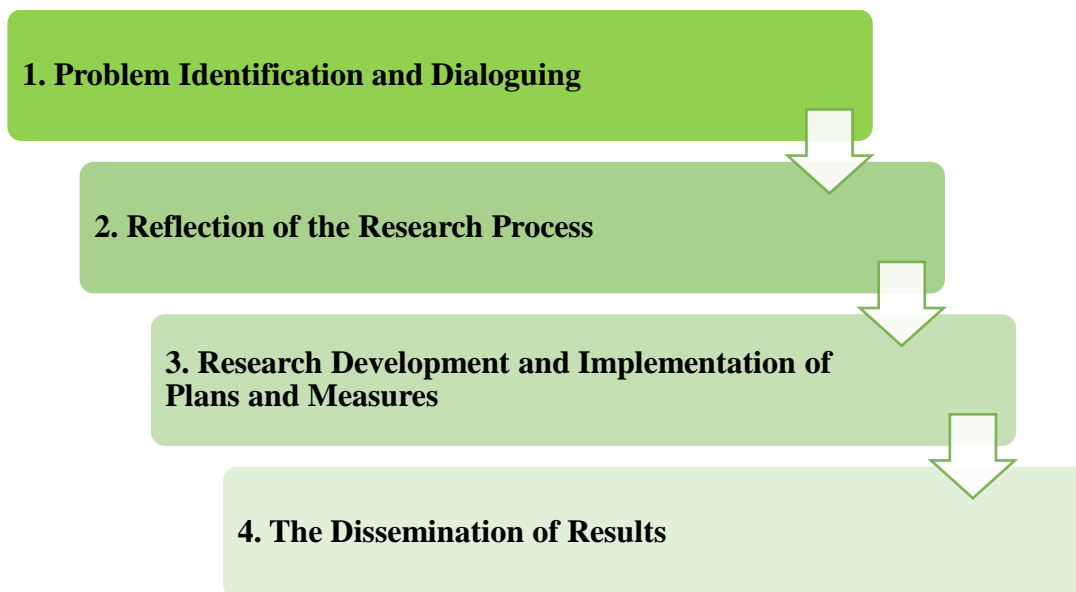
Strand, Marullo, Cutforth, Stoecker and Donohue (2003:8) advise that an agreement on the goals and strategies should be established at the beginning of the partnership, which should be founded on mutual trust and respect. Furthermore, it is paramount that all stakeholders have a shared understanding on the achievement of outcomes through the different roles, contributions and key decisions at the different research stages. This contextualisation will lead to the achievement of the key principles of CBR, which consist of the recognition of the community as a unit of identity; promotion of co-learning and empowerment to challenge community social inequalities; and the addressing of community health from both, positive and ecological perspectives, through a cyclical and iterative process (Israel, Schulz, Parker and Becker, 1998:178-180).

2.13.3 Participatory Action Research (PAR)

According to Chevalier and Buckles (2019:4), Participatory Action Research (PAR) is conducted by community members, professionals in diverse fields, students and academics from HEIs that are engaged in short and long-term projects on varied topics that are considered meaningful to the people involved. In contrast to the traditional method of community research, Brydon-Miller (2001:81) states that PAR draws on the strength of community members with the expertise of the academic researcher in a joint collaboration for the development of research methods, implementation of the research and analysis of the results obtained. Therefore, community members own the research results, which can significantly establish viable solutions towards the articulation of community challenges. According to Walker and Loots (2018:168), this essence is to develop community members' 'voices' and actively involve their elements of participation towards the broader responsibility that educational research needs to influence human development. Criticism against PAR lies in the time constraints that are imminent to establish relationships of mutual trust within the community (Bandy, 2016:4).

The Participatory Action Research framework is illustrated in Figure 2.3 below. According to this illustrative model, the problem component is originated from the community itself, and is defined, examined and solved by the community members. Through the reflection of the research process, the radical transformation of the community's social realities and improvement in the lives of the community members becomes actively strategized and systematically aligned. Therefore, the community members serve as the primary beneficiaries of the research, through the implementation of plans and measures. This creates diverse knowledge, skills and expertise that encourage the sharing of knowledge development. The full and active participation of the community within all levels of the research process disseminates the results that encompasses powerless groups of individuals, which consist of the exploited, the poor, the oppressed and the marginalized (MacDonald, 2012:39-40).

FIGURE 2.3: PARTICIPATORY ACTION RESEARCH (PAR) MODEL



Source: Nhamo (2012:15). Adapted.

2.14 THE CONCEPTUALISATION OF COMMUNITY ENGAGEMENT MODELS IN HIGHER EDUCATION

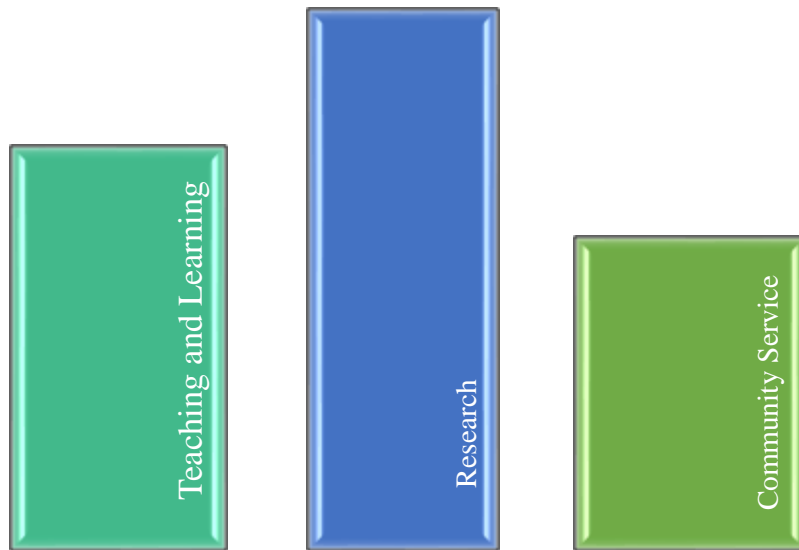
The concept of community engagement in HE is context specific and can occupy many frameworks. As articulated by Bender (2008:87-90), there are three models that conceptualise the way in which CE is embedded in HE, namely the Silo Model, the Intersecting Model and the Infusion/Cross-cutting Model. These models provide examples of institutional approaches to CE.

2.14.1 The Silo Model

The Silo model views CE as a separate and predominantly voluntary undertaking for academics, in which teaching, learning, research and community-service are each pursued independently of the others, as illustrated in Figure 2.4 below (Bender, 2008:87). This can be viewed in the same manner in which service is seen as no more than a ‘means to an end’ approach to satisfy policy requirements and produce research outputs in South African HEIs (Wood, 2017:699). As a result, the categorisation of this “voluntary” activity gives insufficient motivation for academics to effectively engage in community service (Onwuemele, 2018:30). Swap and Wayland (2013:121) identify the different types of silos, which consist of the mindset of students that are focused on the pursuit of job credentials and the mindset of academics, which are focused on the production of competitive cutting-edge research and the separation from the local community knowledge.

Furthermore, academic departments unintentionally create boundaries that reduce the opportunities for inter-disciplinary creativity, cooperation and productivity. Therefore, it is advocated that an evaluation model requires development, which highlights the integration of academic departmental units across boundaries, and its impact on a diverse viewpoint of the units within those boundaries (Trotter, Laurila, Alberts and Huenneke, 2015:2).

FIGURE 2.4: THE SILO MODEL OF COMMUNITY ENGAGEMENT



Source: Bender (2008:88). Adapted.

2.14.2 The Intersecting Model

The Intersecting model views the traditional three roles of HE as teaching, learning, research and community engagement, with the existence of an intersection between the three dimensions (Bender, 2008:88). The Intersecting model of CE activities in HE can accent one component or incorporate a combination of the five components, as illustrated in the overlapping of components in Figure 2.4 below. However, these engagement activities are subject to the applicability of the institutional mission and resources. As illustrated in Figure 2.5 below, Lazarus, Erasmus, Hendricks, Nduna and Slamati (2008:61) state that it is ideal for the circles indicating teaching and research to overlap. This ‘overlap’ assumes that all research and teaching involves engagement within the community, both directly or indirectly. Moreover, to establish a sense of motivation within the institutional academic culture, prioritization should be reflected on promotion and tenure, risk management, financial and leadership support, employee wellness programmes, monitoring and evaluation, communication training and the

dissemination of diversity and inclusion (Ahmed, Young, DeFino, Franco and Nelson, 2017:312).

As illustrated in Figure 2.5 below, the intersection of the circles enable the implementation of SL and CBR to occur, whereas the lack of an intersection enables the implementation of community outreach and service to be pursued further as a separate undertaking. Furthermore, the implementation of engagement can be independently leveraged or at a sequential point, in which the new knowledge is developed through research and disseminated through teaching and learning, which will create a behavioural reaction of change within a set of conditions in the community (Franz, 2009:38). Therefore, it is imperative that all components are intersected, which will ensure that the community development agenda is high-yielding and mutually beneficial to all stakeholders interactions within the partnership. To ensure such an effective integration, Budgen, *et al.* (2014:29) advise that partnerships should be founded on trust, equal autonomy, tangible benefits, collaborative dissemination of findings a supportive leadership culture.

FIGURE 2.5: THE INTERSECTING MODEL OF COMMUNITY ENGAGEMENT



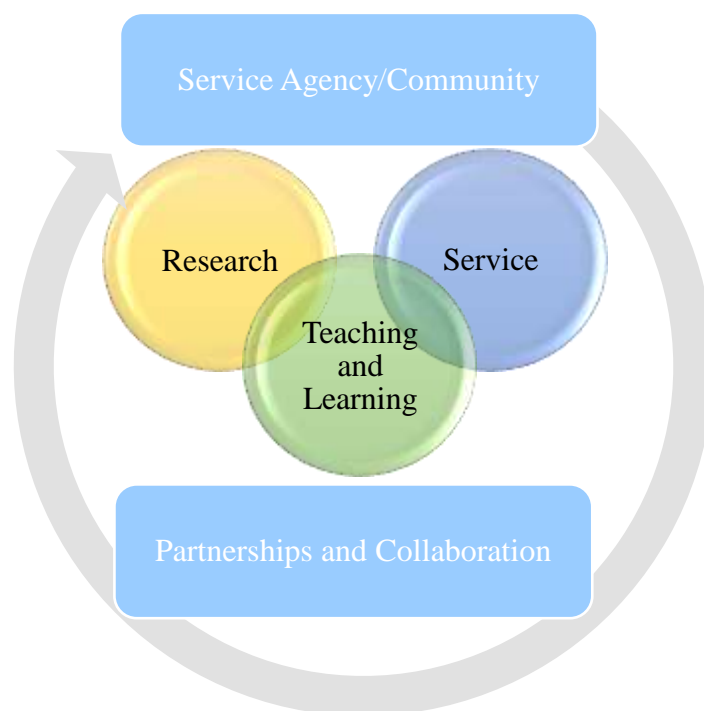
Source: Bender (2008:89). Adapted.

2.14.3 The Infusion/Cross-Cutting Model

The Infusion/Cross-Cutting Model of CE is not pursued as a separate range of activities but is rather embraced as a mode of improving the quality and relevance of teaching, learning and research (Bender, 2008:89). As illustrated in Figure 2.6 below, the conceptualization of this model signifies that academics should foster the integration of CE into their teaching, learning and research practices, enabling engagement to become embedded within the university’s core functions. In Figure 2.6 below, the dynamic interaction between the functioning circles supports the triple helix of the HEI, which enables the industry and government to share knowledge (Ylikoski and Kivelä, 2017:12). This model reflects what many HEIs in SA need to consider for implementation. However, the researcher asserts that this practice needs to be radical, as changes may be required within the existing mission statement and policy of the university.

Therefore, Nhamo (2013:7) highlights that the university will be able to achieve its core functions, which consist of tuition, research and development. Moreover, the interdependent relationship that exists between teaching and learning, research and service creates different forms of CE, which include community-engaged research, service and outreach. These different approaches lead to engaged research and knowledge-sharing, which consist of public dialogue promotion to service, which consist of accessibility to the assets and services of the university and teaching, which consists of practical education for a sustained community citizenship (Bowen, 2010:3).

FIGURE 2.6: THE INFUSION/CROSS-CUTTING MODEL OF COMMUNITY ENGAGEMENT

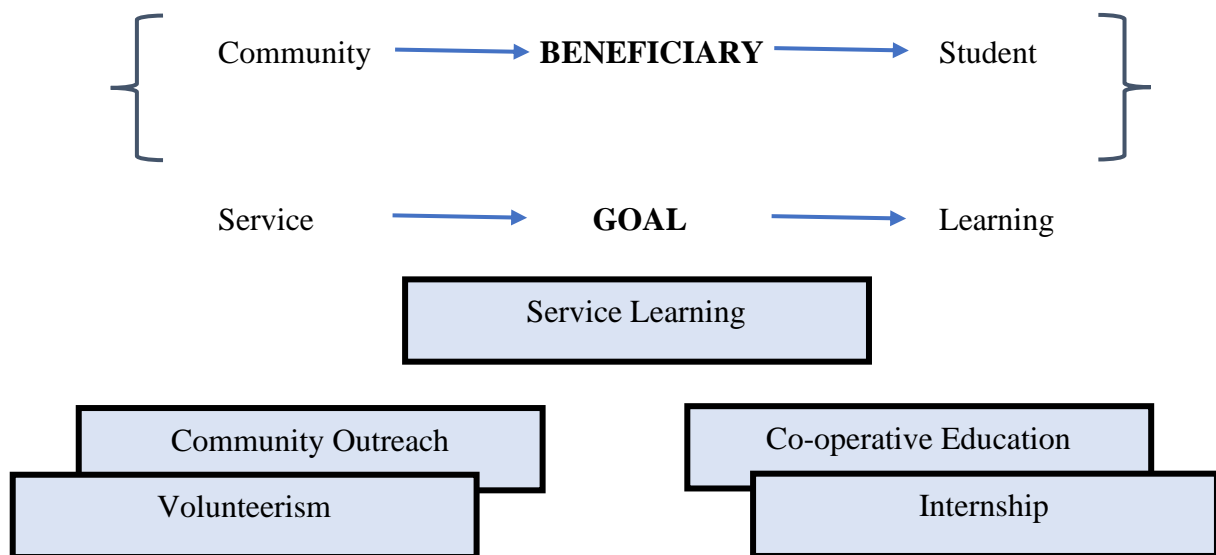


Source: Bender (2008:90). Adapted.

2.15 DIFFERENT FORMS OF COMMUNITY ENGAGED LEARNING

The representation of service programmes within HE implementation is portrayed through an experiential education continuum, which various service programmes focus on. As illustrated in Figure 2.7 below, each programme is located at a range of points on the continuum. However, each service programme is uniquely independent from other types, but portrays a significant universal definition of community engagement (Furco, 1996:3).

FIGURE 2.7: DISTINCTIONS OF COMMUNITY ENGAGED LEARNING



Source: Furco (1996:3). Adapted.

2.15.1

Volunteerism

Weidner, Stone, Latimer-Cheung and Tomasone (2018:66) predict that volunteerism programmes are essentially altruistic as they comprise of services that have been designed to exclusively benefit the service recipient. Although volunteerism is an enrichment of student learning, programmes are not integrated into the student's field of study and is therefore an extra-curricular initiative, which is often implemented during holidays and outside of academic lectures (Higher Education Quality Committee (HEQC), 2006:22). Students benefit from these programmes in an outcome-focused manner, such as an increased employment option (McFadden and Smeaton, 2017:1). Therefore, increased perceptions are attached to volunteerism as it complements formal student education through the required skills for the job market, such as leadership, teamwork, problem-solving, planning, management, creativity, communication and negotiation (Abdullah and O'Steen, 2018:1542).

Moreover, the trust, solidarity and reciprocity amongst the community members is strengthened through a focused creation of participation opportunities (Idris, Mustafa Din and Tajuddin, 2020:123). These opportunities are critically paramount within the current economic and competitive unemployment crisis in SA. However, Holdsworth and Quinn (2012:389) blatantly criticise student learning through an inadequacy shared to communities, as students are positioned more as beneficiaries of new skills and enhanced employability, rather than contributing towards and learning about social justice principles. In addition, Fluks and Naidoo (2019:469) state that students are inadequately prepared for SL and the impulsiveness of CE. Steen (2005:6) attributes this inadequacy to the standard economic framework for financial remuneration from volunteering and recommends a form of utility for engagement.

2.15.2 Service-Learning (SL)

“Tell me and I forget, teach me and I remember, involve me and I learn” – (Benjamin Franklin)

According to Bringle and Hatcher (1996:222), service-learning (SL) is a credit-based educational focus, which enables student involvement within an organized service initiative that achieves community needs and creates reflection on the course content, appreciation of the academic discipline and an enhancement of civic responsibility. Culhane, Niewolny, Clark and Misyak (2018:412) predict that SL is a pedagogical approach that encourages experiential, interdisciplinary and community-engaged curricula in HE. SL programmes have the intent to benefit both the service provider (student) and the service recipient (community), whereby both receive equal attention (Weidner, Stone, Latimer-Cheung and Tomasone, 2018:66). Within the South African context, service-learning (SL) was a relatively unprecedented educational concept until its origination in the year 1967, which emerged to prominence from the work of Robert Sigmon and Ramsay in the United States of America (Giles and Eyler, 1994:78). Against the affluent history of racism within the South African heritage, McMillan and Stanton (2014:74) argue convincingly that the consolidation of SL is a significant sphere of learning that enables students to reflect on and conciliate these profound “disturbances” effectively.

SL is regarded by Preece (2016:108) as an academic programme that enables students to undertake community placement for an allocated period. Students are assessed on the learning that they obtain from community activities and regional engagement that addresses university regional partnerships for development (Preece, 2013:266), which aims at increasing their sense of social responsibility and providing them with the opportunity to implement their theoretical knowledge in practice. Bauer, Kniffin and Priest’s (2015:90) finding shows that it is imperative for students to be orientated with service-learning from their first-year level at university as it sustains a positive perception of their role as engaged learners and citizens within their communities and in their future. Kolek (2016:30) states that the accountability of HE needs to demonstrate the influence of SL on student outcomes and development to advance scholarship

in CE. Kerins (2016:2) recommends that SL programmes should include a strong reflective component, whereby students utilise the acquisition of their skills and values of the service activity and subject theory to extend their classroom learning to real life.

To achieve this strategy, Mason and Dunens (2019:2) stress that academic courses should be grounded in the principles of reciprocity, reflection and social change. This can be achieved by framing the SL experience to the needs of the community, students and disciplinary objectives of the course. It is important for the student to blend the course material with their own real-world observations in order to understand the importance of collaborating with the community partner (Darby and Newman, 2014:107). There are five different approaches for the incorporation of SL within the academic discipline, adapted below by Heffernan (2001:3-4).

2.15.2.1 Discipline-Based Service-Learning

In this approach, the active alignment of student engagement within the community enables a constant reflection of student personal experiences and subject knowledge. This regular interaction requires students to compile a report that outlines their lived experiences through the experiential learning process, which seeks to connect the lecture room and out-of-classroom experience.

2.15.2.2 Community-Based Action Research

This approach occupies an independent methodology that enables students to acquire effective research competencies. Students are well equipped to implement research practices that attach paramount importance on the challenges experienced by community members.

2.15.2.3 Project-Based Service-Learning

This model promotes an active incorporation of teamwork, in which students adopt a consultative role within the community. The active interaction of students identifies the challenges that prevent the sustainability of the community and the promotion of viable solutions to overcome these challenges. However, there is limited interaction between the student and community member, based on the significant assumption of the student being the core provider of key knowledge for the effective implementation of problem-solving strategies.

2.15.2.4 Capstone Courses

The implementation of these courses promotes the academic discipline within first year and final-year students. The development of reflective exercises stimulates students to apply their individualised knowledge within the relevant community contexts, which mandate personal experiences. This creates an advantageous approach for final-year students, which creates professional network structures and the practical experience that reinforces the academic framework.

2.15.2.5 Service Internship

The service internship model promotes a combination of the traditional forms of internship, in which the student is required to commit a significant proportion of their time and energy to the community. Through this implementation, students benefit from a constant interaction with their academics that promotes the exchange of knowledge acquired from the community-engaged learning experience.

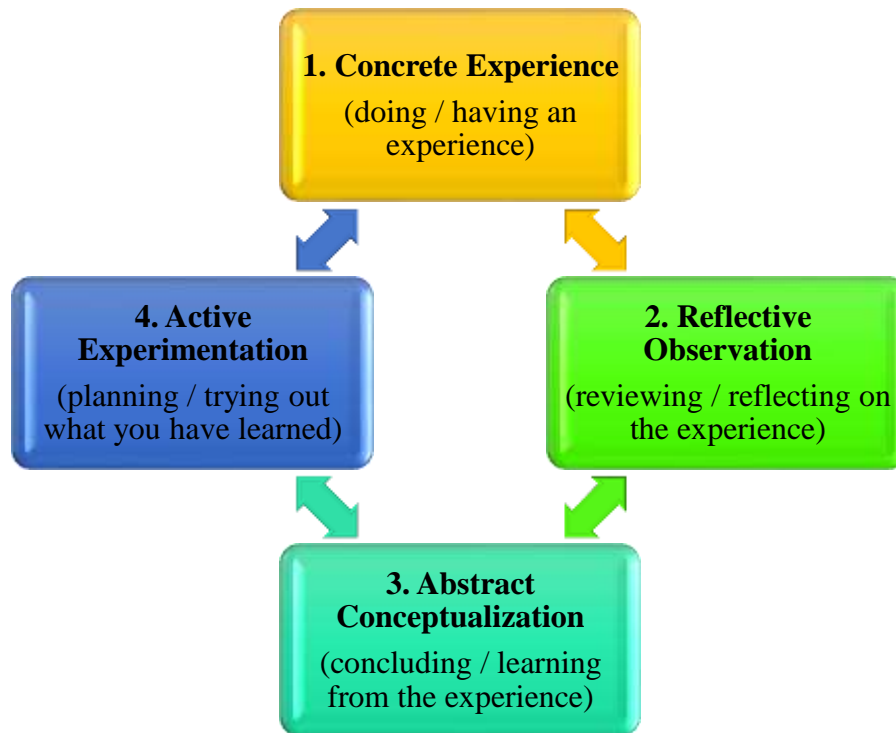
2.15.3 Experiential Learning

According to Culhane, Niewolny, Clark and Misyak (2018:412), experiential learning has originated from the work of John Dewey (1938) and refers to a “learning by doing” approach that connects the student’s education with a personal experience. The pedagogy of experiential learning has gained significant momentum within the development of graduate attributes that are paramount for society (Idris, Mustafa Din and Tajuddin, 2020:125). The achievement of this learning is significantly dependant on the university curriculum that comprise traditional knowledge with concrete actions to ensure that the teaching process is a rigid and active hands-on learning approach (Beaulieu, Breton and Brousselle, 2018:10). Chiu (2019:2) states that this experience enables student development for a significant understanding and reflection of knowledge. Moreover, the participation within real-life experiences provides students the opportunity to view their subject content from different perspectives and approaches that can inspire innovative solutions towards challenging societal problems (Giac, Gai and Hoi, 2017:180).

2.15.3.1 Kolb’s Experiential Learning Cycle

Kolb views student learning as a process in which knowledge is created through the transformation of experience (Boyd and Fales, 1983:100). Figure 2.8 below illustrates the learning cycle of Kolb, which consists of four stages, namely concrete experience, reflective observation, abstract conceptualization and active experimentation (Chiu, 2019:3). According to Kolb and Kolb (2017:15), an important trait of Figure 2.8 below describes the learning process as a recursive circle or spiral, as opposed to the linear, traditional information transmission model of learning, in which information is transferred from the lecturer to the learner to be stored in declarative memory for later recall purposes.

FIGURE 2.8: KOLB'S EXPERIENTIAL LEARNING CYCLE



Source: Kolb and Kolb (2017:11). Adapted.

2.15.3.1.1 Concrete Experience

Bohon, McKelvey, Rhodes and Robnolt (2017:614) predict that concrete experience refers to the full and unbiased engagement within learning experiences, which is a significantly paramount attribute required for efficient CE. According to Idris, Mustafa Din and Tajuddin (2020:127), concrete experience stimulates students' affective and cognitive domain, to enable an experience that can be reflected upon. Moreover, McCarthy (2016:93) states that the process of concrete experience within reflective observation creates different viewpoints, which enable students to perform better in community situations that require innovative ideas and brainstorming. This strength lies in a consistent imaginative ability and consciousness of meaning and values. These experiences can be stimulated by exercises, business games, role

plays and cases. Moreover, topics such as motivation, perception and group decision-making provides the experience, structured reflection and conversation exercises, conceptual material and a personal application of knowledge (Kolb and Kolb, 2017:15).

2.15.3.1.2 Reflective Observation

Giac, Gai and Hoi (2017:181) state that reflective observation is analysed by the subject to process the knowledge, which will ensure a basis for action that is aligned with reality, to achieve results. This requires a systematic re-think of experiences in order to determine their characteristics. Students are able to collectively share, analyse and discuss their different viewpoints systematically. However, this effort requires student individualised thinking, which provides an effective platform for learning. Therefore, students are able to create connections between learning experience obtained from working in the community in conjunction with their academic setting (Hou, 2014:2). Widiastuti and Budiyanto (2018:99) recommend that verbalization and discussion are paramount for lecturer-student and student-student discourses.

2.15.3.1.3 Abstract Conceptualization

Through the process of the subject, abstract conceptualization refers to the acquisition of the concrete inherent in reality that obtains a true perception on the subject. However, the subject requires sufficient knowledge about the object, its movement and development in relation to other objects. Through this detailed observation and rigid thinking, the student is able to generalize the experience into reasoning, which enables the experience gained to be transformed into knowledge that is stored in the cerebral cortex (Giac, Gai and Hoi, 2017:181). Moreover, the theoretical observations are based on significant logical generalizations or principles (Fromm, Radianti, Wehking, Stieglitz, Majchrzak and Vom Brocke, 2021:3). This enables students to adapt to changing circumstances by solving community challenges in an intuitive, trial-and-error manner, such as the discovery learning approach through community design projects and experiments (Das, 2016:3).

2.15.3.1.4 Active Experimentation

According to Chiu (2019:11), students are required to actively apply the consolidated knowledge that they have obtained from the suggested pedagogical approach. This creates an independent student that can manage the learning process on their own. Therefore, the effective awareness of learning strategies acquired throughout the cycle and an active involvement promotes effective language learning for the student. Academics should institutionalize their content-based modules and the integration of experiential learning tasks as part of the academic curriculum (Boggu and Sundarsingh, 2016:25). Through this active experimentation, increased expectations are on student's motivation. Therefore, the academic learning process should be able to equip students cognitively and unclear structure psychomotor through experience, in order to enable students' competitiveness to work, continue their studies or become successful community entrepreneurs (Pamungkas, Widiastuti and Suharno, 2019:31).

2.15.4 Work-Integrated Learning (WIL)

Sattler, Wiggers and Arnold (2011:3) define work-integrated learning (WIL) as a range of educational activities that formally integrate academic learning within an institution with the practical application in a workplace setting, which is of relevance to the student's career interest. According to Jackson (2016:39), WIL provides students with insight into the realities of professional practice, encouraging them to apply their non-technical and technical skills. This practice constitutes an integral element of the cultivation of life-skills and civic responsibility, which enhances graduate employability. The White Paper on Post-School Education and Training (2013:64) declares workplace learning as a pivotal inclusion of tertiary qualifications and the design of the academic curriculum programme.

2.15.5 Internship

Furco and Norvell (2019:22) state that in an internship programme, the student intern is intentionally focused on learning from the experience, primarily benefiting himself. Internship activities are designed to provide applications to different settings on/off campus that grant students the exposure to a variety of community needs and programs that meet those needs. The issues and ideas that are discussed aid students to secure a job upon graduation (Taylor, Carroll, Ballard, Baugh and Jorgensen, 2017:53). According to Wawrzynski and Baldwin (2014:58), students are provided with the opportunity to gain direct work experience and supervision with professionals that encourages them to integrate their academic knowledge with the knowledge acquired in their field of profession.

2.15.6 Community Outreach

Ahmed, Young, DeFino, Franco and Nelson (2017:311) regard community outreach as a common implementation of CE in which the institution is provided with the platform and onus to proffer a personal connection with the community by offering a benefit, and the development of a shared understanding of the community needs. The primary focus of community outreach, as with volunteerism, is to provide a service to the community, which serves as the primary beneficiary. In contrast to SL, outreach programmes require greater commitment from students, which is initiated by the academics within their department. Recognition can be administered in the form of an academic credit or research publication. Community outreach becomes more like SL as the integration of service activities within the academic work of the students overlaps, engaging students in formal intellectual discourses. These programmes adopt a distinctive approach to the HEI, whereas SL is fully integrated into the academic curriculum (HEQC, 2006:22). According to Ylikoski and Kivelä (2017:2), community outreach is required to be linked to the existing strategy of the HEI, which will ensure that the local and regional development of the institution is successfully achieved. However, this approach is significantly dependent on a functioning triple helix structure that focuses on profound integration and commitment.

2.15.7

Co-operative Education

In cooperative education, as with internships, the primary goal is learning on the part of the student, who serves as the primary beneficiary. Antwi, Duncan and Tsegah (2019:272) define co-operative education as a structured method that HEIs deploy to successfully establish classroom-based education with practical work experience that provides academic credit. The Higher Education Quality Council of Ontario (HEQCO, 2016:35) states that the programme provides students with work experience that is conducted under the guidance of an experienced professional for the purpose of developing employability skills. Reinhard, Pogrzeba, Townsend and Pop (2016:250) predict that many UoTs in South Africa have implemented co-operative education, which propelled students to perform work during vacation times, integrating practical work experience into the academic year, or spending a full year undertaking work-integrated learning. Within the context of the DUT, this occurs as part of the specialist Co-operative Education Department that generally involves students interning with organizations where the skills acquired in the classroom can be applied, alternating full-time study with full-time employment for students. Students at the DUT cannot graduate from the university without having successfully completed that requirement. This underpins the importance that the Co-operative Education Department attaches to the on-the-job training experience of students.

2.16 ACADEMIC BARRIERS TO ENGAGEMENT

2.16.1 Funding Constraints

O'Meara and Jaeger (2016:138) state that academics are “pressured” to seek external funding support. Therefore, a majority of work implemented with communities is without corporate partnerships and a significant base of external funding. This inconsistency of reliable funding sources inhibits effective engagement with communities (Holzer and Kass, 2015:116; Adekalu, Krauss, Ismail and Suandi, 2018:197). Belfield (2012:21) adds to this pressure by stating that academics are required to formulate progress reports that seek to monitor the relevance of research by reporting their constant progress in an attempt to sustain funding on an annual basis. This holds true against the tertiary education sector that has constituted a much smaller R388 million out of a supplement of R557 billion of provincial government spending (Stats SA, 2016:1). As a result, research and development in the higher education sector has increased its contribution merely from twenty to thirty-seven percent in 2019 (Department of Science and Technology, 2019:1).

Moreover, continued pressure exists to bring in external funding (DHET, 2013:36) to deflate the pressures of teaching in a low throughputs rate context, as these rates are significantly instrumental to secure the subsidy funding formula from the South African Department of Higher Education and Training (Barnard and Fourie, 2013:3). The evidently restrictive and inconsistent basis of long-term funding creates an increased prioritisation and review on the legislative and tax framework that governs the South African education sector to create medium-term sustainable funding for the achievement of a developmental state (National Development Agency Report, 2013:53-54). Therefore, it can be recognised through the lenses of Blanco-Portela, Pertierra, Benayas and Lozano (2018:9) that the financial, social and political instability of the South African government creates engagement to be viewed as low priority against the destitution of resources for effective implementation.

2.16.2 Time Constraints

Academics are under constant pressure to ensure the applicability of their lecture room learning to workforce requirements simultaneously with the relevance of their research (Roberts, Wilson, Coveney, Lind, Tieman, George, Gill and Tonkin, 2018:5) within the depth of a content-driven curriculum and the busy schedules of students (Schaffer and Hargate, 2015:8). Therefore, Gorski and Mehta (2016:111) argue that it is not reasonable for academics to commit their additional time in developing relationships with community members and organizations. Moreover, Bandy (2015:1) states that it is time-consuming to develop a productive working-relationship with community partners as it involves: The design of projects to meet learning and community goals; the management of logistics as projects unfold; the engagement of students within special skills training; and reflection on the meaningfulness transpired from the projects. Hamilton (2019:11) adds that non-confrontational language creates indirect responses, which requires academics to further pursue additional effort to ascertain the real answers towards the challenges experienced in communities.

Belfield (2012:42) recognises strategic partnerships as severely time-consuming, with academic professors having a limited amount of interaction for the development of sustainable and meaningful relationships with external members. Mahon, Heikkinen and Huttunen (2019:474) found that the increment of lecture sizes has an effect on the amount of time that academics could spend with individual students. This reduced contact time negatively impacts on the ability of the lecturer to ascertain the appropriate level of individual student knowledge against the extent to which instrumental or technical knowledge are privileged. In addition to the lack of capacity of academics towards meeting the individual needs of the student, the challenge for implementing an active learning atmosphere through the opportunity of experiential learning in a large lecture room is severely constrained (Briseño-Garzón, Han, Birol, Bates and Whitehead, 2016:136). Cooper (2014:423) describes the incorporation of SL into the academic curriculum as “challenging and time-consuming work”.

2.16.3 Academic Workload

The traditional nature of working in a less demanding higher education environment is now compounded against tremendous pressure to produce high-quality and critical-thinking graduates (Badat, 2010:6). In addition, there is an existence to increase the quantity and quality of published research outputs (Nkomo, 2015:249). The lecturing workload of different skill levels require alignment with an increasingly diverse student complement (Portnoi, 2015:265). This is required to improve the quality of education through curriculum adjustment that caters for the needs of unprepared students (Tewari and Ilesanmi, 2020:6). As a result, increased student demands are obtained from the expectation of being consumers of HE (Tomlinson, 2018:716). Moreover, Carbonnier and Kontinen (2015:151) reveal that the intensity of the pressure placed on publication outputs reduce the incentive to invest time and resources in partnerships that facilitate effective capacity building.

Portnoi (2015:265) found that it is increasingly challenging for academics to establish a balance between scholarship and teaching due to competitive HEI rankings that emphasise research. Turk and Ledić (2016:107) have exposed the identification of working as a lecturer, which is seen more as a necessity due to the circumstances of having too many students that results in increased administrative tasks, and the perception that lecturing is an ongoing responsibility. In conjunction, Kezar and Rhoads (2001:125) argue convincingly that the trinity of teaching, research and service creates a strenuous impact for academics to sustain their teaching efforts towards service-learning out of the lecture room. It can be estimated from the study of Skolnikoff, Engvall and Ferrara (2010:30) that developing sustainable SL programmes requires significant time invested by academics within a prolonged period. Therefore, it becomes challenging for academics to “add” community engagement to their current responsibilities, more especially since there is a lack of a motivating force, such as a clear linkage to academic reward structures, which are described by Saltmarsh, Wooding and McLellan (2014:4) as “slow” and “fraught with conflict”.

2.16.4 Partnership Development

Palombi (2017:4) states that the evaluation criterion for community-engaged scholars constricts the time to develop conducive relationships with community members to sustain meaningful partnerships. Furthermore, this creates a significant barrier for tenure-track academics to being effectively involved in community-engaged work. However, it is argued by Holland (2005:11) that academics often share the assumption that their role is to teach; the student's role is to learn; and the community partner's role is to provide a set of needs that must be addressed. In addition, academics come to the community from a perceptibly advantaged and wealthy context, thus creating an imbalance in the equality of the power relationship within the partnership. The argument made by Holland (2005:11) is in congruence with Fitzgerald, Bruns, Sonka, Furco and Swanson's (2012:9), that academic power is often embodied against who is perceived to be the "expert".

According to Lough and Toms (2018:71), this perception of the university faculty being the "experts" creates a degeneration for community partners to articulate their roles as co-educators and draw on their local knowledge expertise. While the discussion makes some good points, there are serious problems that also lie in the mistrust of institutions rooted in perceived historic injustices towards or continuing inequalities within the community, and a lack of community trust in government bodies. Moreover, Guimon (2013:4) found that the challenge of negotiating a meaningful collaboration also lies in the lack of information; difficulties finding contact persons; and the transaction costs involved towards finding the right partner. In addition, Blickenstaff, Wolf, Falk and Foltz (2015:223) found in their study that the possession of a multi-cultural awareness and the ability to work within diverse communities was ranked very low on academic value. However, Welch (2017:71) laments that this democratic process of co-creating mutual knowledge is not solely for the professional advancement of scholars and students.

2.16.5 Skills and Capabilities

According to Belfield (2012:10), a vast majority of universities that engage with communities through the conduit of partnerships are “learning by doing”, with academics that have a lack of exposure in industry and the experience to network with those found outside their academia expertise. Sobrero and Jayaratne (2014:132) found that insufficient job experience creates a deterrent to a lack of knowledge and understanding of engagement scholarship metrics, standards and processes. Furthermore, Welch and Plaxton-Moore (2017:155) revealed that the gaps found within the knowledge and skill sets of academics lie in the preparation of promotion and tenure; the dissemination of research regarding an engaged teaching and scholarship; the enhancement of community capacity; grant writing; and the understanding of cultural competency that have a systemic consciousness to impact communities.

However, Leal Filho, Morgan, Godoy, Azeiteiro, Bacelar-Nicolau, Ávila, Mac-Lean and Hugé (2018:4) argue that funding pressures create a “publish or perish” attitude that encourages academics to ensure their competitiveness, instead of an effective generation for innovative interdisciplinary approaches. Moreover, Hamilton (2019:11) found that written surveys are seen as less respectful than face-to-face dialogue and therefore does not capture the essence of the project content. Khanyile (2020:108) attributes this to the lack of a common understanding of what CE is, which leads to educational activities that are carried out to be closely aligned more to SL instead of CE, as there is increased emphasis on the assessment of how students think they learn from community and regional engagement. Furthermore, academics who proffer solutions to the problems that are faced by the community are often not from the same community and have a lack of true understanding of the root cause of the problems experienced (Khanyile, 2020:114).

2.16.6 Rewards and Recognition

According to Guimon (2013:6), universities are struggling to provide incentives that align research agendas with market demands and therefore create a lack of relevance towards the needs of the local community. Mugabi (2015:22) found that the hiring and promotion practices of HEIs do not effectively recognize the contributions of academics within external communities, as an overwhelming perception exists on promotion and tenure that have an emphasised value more on research productivity (Blickenstaff, Wolf, Falk and Foltz, 2015:223). Deemed critical, the lack of establishment of an interactive institutional portal that systematically details the expertise, competencies, previous research and consultancy of its academics (Ramjeawon and Rowley, 2017:12) has led to the discouragement of many academics (Hou and Wilder, 2015:4). This creates a fear within academics to avoid risking their career advancement to pursue CE, which does not have the recognition within their institutional promotion and tenure standards (Gorski and Mehta, 2016:111).

Younger academics are also discouraged, as Saltmarsh and Wooding (2016:77) articulate an insufficient recognition despite diverse approaches made towards scholarship. Holzer and Kass (2015:121) are in congruence with this articulation as their study revealed that junior academics are not rewarded for their engagement work, making it challenging for more faculty to be trained in engaged research. This further jeopardises the career mobility for junior academics to have a significant correlation in the production of publications. As a result, Nhamo (2012:4) reveals that this discouragement is accompanied by institutions experiencing problems to use a tuition criterion to evaluate academic promotion, resulting in a lack of academics being promoted on their excellence provided in tuition or CE.

2.16.7 Communication

The synergies that exist between the community and the HEI is constantly pressurized against communication which is insufficiently modified to the demographics and cultural characteristics of the groups within the community (Ramsbottom, Brien, Ciotti and Takacs, 2018:417). In addition, Schaffer and Hargate (2015:7) state that the busy work schedules of academics impede following through on communication. This creates a breakdown in communication, which could be perceived as a lack of interest and professional mistrust that stems from the implicit depiction of the academic as the source of power, as in many instances the university implements control of the budget within the partnership (Tapp-Neville, 2015:104). Furthermore, it becomes challenging to ensure that a free exchange of information across the partnership continuum that ensures mutual benefits to both parties is achieved, since there is a divergence of views with a lack of uniformed standards and guidelines for adherence (Musesengwa and Chimbari, 2017:6).

Furthermore, Bradford (2016:111) found that CE is significantly determined by staff opinion, which does not provide the opportunity for the community to actually participate in the project's decision-making. This behaviour jeopardies the success of engagement, as many projects are significantly dependent on a broader local buy-in and participation through consistent communication across the community population (Mazhar *et al.*, 2017:809). In addition, written communication restrains effectiveness as this does not reflect the lived experiences of the community members. However, Gilmore, *et al.* (2020:9) caution against an over-abundance of information, which can be accurate or false, thereby, creating a lack of trustworthiness, ambiguity and resistance. In contrast, Blanco-Portela, *et al.* (2018:9) found that inefficient communication exists within academics in HEIs. This lack of efficiency degenerates the assertiveness of communication by creating a duplication of efforts and resources, meagre dissemination of CE project initiatives and efforts of change through isolated co-ordination.

2.16.8 Training

The collaboration of teamwork is often interdisciplinary and results in academics that possess a varying understanding of community engagement, which restricts the ability to achieve a clear and principled view of the purpose and approaches to the engagement strategy (Glandon, Paina, Alonge, Peters and Bennett, 2017:1461). Furthermore, in the view of Netshandama (2010:351), academics seldom receive training that is appropriate to the development processes and procedures of CE. Additionally, Becker, Cummins, Davis, Freeman, Hall and Ananthanarayanan (2017:7) state that there is a greater prominence for academics to advance digital literacy for the engagement of professional development. These pressures lie against the growing appeals that exist for academic researchers to balance the need for cutting-edge, theoretical research against the demands for an applied policy-relevant science that encourages a disciplinary focus (Leal Filho, *et al.*, 2018:3).

According to Jessani, Valmееkanathan, Babcock and Ling (2020:7), the diversity and quantity of capacity enhancement initiatives are restricted to a few academics in the domains of networking, relationship building, communication and advocacy. Moreover, academic researchers lack the experience in working with communities and require learning from communities itself before the research activities can be implemented (Musesengwa and Chimbari, 2017:7). This challenges the ability for academics to articulate meaningful outcomes when designing the CE programme and the formative and summative assessment strategically and explicitly after the project has been completed (Justo and Vaz, 2016:126). Moreover, Hamilton (2019:10) stresses that it is required that project pre-planning with the community partner is conducted to determine the expected outcomes, timeframe, project supervision and materials needed for collaboration. Therefore, this process is imperative as a lack of clarity amongst staff will lead to the degeneration of consistency across the department and faculty (Bradford, 2016:112).

2.16.9 Community Expectations

Ramsbottom, Brien, Ciotti and Takacs (2018:416) put forward the statement that community citizens often have ‘unreasonable’ expectations of HEIs. Harkavy (2005:29) proclaims that community members often share the misconception that HEIs have an abundance of resources that can significantly affect communities. However, this notion inadequately serves possibility as many institutions have limited access to resources, creating a sense of mistrust that deflates high expectations and poses a barrier for the formulation of future partnerships. Moreover, Musesengwa and Chimbari (2017:6) found that there are expectations of tangible benefits coupled with an impatience in planning processes (Jiusto and Vaz, 2016:129). In addition, the lack of recognition through the value contributions made by community members creates a divide between the needs of the institution and those of the community, which also negatively impedes future relationships (Woods and Zuber-Skerrit, 2013:8).

Furthermore, Chifamba (2013:140) highlights that extensive participation of the community is not easily controllable and is inadequately effective towards the planning and the implementation process of engagement projects. In addition, this leads to concerns that evolve around the costs associated with regard to the community members’ time, efforts and resources (Chifamba, 2013:140). As the professional commitments of academics’ spare inadequate energy for the creation of new volunteerism efforts, Lee, *et al.*, (2018:10) state that a considerable gap is formed between what the CE project expects from the community and what the community members are qualified to actually take on. This creates the perception within the community that academics have ceased to deliver on their assurance, which leads to excessive costs and low returns. According to Gosman and Botchwey (2013:12), community members’ interest towards the core purpose of the engagement project becomes deterred, which challenges the academic to establish focus on long-term projects, whilst maintaining short-term projects.

2.16.10 Quality of Students

According to Culhane, Niewolny, Clark and Misyak (2018:412), the authentication of full student participation that creates meaningful engagement within the community is a constantly challenging experience. Ibrahim, Awang, Rahim and Abdullah (2012:5) have blatantly criticised the qualities of graduates by denoting a high expectation of students balancing personality and morality that recognizes the importance of collaborating with the community (Darby and Newman, 2014:108). Seabi, Seedat, Khoza-Shangase and Sullivan (2014:67) illuminate this ‘personality’ as the lack of efficiency in communicating with others, by charting that the majority population of students in SA are from disadvantaged backgrounds in which the English language medium is either second or third language. In addition, students are required to modify their language to effectively communicate with the community on social justice and sustainability (Karwat, *et al.*, 2013:156).

Furthermore, Akhurst, Solomon, Mitchell and Riet (2016:137) reveal that CE activities may cause a disturbance to the existing promotion of knowledge within the university by the representation of cultural and local practices that may conflict with the Western modes of student education. Nasir, Salamat, Ghani and Redzuan (2017:211) found that students prioritised the completion of their studies and the fulfilment to their commitment as a student, as opposed to joining volunteer initiatives that are perceived to not form a critical component within their learning activities. Despite CE being a continuous learning cycle for all stakeholders, Karwat, *et al.*, (2013:157-158) found that students require consistent support from academics to certify “correct” approaches. As a result, it becomes strenuous for students to translate the concept of an extensive community-based framework into a clear and attainable goal which creates a meaningful impact on the lives of the people in the community.

2.16.11 Lack of Support

Carbonnier and Kontinen (2015:157) make several interesting points regarding the challenges that academics experience, which represent a significant domain for their collaboration that advocates “tensions” such as travelling arrangements, the organisation of workshops, the transfers of funds and reporting. This is coupled with the non-existence of a departmental framework for sustainability that is supported by management. As a result, CE projects are voluntarily developed through internally dispersed actions that ineffectively impede the sustainability mission of the department (Blanco-Portela, *et al.*, 2018:9). Moreover, Jessani, *et al.* (2020:6) emphasise that increased leniency and support is required to permit academics to capitalize on unexpected opportunities such as the attendance of a high-profile summit in the midst of a lecturing semester. Therefore, Vuong, Rowe, Hoyt and Carrier (2017:251) reveal that engagement work becomes further ineffectual as institutional policies do not provide distinct guidelines that endorse the nature of a community engagement scholarship.

Hamilton (2019:6) found that an irregular pace of support creates the need for continued resources in order to fulfil the institutions’ obligation towards community projects. Fang (2016:69-73) adds that the bureaucratic culture of HEIs creates a challenge for an institutional commitment towards the creation of innovative community-engaged curricula. Furthermore, a lack of support adds to the inconsistent understanding of CE, which creates the misconception that academics are adhering to the requirements of CE, which is distant from actual reality (Bradford, 2016:111). In addition, a “poor” understanding that is not reinforced by adequate support leads to the challenge for academics to develop their own actions that are regarded as appropriately acceptable and meaningful to the cultural and ethnic differences embedded within the local community (Lee, *et al.*, 2018:2). Therefore, with the lack of a pre-existing foundation of support to build on, expectations become unrealistic within the timescale and resources (Lee, *et al.*, 2018:6).

2.17 ACADEMIC ENABLERS TO ENGAGEMENT

2.17.1 Shared Power within Partnerships

According to Benneworth and Sanderson (2009:1), the collaborative nature of partnerships serve as a significant capacity building mechanism for academics to foster a local demand for their knowledge. The development of relationships needs to determine common goals and mutually beneficial outcomes from the outset (Ebersöhn, Loots, Eloff and Ferreira, 2015:12) to create a learning culture that is inclusive for building academic identity and an enhanced sense of belonging towards the HEI. This proposition should be articulated in a mission that creates an agreed-upon implementation for the partnership to address the community challenges. As this synergy deepens, Harden and Loving (2015:3) describe academics to have already grown trust in their association, which leads to the formulation of a value proposition for the community. This creates spaces and opportunities for exploration and growth that are underpinned by an ethic of reciprocity (Cook-Sather and Felten, 2017:5).

Furthermore, the input from community partners is paramount for engagement to be sustained with the central core component of the university (Fitzgerald, Bruns, Sonka, Furco and Swanson, 2016:248). This seeks to create a reciprocal relationship that benefits the mutual exchange of localized knowledge. Mtawa, Fongwa and Wangenge-Ouma (2016:5) reveal that this integration of knowledge from communities could enable a theoretical platform of indigenous knowledge that addresses complex issues for local stakeholders in an unambiguous manner. Frawley, Larkin and Smith (2017:8) recommend approaches to be built on the strengths and resources within the existing community framework. Bodison *et al.*, (2015:815) emphasise that the dissemination of outcomes should be articulated in a “shared” interaction to the community, whereby recommendations are promoted within all spheres of the research pipeline for all partners to authentically engage in the community project.

2.17.2 Rewards and Recognition of Community Engagement

The criteria for academic staff promotion and reward in South African HEIs have made provision for the inclusion of CE (Lazarus, Erasmus, Hendricks, Nduna and Slamati, 2008:68; Nhamo, 2012:4). However, a significant proportion of academics desire a much more formalized recognition and incentive system to advance their engagement efforts (Slamati, 2014:155). Stanton (2012:280) states that HEIs can approach this advancement by establishing a clear criterion that articulates the incentives provided for academics to undertake research and its quality assessment. Furthermore, Crandell, Pariser, Wiegand and Brosky (2013:76) reveal that the recognition of the academic workload through tenure decisions is integral for academics to ‘buy-in’ and support long-term SL. Gorski, Obeysekare, Yarnal and Mehta (2015:8) have identified the recognition of incentives such as certificates of completion and public recognition through newsletters and awards towards sustaining long-term CE participation.

Kern, Mettetal, Dixson and Morgan (2015:9) recommend that excellence on the basis of teaching should be clearly articulated in promotion or tenure criteria that outline an increased emphasis on effective student learning and the value of multiple pathways that lead towards accomplishing this scholarly teaching practice. Alshuwaikhat, Adenle and Saghir (2016:14) recommend the development of a full costing strategy and a sustainable financial policy framework on endowment spending to diversify sources of internally generated income that will support teaching, research and outreach initiatives. Furthermore, academics will benefit from a cross-disciplinary joint effort and information-sharing that will lead to the development of more grounded research in sustainability. On this basis, the HEI would be able to initiate an annual or a monthly research conference that recognises the academics’ research excellence towards sustainability.

2.17.3 Communication with Community Members

The importance attached engaging and listening to the perspectives of community members that possess an affluence of traditional knowledge and experience in the indigenous community is emphasised by Hatala *et al.*, (2017:5). It is paramount for academics trained in a Western language to humbly alleviate their formal titles and achievements against community members who may possess a limited exposure to education. This synergy can be accomplished through a designated platform created by the university to ensure and crystallise concerns and resources with community members and leaders for the establishment of consensus (Tamrat, 2019:1). According to Quillinan, McEvoy, MacPhail and Dempsey (2018:12), these constant meetings create a mechanism for the workings of the partnership and discussion on the suitability of teaching and learning strategies, which leads to appropriate outcomes being formulated. Incorporating online communication tools, such as volunteer matching databases and virtual platforms for group collaboration creates platforms to connect with diverse partners (Levkoe and Stack-Cutler, 2018:29).

Furthermore, knowledge-sharing between academics and community members can be disseminated through innovative approaches such as plays, exhibitions and the joint preparation of educational materials, with the involvement of community members in formal teaching (Favish, 2015:5). University interactions with the community should facilitate a collaborative process of decision-making that also recognises cultural concerns (Preece, 2016:218). Adekalu, Shitu, Turiman, Olohungebebe and Adio (2017:136) found that by identifying with the integration of this existing culture first, then only should the proposed community project be introduced. In addition, it is paramount to adjust respect that corrects etiquette when interacting with the host community members (Gahungu and Freeman, 2015:163). According to Francis, Kilonzo and Nyamukondiwa (2016:5), this justification should be achieved by strengthening social cohesion, which will enable communities that are not “healthy” due to internal conflict amongst its leaders to develop sustainable energy for the achievement of a self-driven development.

2.17.4 Management Support

Increased expectations are attached to the clear capacity for academics' professional development and enhancement of subject expertise (Cheng, 2017:15) that will supplement greater confidence and levels of participation (Burchell, 2015:4), by offering continuous learning that will intrinsically motivate academics to sustain a unilateral knowledge level within their departments (De Vito, Brown, Bannister, Cianci and Mujtaba (2016:27). The provision of feedback (Ott and Cisneros, 2015:16); allocation of time for professional development and support incorporated within current workloads (Czerniawski, Guberman and MacPhail, 2017:3); peer development for academics to partner with and learn from each other and the provision of support for dissemination activities (Holland, 2016:67); and mentoring (Johnson, 2016:4); through a supportive and facilitative organisational leadership (De Weger, Van Vooren, Luijkx, Baan and Drewes, 2018:6), positively predicts commitment for all faculty.

According to Land and Gordon (2015:24), a sustained managerial approach for efficient learning is informed primarily by effective resource deployment and the pursuit of greater coordination and the alignment of rigid control for policy direction across activities. Akpan, Archibong and Undie (2016:43) advise that management should develop modalities for academics for the identification and dissemination of research funding opportunities and the requirements for accessing them. This should be accessed on-line through significant funding agencies on the global internet. Buzinski, Dean, Donofrio, Fox, Berger, Heighton, Selvi and Stocker (2013:65) identify further support for engagement through the conduit of departmental associations, workshops and conference presentations. Bringle and Hatcher (1996:228) support this implementation through a syllabus to read; an instructor for wisdom of reflection and evaluation; and a group of students who advocate SL. According to Morrison (2020:49), in order to prevent existing department evaluation systems that favour top publications from further discouraging community engaged scholars, the department should revise its purpose, values, curriculum for graduate education, conceptualization of scholarship and metrics for assessing quality.

2.17.5 Resources

According to Belfield (2012:8), the provision of resources for academics should seek to manage the cultural shift that distinctly articulates engaging with industry for the mutual benefit and the benefit of society, whilst also prioritising basic research. Slamet (2014:154) states that financial and human resources are an imperative catalyst for engagement activities and requires confinement within the main institutional budgets of HEIs. Moreover, activities that include logistics such as transportation, assessment procedures at placement sites, risk management strategies (Hou and Wilder, 2015:4), planning, evaluation and communication (Holland, 2016:67) can be handled through the provision of a teaching assistant (Darby and Newman, 2014:111). In addition, the establishment of advisory boards that consist of executives from industry sectors (Belfield, 2012:10) creates the provision for a systematic shared evaluation performance system to assess the extent of individual and team performance of the community project (Gahungu and Freeman, 2015:164).

Raina and Khatri (2015:301) state that a well-defined network structure and support from administration personnel outline clear guidelines on which areas are of significant assistance to faculty members for the motivation of their expertise and knowledge to be taken outside of academia. Furthermore, facilitating a Community Score-Card methodology can approach the monitoring and evaluation within the community level, which can assist to establish data on the outcomes of the engagement programme and serve as an intervention to influence those outcomes to enhance transparency and accountability (Glandon, Paina, Alonge, Peters and Bennett, 2017:1463). Moreover, the integration of community engaged activities within the teaching curricula reduces the need of resource costs by the establishment of a separate funding and support structure which is already absorbed into the existing teaching practice, enabling students to assist with associated costs such as travel (Akhurst, Solomon, Mitchell and Riet, 2016:137).

2.17.6 Community Engagement Policy

A community–university engagement policy serves as a catalyst for a formal framework that will guide the implementation for community-university engagement (Slamat, 2014:154) and reduce ambiguous expectations of what academics are expected to perform within the tripartite function of the university (Bender, 2013 :29). The Centre for Applied Legal Studies (2014:13) states that the establishment of community partnerships requires academics to possess courage, determination and patience over a sustained period. Therefore, this “challenging” relationship can be effective, sustainable and mutually rewarding if it is designed, developed and managed systematically in a policy. Furthermore, gaps found in the institutional policy should be compounded with an increased emphasis on the need to demonstrate traditional research in promotion and tenure criteria (Hou and Wilder, 2015:5).

In addition, Welch and Plaxton-Moore (2017:151) state that the assessment of direct practices embedded within institutional policy such as syllabus review and analysis; course development and approval; and scope for the analysis of academics’ personal reflections can create strategic insights on the intended learning outcomes for a sustained development offering in the institution. Ward and Hazelkorn (2012:19-20) recommend that HEIs need to ensure that the alignment of the institutional mission and purpose is articulated extensively across all disciplines, which expands on the institutional definition of research to include community engaged research within the institutional and departmental recruitment and promotion policy. This expansion should also accommodate for community members to be given an equal opportunity to illustrate their own knowledge and practical contributions to establish an awareness-raising intervention at the community level within the institutional culture (Woods and Zuber-Skerrit, 2013:9).

2.17.7 Clear Communication Channels

Rinaldo, Davis and Borunda (2015:7) found that engagement established early within the academic community project results in clear communication on expectations, thus preventing the lack of community partner input or assessment of the engaged teaching and scholarship for faculty development activities (Welch and Plaxton-Moore, 2017:153). A necessity exists to articulate the collaboration that entails the roles and responsibilities for authentic cooperation in the research process (Wood and Zuber-Skerrit, 2013:11). Moreover, it is imperative for department heads to prevent misunderstandings by distinctly articulating the time commitment for the academics, students and community partners to being involved in the project. This facilitation can be achieved through collaborative, multi-disciplinary knowledge-exchange workshops (O'Donovan, Thompson, Stiles, Opintan, Kabali, Willis, Mutimba, Nalweyiso, Mugabi, Kateete, Ameniko, Govina, Weberman, O'Neil, Winters and Mutreja, 2020:3) or joint-steering groups that include senior executives and department executives to illuminate the goals and benefits of community partnerships across the entire faculty (Belfield, 2012:8).

Welch (2017:71) emphasises that CE should make a consistent provision for ongoing conversations in a true form of parity within the planning and implementation of the community-based learning experience, in comparison to making a student placement at the site. In addition, the facilitation of a network map aids to provide for the inclusion of a network-based indicator that can develop a stakeholder management approach to create a shared understanding of the community engagement project (Glandon, Paina, Alonge, Peters and Bennett, 2017:1462). Despite the evidence of having such a strategic approach becoming difficult to achieve, Jiusto and Vaz (2016:136) confidently state that the communication of clear intentions for both the academic and community impacts will increase the likelihood of positive outcomes for all stakeholders involved. Belfield (2012:10) proffers that the development of this two-way benefit exchange should be encouraged by enabling academics to visit industry and inviting industry to the lecture room.

2.17.8 Distinct Empowerment

Empowerment or autonomy is one of the most important variables that affects the engagement of faculty (Raina and Khatri, 2015:299). According to Lu, Laux and Antony (2017:646), the necessity exists to incorporate a sense of process ownership amongst faculty, which aligns responsibilities and objectives to the short and long-term goals of the institution. This can be achieved through autonomy (Ott and Cisneros, 2015:16) by further encouraging academics to ‘self-lead’ in relation to their perceived sense of purpose, goals and objectives that emerge from their academic values, identities, tasks and processes (Bolden, Jones, Davis and Gentle, 2015:7), such as being the manager of the partnerships that have direct relationships with students and community partners (Janke and Colbeck, 2008:38). As a result, faculty are empowered to create their own connections between tools and intended outcomes, leveraging technology in innovative ways to adapt to diverse contexts (Becker *et al.*, 2017:7).

According to Guimon (2013:8), the establishment of a consultative process is important, in which the voices of academics are considered within curriculum development, enabling for the department programmes to respond more efficiently to the needs of the industry. Mahon, Heikkinen and Huttunen (2019:471-472) predict that the designation of autonomy and flexibility for academics to demonstrate their professional judgment is critical for the exploration of creative ideas fuelled by diversity, which is based on the context of the different ways of ‘seeing’ and ‘being’ in the world. Hamilton (2019:9) states that the initiation of monthly staff meetings seeks to promote this autonomy, collaboration and unity by enabling the opportunity for all parties to proffer decisions using collective wisdom. The promotion of such a distinct empowerment on a distributed faculty in their various disciplines includes the respectful entrustment by the Faculty of Management Sciences that distributed academics each have a unique expertise for the implementation of CE initiatives within their setting. This should be constantly elevated against the purpose and mastery for these distributed academics.

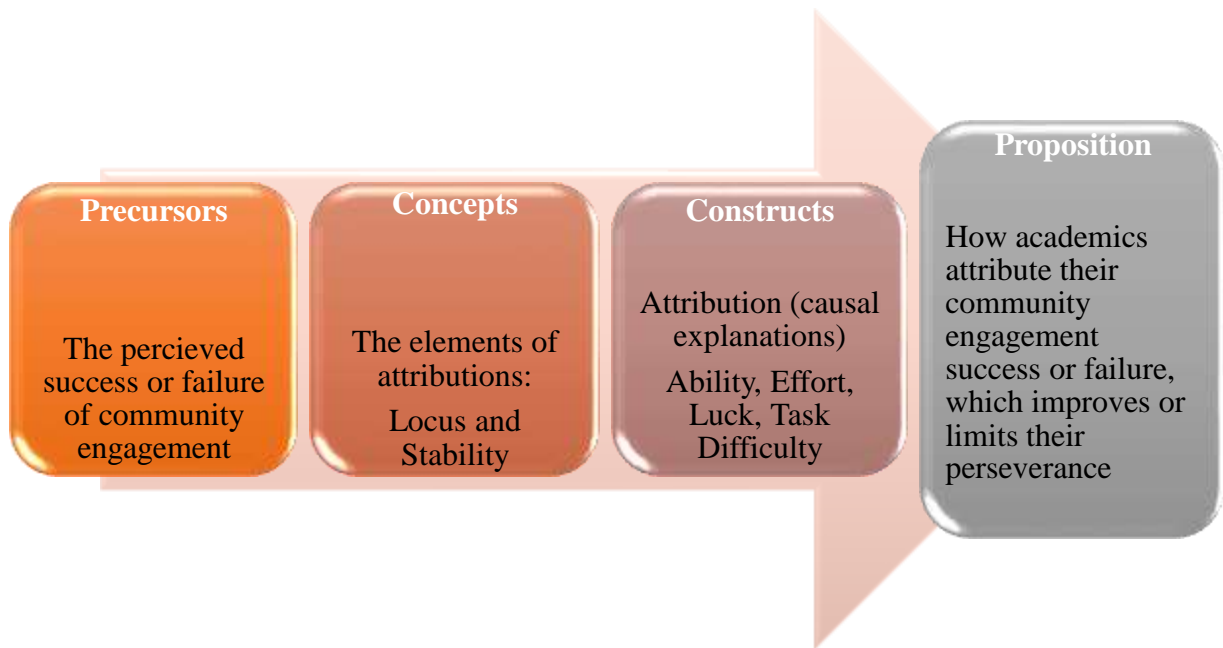
2.18 THEORETICAL ORIENTATION

According to Imenda (2014:189), a theoretical framework refers to the set of concepts drawn from the same theory to offer an explanation on the research problem investigated. The study extends to incorporate the theoretical framework of Weiner's model of Attribution Theory (1986) and Vroom's Expectancy Theory of motivation (1964) to examine academics' perceptions and motivation to participate in community engagement.

2.18.1 Weiner's Attribution Theory

According to Harvey and Martinko (2009:147-148), an attribution provides the causal explanation of an individual's behaviour and its occurrence. Therefore, the formation of attributions are context and individual specific. Moreover, positive outcomes assist the individual to conceptualize the implementation for a recurrence, whereas a negative outcome, enables the identification of attributions to avoid the factors for a recurrence. Within the academic context, the assumption created is that community engagement implementation is significantly individualized on the abilities of academics, which includes both aptitude and acquired skills; a temporary or sustained effort; the challenge of implementation; personal affirmations; and assistance from colleagues or management support within the university. Therefore, the implementation of abilities and efforts creates the significant dimensions of community engagement success or failure (Graham, 1991:6). As illustrated in Figure 2.9 below, there are two elements of attributions, namely locus and stability, which explain the capacity of success or failure.

FIGURE 2.9: WEINER'S THEORETICAL MODEL OF ATTRIBUTION



Source: Mali (2021:1). Adapted.

2.18.1.2 Application of the Attribution Theory

2.18.1.2.1 Concepts

As illustrated in Figure 2.9 above, the dimension of Concepts focuses on the elements of attributions, which consist of locus and stability. The causality of locus can be based on the internal confines of the individual academic or the external confines, which is linked to a particular implementation of a community engagement initiative. Furthermore, internal causality represents the academic's skills and the exertion of efforts that are invested for a successful implementation of community engagement, whereas the external causality represent the challenges for the academic, as well as the luck that may or may not be in favour of the

academic. Therefore, the higher attribution to internal causes is obtained by the value that is experienced by the academic towards the quest of goal achievement of community engagement (Schmitt, 2014:1).

The causality of stability can be based on the sustainability of a community engaged practice at the university, which can be recurrent or isolated. Recurrent causality represents the academic's skills and task difficulty, whereas isolation causality represents the investment of effort and luck that is experienced. In addition, academics create an expectancy in the development of the success or failure of their similar experience of community engagement initiative implementation in the future. Therefore, it is expected in a recurrent causality for a similar outcome of academic expectation, whereas in an isolated causality, increased academic expectations exist on a different outcome (Schmitt, 2014:1). The conceptualization of these elements of attributions leads to the causal attribution that forms the construct for the academic's motivation to perform community engagement.

2.18.1.2.2 Constructs

According to Manusov and Spitzberg (2008:37), mental and communicative processes form causal explanations of the individual's behaviour. In addition, the outcome of an action requires correlation with the attempt to perform the action, namely "trying", and the supporting factors that are embedded within the agent, namely "effort" and "ability", or in the university environment, for example, opportunities, luck and key enablers which create favourable conditions that support academics' community engaged efforts (Malle, 2011:74-75). Moreover, stress and coping incorporates the personal control of causal explanations. Therefore, if academics perceive a significant level of personal control within their faculty, stress levels for the increased academic responsibilities will be reduced and adaptive functioning will be encouraged (Weiner, 2008:155). To ensure an effective academic perception within the causal constructs, the social responsibility mission of the DUT requires rigid manifestation with the academic's personality and psychological processes, which are

significantly attributed to observed behaviours and communication with external stakeholders within the university system (Murray and Thomson, 2009:97).

Through this inductive synergy, the academic perception is created. Therefore, the mindset of the academic combines the central processes within their cognitive interaction and visualized external information, which determines the interpretation and organization of their motivation to undertake community engagement initiatives (Murray and Thomson, 2009:97). To prevent the obscurity of perceptions within the faculty, it is integral that senior management ensures that academics do not infer any de-motivation of knowledge from one another and that distinct communication channels are transparent within the department on a sustained level. Furthermore, the creation of internal attributions for a positive construct provides the development for self-efficacy that institutionalizes positive events of community engagement to re-inforce academic confidence, which fuels community engagement performance (Harvey, Madison, Martinko, Crook and Crook, 2014:133).

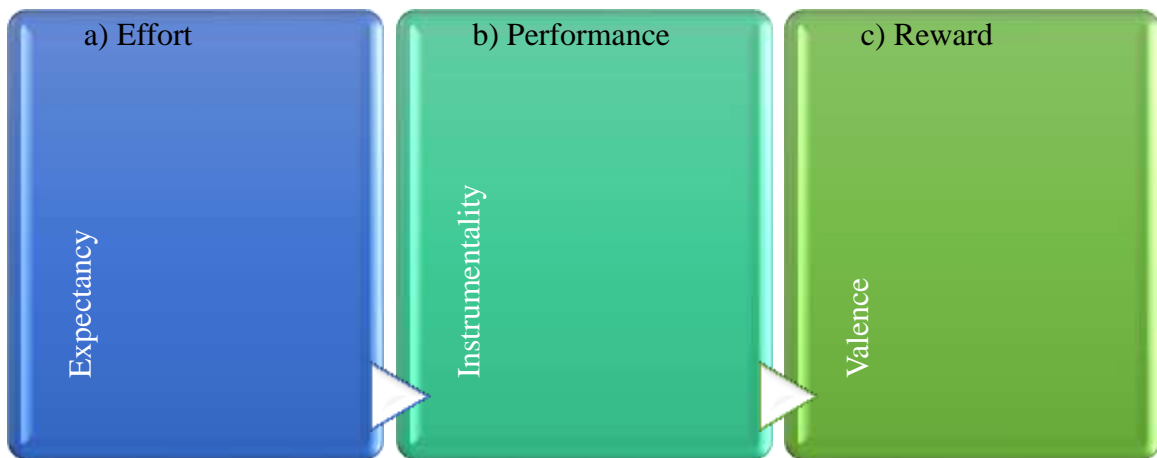
2.18.1.3 Disadvantages of the Attribution Theory

According to Lowery and Burrow (2019:2), research has not effectively analysed the extent to which the community characteristics, such as poverty, enhances the attributions. Therefore, academics internal and external attributions cannot be effectively analysed against the community outcomes. In addition, Maymon, Hall, Goetz, Chiarella and Rahimi (2018:36) observed the negative effects of stable attributions, which provided mixed results for personally controllable attributions, and created emotional challenges for academic's external attributions. Moreover, academics are required to be proficient in the social environment, which is significantly dependant on measures of accuracy and adequacy of hypotheses, evidence and methods of analysis. Therefore, sources of bias and error can enable challenges for both, the academic and the community that is examined (Ross, 1977:174).

2.18.2 Vroom's Expectancy Theory

Propounded by Victor Vroom, the Expectancy Theory argue that employees will act according to the perceptions that their work efforts will lead to certain performances and outcomes, and the value that they articulate on these outcomes (Smit, Cronje, Brevis and Vrba, 2011:395-396). Abadi, Jalilvand, Sharif, Salimi and Khanzadeh (2011:159) state that the force of motivation direct specific behavioural alternatives, which enable individuals to consciously select the options with the greatest motivation force that will lead to the best personal outcome. According to Vroom, the motivational force that drives this behaviour is a product of expectancy, instrumentality and valence (Lloyd and Mertens, 2018:28). For example, the contextualisation of this theory in higher education would make decisions regarding the publication and research efforts based on the degree to which academics value the outcomes of their efforts (valence). This determination of value could assist in the role of predicting effort (instrumentality). As a result, management can be consciously predictable in establishing whether its academics believe that they can achieve success (expectancy) in the implementation of CE initiatives for the department. According to Estes and Polnick (2012:3), these expectancies, instrumentalities and valences interact psychologically within an academic's belief to create a motivational force, which in turn influences their behaviour.

FIGURE 2.10 VROOM'S EXPECTANCY THEORY OF MOTIVATION



- a) Effort – performance relationship
- b) Performance – reward relationship
- c) Reward – personal goals relationship

Source: Smit *et al.*, (2011:396). Adapted.

Figure 2.10 above illustrates the relationship between the factors of the Expectancy Theory. Lazaroiu (2015:67) states that an employee is stimulated to the extent of the perception that (a) their attempt will generate satisfactory performance (expectancy); (b) this performance will be compensated (instrumentality); (c) leading to the significance of the reward as considerably positive (valence).

2.18.2.1 Application of the Expectancy Theory

2.18.2.1.1 Valence

According to Agah, Kaniuka and Chitiga (2020:83), valence refers to the emotional orientation that the employee has regarding the outcome of their effort at work, such as a reward which the employee receives as a result of good performance and therefore is described as the strength of the satisfaction with that reward (De Simone, 2015:20). In addition, valence involves the positive or negative value that employees personally place on outcomes such as bonuses, recognition or promotion. This forms an important component as the integration of engaged scholarship into the academic's performance review and selection criteria is paramount for demonstrating that the institution attaches a value to the explicit connections made by academics amongst their scholarship and its social context, and the production of socially useful outputs (Favish, 2015:3).

Palombi (2017:4) states that despite CE being consistent within institutional mission statements and strategic plans, academics are not consistently rewarded for their community engagement activities. In addition, O'Meara and Jaeger (2016:137) and Palombi (2017:5) add that if reward systems do not support CE work, future faculty will most likely be socialised away from scholarship that seeks a public purpose. In recommendation, getting a pay increase or recognition for CE work will establish a positive valence for academics. As Kuchava and Buchashvilli (2016:99) advise that good remuneration should not be considered solely as a need factor for motivation, as it can also reflect the potential to de-motivate employees. Therefore, it is paramount for the university to incorporate a recognised culture of reward for engaged scholarship in order to ensure the social and political consistency of UCE.

2.18.2.1.2 Instrumentality

Sidik, Hamid, Ibrahim and Ali (2017:10) explain that instrumentality is the estimation of the employee's performance that would be rewarded. The assumption being made is that if academics perceive that their external work is adequately rewarded, they will feel motivated and become more engaged within their respective community tasks. However, a lack of reward and recognition creates a deterrent for the motivation to work further than their normal job scope. Furthermore, it is noted by Badat (2010:29) that academics in South African HEIs are not adequately remunerated in comparison to occupations in the public and science councils' sector that demand similar levels of qualifications and expertise. Robyn and Du Preez (2013:3) support the notion that is influenced by Badat (2010:29). Moreover, Checkoway (2013:13) states that the current rewards structure of HEIs do not emphasis research and publication for civic outcomes. Therefore, the lack of an appropriate reward and promotion priority creates a dysfunctional individual for the implementation of CE.

2.18.2.1.3 Expectancy

Expectancy lies in the employee's perception of their effort's role in improving performance, which is determined by self-efficacy, goal difficulty and perceived control (Nimri, Bdair and Al Bitar, 2015:71). For example, academics who have a positive self-assessment about their skills and capabilities are likely to expect that their CE endeavour will lead to their performance. Moreover, Kuchava and Buchashvilli (2016:98) discovered that if an employee lacks the skills, such as capacity and education, their performance will be less optimal. Furthermore, if the academic has the necessary skills and is backed by adequate motivation, their performance to undertake engagement initiatives will be at the optimal level.

Kovach (2018:40) states that expectancy creates anticipation within the employee that they must achieve a goal. Devonshire and Hathway (2014:3) reveal that this is significantly dependent on a change in academic structures, such as the top-down initiatives from HEIs that offer practical guidance and management support. The change structure for a successful reward and recognition policy by management is paramount to establish what academic values are, and to ensure that the policy alignment is sound, fair and increasingly competitive (Robyn and Du Preez, 2013:5).

In congruence, Zlate and Cucui (2015:473) state that the effects of non-financial tools are equivalent as financial tools in the motivation of academics in HEIs. For example, academics will be more motivated if they share an interest in their respective work, if they feel respected and see the possibility of personal development through coaching and professional training programmes. Training and development programmes are considered an important motivation strategy by Bawa (2017:670), who asserts that the participation in conferences and other developmental activities will enhance the ability of the academic to handle challenges and feel less intimidated by their workloads for industry attachment and collaboration. Turabik and Baskan (2015: 1060) proclaim that according to the Expectancy Theory, motivation is calculated by multiplying expectancy (E), instrumentality (I) and valence (V), thus $M = E \times I \times V$. It is imperative to ensure that expectancy, instrumentality and valence are functioning at an optimum level to maximise the level of academic motivation towards undertaking CE initiatives within the faculty.

2.18.2.2 Disadvantages of the Expectancy Theory

According to Parijat and Bagga (2014:5), quantitative measures of expectancy, instrumentality and valence are difficult to be effectively measured upon. As a result, management may lack the time, willingness, resources and adequate ability to determine the level of academic motivation in their department. Therefore, this restricts the ability of management to reach a uniformed decision on the individual parameters of motivation, which impedes the significant construct of self-efficacy (Hsu, Shinnar and Powell, 2014:125).

This chapter provided an overview of the literature review relating to the problem statement identified by the researcher in Chapter One. An overview of community engagement was provided in this chapter, which analysed the conceptualisation and integration of community engagement within the higher education sector. The perception of community engagement is explored briefly at both global and local levels. The various forms of community engagement were discussed, with a focus on the key enablers and barriers to community engagement. Furthermore, three different conceptual models of community engagement were illustrated, which distinguishes the roles between academics, community members and students. In addition, the challenges of community engagement are explored at both an institutional and community perspective. From the theoretical exposition depicted in this chapter, it is necessary for academics to adapt to the challenges of the South African economy and the dynamic nature of higher education institutionalisation. Therefore, academic departments at the DUT require an integrated approach that incorporates engagement within the current job scope of academics, which will ensure that motivation and performance outputs are on equilibrium across all disciplines. The subsequent Chapter (Three) relates to the research methodology and design of the study.

CHAPTER THREE

RESEARCH METHODOLOGY AND DESIGN

3.1 INTRODUCTION

Research is a systematic, purposeful and disciplined process of discovering reality structured from human experience (Reid, Greaves and Kirby, 2017:7). According to Sekaran and Bougie (2016:7), basic or fundamental research entails the generation of more knowledge and an understanding of the phenomena of interest, and building theories based on the results derived from the research. Leavy (2017:4) states that research is required to challenge and overcome the biases and limitations that are immanent in learning from experts, culture and personal experiences. Furthermore, Lederman and Abell (2014:12) state that research seeks to expand the body of knowledge, which will challenge and transform society and institutions for the betterment of the people involved. The purpose of this chapter is to provide an overview of the relevant methodology for the study.

3.1.1 Types of Research Design

A research design is the guideline that specifies the collection and analysis of information that is pertinent to the research question. According to Carter and Lubinsky (2016:55), the fundamental basis of knowledge is in constant evolution, hence the beliefs based on the methods of obtaining this knowledge constitute different research paradigms. The Positivism paradigm relies on deductive logic that proffers mathematical equations and expressions to derive quantitative conclusions (Kivunja and Kuyini, 2017:30). Adom, Yeboah and Ankrah (2016:5) predict that the Constructivism paradigm involve a qualitative approach to construct meanings from the phenomena under study through the personal experiences of the participants. Rahi (2017:1) states that the Pragmatist paradigm adopts both a quantitative and

qualitative approach to solve the research problem statement. In order to contextualise the research paradigm followed in this study, the different types of research designs are initially discussed briefly.

3.1.1.1 Quantitative Research contrasted with Qualitative Research

Taylor, Bogdan and DeVault (2015:8) define qualitative research as an inductive focus on the competence of the researcher to develop concepts, insights and understandings from patterns of data (e.g., interviews), whereas quantitative research enables the researcher to use instruments (e.g., questionnaires) for the collection of numeric data (Rutberg and Bouikidis, 2018:211). Webley (2010:2) states that qualitative research is not dependent on statistical quantification but attempts to capture and categorize the social phenomena meanings that cannot be measured effectively. According to Walia (2015:3), qualitative research is a naturalistic approach which constantly transforms the interpretation of its phenomena.

In contrast, Smith (2015:2) asserts that quantitative research is significantly dependant on the reduction of phenomena to numerical values for the implementation of statistical analyses. Leavy (2017:9) explains that the quantitative methodology tries to establish deductive approaches that prove, disprove or lend credence to existing theories of the research process and ultimately involves the measurement and testing of relationships between variables to reveal patterns, correlations or casual relationships. In the quantitative paradigm, the researcher needs to ensure the conceptualization of the variable that requires investigation for the completion of the research (Onen, 2016:30) and occupies an integral position in the collection of the data (Lowhorn, 2007:4).

For the purpose of the study, a quantitative descriptive approach was adopted to enable the large dataset to be easily observed, identified and analysed (Loeb, Dynarski, McFarland, Morris, Reardon and Reber, 2017:2). Moreover, the quantitative approach also allows for the results of the analysed questionnaires to be representative of the broader target population (Hammarberg, Kirkman and De Lacey, 498:2016).

3.1.1.2 Experimental Research contrasted with Non-Experimental Research

There are three significant types of research designs, namely experimental research, non-experimental research (Davis, 2003:65) and qualitative research designs (Flannelly and Jankowski, 2014:26). Khaldi (2017:19) predicts that from the three research designs mentioned above, quantitative research is relevant in experimental research and non-experimental research design. Adekeye (2016:17) states that in experimental research, there is a planned intervention in which the researcher has no control of the variable relationship. According to Hanifah and Darno (2020:94), in the non-experimental research design, the researcher can observe the variable relationships contained in the research subject in accordance with the actual conditions, without the manipulation of the processed data. Edmonds and Kennedy (2017:19) state that non-experimental research is often conducted by using surveys to observe the attitudes or opinions in a real sociological context. In this study, a non-experimental research design is selected to re-inforce the quantitative research paradigm.

3.1.1.3 Exploratory Research, Descriptive Research and Explanatory Research

The conduct of research has three significant processes, namely exploratory research, descriptive research and explanatory research (Kante, Chepken and Oboko, 2018:50). Exploratory research is conducted in the initial stage of the research process, in which concepts lack a distinct and focused operational definition (Rahi, 2017:2). Gratton and Jones (2010:6) affirm that exploratory research is utilized when problems are in a preliminary stage, with an inadequate knowledge of the research phenomenon for an initial exploration. Moreover,

exploratory research can lead to the creation of hypotheses and the methods for subsequent research (Jo and Nabatchi, 2016:1106). Cox and Battey (2017:8594) conclude that exploratory research provides a more comprehensive interpretation on the research problem.

According to Teddlie and Tashakkori (2008:23), descriptive research is specifically directed at the exploration of attributes from the research phenomenon and the possible relationships between the variables. In addition, Taguchi (2018:25-26) states that descriptive research can be both quantitative and qualitative. However, the presentation of quantitative information is restricted to inferential statistics and frequency (Mishra, Pandey, Singh, Gupta, Sahu and Keshri, 2019:67-68). The purpose of explanatory research is to provide an explanation on the occurrence of social phenomena, and an advance of knowledge on the recurrence of the process (Ahlawat, 2020:5). During explanatory research, the researcher seeks to identify the relationship between the independent and dependant variables through a confident expectation (Check and Schutt, 2012:36). For the purpose of this study, the exploratory research process was used to gain the perceptions of an existing academic community engagement phenomenon in order to establish a new insights that underpin the challenges within the Faculty of Management Sciences at the DUT.

3.2 PRIMARY DATA

Obtaining primary data stems from the direct objective exposure of the researcher within the investigation of the phenomenon (Prada-Ramallal, Roque, Herdeiro, Takkouche and Figueiras, 2018:2). Moreover, the collection of primary data is utilized for the specific purpose of the study (Jameel and Majid, 2018:1). Through the analysis of previously collected data, the researcher can establish some inferences that are representative of the population (Voleti, 2019:23). However, Ghauri, Gronhaug and Strange (2020:160) state that primary data collection tends to be slow and expensive to conduct, which inhibits timely analysis to obtain a data set that is of a suitable size. Methods of collecting primary data are through observation, personal or telephone calls, interviews and self-administered questionnaires (Kumar,

2019:216-221). For this study, an open and closed-ended structured quantitative questionnaire (Annexure E) as a data-gathering instrument was utilised to gather the data.

3.3 SECONDARY DATA

Secondary data are sources of information that have already been subject to interpretation by others (Walliman, 2011:177) and have been collected for another purpose than that of the current study (Sekaran and Bougie, 2016:37). Dunn *et al.* (2015:1297) postulate that the value of secondary data is that the researcher can utilize this existing data to conduct an analysis that answers the research questions. However, Tripathy (2013:1479) advises that although secondary data saves time and money, it requires the researcher to obtain data that is relevant, adequate and not excessive. Secondary data for this study was sourced from a comprehensive review of journal articles, related textbooks, the internet, media articles, government publications, periodicals and relevant dissertations and theses.

3.4 TARGET POPULATION

According to Taherdoost (2016:19), the initial identification of the sample must begin with a distinct definition of the target population to be surveyed. Ary, Jacobs, Irvine and Walker (2018:172) clarify that the target population refers to the total group of people to which the researcher would like to generalize the results of the study. The population can be finite or infinite (Kozak, 2008:59). A finite population is limited, and the individuals can be accurately counted and measured, whereas an infinite population is uncountable and unlimited (George, 2021:1811-1812). Etikan and Bala (2017:1-3) state that the researcher must obtain confident co-operation from the respondents to ensure the generation of data through a controlled biased probabilistic method of sampling. Furthermore, the whole population consists of a divided homogeneous strata or sub-groups (Elfil and Negida, 2017:1). However, the strata within the population should be homogeneous to ensure effective representativeness (Sarstedt, Bengart, Monim Shaltoni and Lehmann, 2017:2). Rahi (2017:3) states that it is not feasible to study

the whole target population because of the workload and costs. Therefore, the target population for the study comprised all academic staff members in the Faculty of Management Sciences at the DUT based in KwaZulu-Natal. From the population, 80 respondents were randomly selected to represent the population in order to draw conclusions that could be generalized to the population of interest.

3.5 SAMPLING PROCEDURE

A sample is a sub-set of the larger population that the researcher observes or measures to approximate the entire population (Babin and Zikmund, 2015:337). According to Sharma (2017:749), sampling is a systematic technique adopted by the researcher through the selection of a small number of representative items or individuals from a pre-defined population that are observed as subjects for the accomplishment of the research objectives. Moreover, Patten and Newhart (2018:89) note that sampling involves the provision of statistical methods, through data outputs (Edmonds and Kennedy, 2017:19), which enables inferences on the population to be made. Furthermore, the data obtained from a smaller group enables an effective generalization. Therefore, a sampling design creates a time and cost efficiency for the population examination and ensures accurate data collection, which is adaptable and feasible for the census of the total population (Jawale, 2012:185). In addition, Jawale (2012:183) states that there are two main types of sampling techniques, namely non-probability sampling and probability sampling.

3.5.1 Non-Probability Sampling

The non-probability sampling technique is significantly characterised by the subjective judgement of the researcher in the selection of a unit that represents an accessible study population (Etikan, Alkassim and Abubakar, 2015:1). This sample approach is implemented when the target population is rare. Therefore, an equal chance of research participation is not

provided (Etikan, Musa and Alkassim, 2016:1). Williamson and Johanson (2017:374) state that there are differing types of non-probability sampling techniques, namely:

- Accidental/Convenience sampling;
- Snowball sampling;
- Purposeful or Purposive sampling; and
- Quota sampling.

3.5.2 Probability Sampling

In probability sampling, every case in the population has a known chance of being included in the sample, which therefore intensifies the researcher's ability in the selection of cases that constitute the total population and ensures the formulation of statistical conceptions (Rowley, 2014:17). The implementation of this sampling method is utilized when the population's subjects are accessible to the researcher through a sampling frame (Elfil and Negida, 2017:1). However, a critical assumption is based on the correlation between the sample and the characteristics of the target population to ensure representativeness (Sarstedt, *et al.* 2017:2). Edmonds and Kennedy (2017:20) affirm that there are five differing types of probability sampling methods, namely:

- Simple random sampling;
- Cluster sampling;

- Stratified sampling;
- Systematic sampling; and
- Multi-stage sampling.

3.6 SELECTION OF THE SAMPLE

The acknowledgment of the above options prompted the researcher to select the simple random sampling technique for the purpose of this study. Moreover, Polit and Beck (2010:1452) recommend that the simple random probability method of sampling is the best strategy to utilise in order to achieve a sample that is representative of the target population as it renders each member of the population an equal latitude and a determinable probability of incorporation within the study. Furthermore, Bryman (2016:176) highlights that the simple random sampling technique is characterised by the following steps:

- The specification of the target population (N) by the researcher. For instance, for this study, N = 102, which represents the total number of permanent academic employees from the Faculty of Management Sciences at DUT;
- The researcher determining the desired optimum sample size. For instance, according to Sekaran's (1992:253) computed table, a sample size of 80 respondents was selected for this study;
- The researcher listing the population, which was obtained from a staff list of all academics from the Faculty of Management Sciences;

- The researcher assigning a consecutive number from 1 to N next to each academic staff member. For instance, for this study, the assigning of a consecutive number from 1 to 102; and
- The last step involves selecting random numbers from a random number table generated from Excel (Annexure G) until the required sample size of 80 is reached.

3.7 ADVANTAGES OF SIMPLE RANDOM SAMPLING

Simple random sampling allows for an unbiased estimate of the population mean and variance estimates (Tillé, 1998:304; Elsayir, 2014:115), which can be utilized in conjunction with the other types of probability sampling (Jawal, 2012:186), or serve as a building block for more complex sampling methods (Meng, 2013:531). In addition, the sample representativeness creates a reasonable generalization to be formulated from the results of the sample back to the population, which effectively achieves the goal of research (Sharma, 2017:750). Moreover, as the study population consists of homogenous individuals, an effective estimate of the parameters is created (Singh and Masuku, 2014:4). Therefore, a simple random sample can be obtained from the academic population, which consists only of an area sampling frame, namely the Faculty of Management Sciences (West, 2016:7).

3.8 DISADVANTAGES OF SIMPLE RANDOM SAMPLING

According to Jawale (2012:186), a complete accounting population is needed for the sampling to be implemented, which can be challenging to allocate a unique designation to every member within the population. Moreover, it is required that the accounting population list is complete and highly relevant. However, this is significantly difficult to achieve within a large population (Sharma, 2017:750). Therefore, it is a challenge to benchmark the calculation of effects to assist in the interpretation of findings (Lynn, 2019:260).

3.9 MEASURING INSTRUMENT

Measurement tools are instruments used by the researcher to establish how the appropriate variables of the study would be evaluated, which is significantly dependant on the implementation of the analysis (Awang, 2012:21). According to Murgan (2015:268), a questionnaire is defined as a set of prepared, organized and designed questions, which is completed by the respondents of the research study to enable the researcher in the formulation of a general opinion on the phenomenon of interest. For this study, an open and closed-ended structured quantitative questionnaire (Annexure E) was developed by the researcher as the measuring instrument for the collection of primary data from respondents.

3.9.1 Brief Prospects on the use of Questionnaires

According to Neelankavil (2015:160), a questionnaire assists in the translation of the research objectives into specific questions which guide the purpose of the study. Babbie (2014:268) defines a questionnaire as a data collection strategy, which is the most widely used instrument. In conjunction, Kabir (2016:204) affirms that a questionnaire is the commonest method of data obtainment. Chambliss and Schutt (2019:151) state that a questionnaire collects information from the sample of respondents through standardized questions and is regarded as a significant mode for the collection of quantitative primary data. Collins (2003:229) states that the questionnaire should standardize the assumptions by which the respondents are able to understand the questions; the questions are understood in a similar way by all respondents; and creates a willingness for the respondents to be able to answer the questions for an honest and correct response (Verma and Abdel-Salam, 2019:45).

3.9.2 Specifications Deployed in the Development of the Questionnaire

The design of the questionnaire requires considerate acknowledgement to ensure an enhanced response rate from the data collection, which eradicates a repeat of the questionnaire administration process (Mutepfa and Tapera, 2018:3-4). According to Tran, Pham and Khuc (2021:2), a characteristic of a good questionnaire is being complete, which covers the information required by the researcher from transparency to retrieving scientific information for an in-depth analysis. Kılınç and Fırat (2017:1461-1462) state that the response to a questionnaire should be voluntary. Moreover, Verma and Abdel-Salam (2019:46-47) contend that a good questionnaire should be professionally concise and have a proper usage of wordings, which will ensure the effective communication of instructions on how to answer the questions. Sekaran and Bougie (2016:146) suggest that the language of the words utilized should have a significant correlation with the respondents' educational levels and frames of reference. Chambliss and Schutt (2019:153) assert that when developing a questionnaire, questions that are negative, double-barrelled and sensitive and leading (Kumar, 2019:235) in nature should be avoided. Dalati and Gómez (2018:181-182) recommend that a questionnaire should be structured into sections in order to ensure an effective structural categorization that facilitates understanding.

3.9.3 Advantages of Questionnaires

According to McGuirk and O'Neill (2016:10), a structured questionnaire enables the researcher to gain a perception of the attitudes, values and expositions that permit expansive research for a substantially disseminated population. Moreover, Ekinçi (2015:9) states that the utilization of closed-ended questions creates an easy transition for the behaviour investigation of quantitative data, as the utilization of standardized questions produces results that are easy to compare and generalize (Kabir, 2016:203). Therefore, the assurance created is the reduction of bias error of a variability in skills, which underpin a reliable mode of data collection (Dalati and Gómez, 2018:178). Musa, Haris, Khalid, Jabar and Yunus (2015:14) add that questionnaires are relatively easy to create from a potentially large number of respondents, and

therefore facilitates robust statistical analysis (Jones, Baxter and Khanduja, 2013:7). In addition, Murgan (2015:269) states that the independence and equality of opinion for each respondent is created, which therefore enhances the significant competence and reliability of the data obtained. Nardi (2018:16) contends that a questionnaire has more accurate generalizability for a study that adopts the probability sampling technique. For this study, an open and closed-ended quantitative questionnaire (Annexure E) was developed.

3.9.4 Disadvantages of Questionnaires

According to Williams (2003:249), it is difficult to ensure that the respondent completes all the questions before returning the questionnaire. In addition, there can be problems with literacy or language that are difficult to interpret. Therefore, good response rates are difficult to achieve and tend to be biased towards the more educated population on the subject content. Furthermore, the researcher does not have control in which the questions are answered and have to be re-keyed into the statistical analysis software. This time-consuming process can be prone to errors, as it demands a prolonged concentration to ensure that the validity of the returned questionnaire is achieved (Jones, Murphy, Edwards and James, 2008:17).

3.9.5 Questionnaire Construction and Administration

The pre-coded structured questionnaire underwent considerable refinement for an effective facilitation of the divergent interpretations of community engagement. A covering letter (Annexure D) inscribed to the respondents highlighted the significance of participation in the questionnaire. To facilitate the liaison from respondents, the option of having the main summary of the study findings mailed was comprehended. The design of the questionnaire consisted of a combined, open and closed-ended questions. The allocation of the statements were significantly based on the research objectives of the study, which would facilitate an effective statistical analysis. A combined implementation of single response statements were infused with nominal and ordinal categories and scaled questions. The single response

questions created a multitude of options for respondents to choose from. In addition, the five-point Likert scale was used to obtain the relevant responses from the scaled questions, which consist of the varying elements of agreement and disagreement and neutrality for the series of statements. The five-point Likert scale was systematically aligned to the objectives of the study and is regarded as an optimum method for data quality, internal consistency and discriminative validity (Østerås, Gulbrandsen, Garratt, Benth, Dahl, Natvig and Brage, 2008:8).

3.9.6 Overview of the Final Questionnaire

The questionnaire (Annexure E) was divided into six sections. Section A consisted of five biographical statements for the respondents. Section B contained twelve statements that were based on academics' understanding of community engagement at the DUT. Section C focused on eight statements that attempted to understand the extent of community engagement undertaken by academics at the DUT. Section D specified the enablers in eight statements, whereas Section E specified the barriers through 12 statements towards academics' undertaking of community engagement initiatives at the DUT. Moreover, Section F consisted of three open-ended questions to ascertain an additional understanding of the reinforcement of academic community engagement at the DUT. Therefore, the questionnaire comprises 45 statements and three questions that highlight the following sections:

- Section A: Biographical Information

- Section B: Understanding of Community Engagement at DUT

- Section C: Extent of Community Engagement at DUT

- Section D: Enablers towards undertaking Community Engagement at DUT

- Section E: Barriers towards undertaking Community Engagement at DUT
- Section F: Open-ended questions

3.10 ETHICAL CONSIDERATIONS

Adherence to ethical norms form an integral component of any research study. The researcher is faced with the necessity to protect the respondents and proclaim the findings of the research in an honest manner. Ethical conduct governs the management of research, enabling the researcher to explicitly understand one's own values, as well as examine and clarify perspectives, social processes and the attitude of self and others (Kakabadse, Kakabadse and Kouzmin, 2002:106). To maintain the integrity of research, Resnik (2015:1) asserts several key reasons why it is important to adhere to ethical norms in research. Firstly, ethical norms promote the aims of research, such as knowledge, truth and avoidance of error. Secondly, since research often involves a great deal of co-operation and co-ordination amongst many different people in different situations, ethical standards promote the values that are essential to collaborative work, such as trust, accountability, mutual respect and fairness. Thirdly, many of the ethical norms help to ensure that the researcher can be held accountable to the public. The assertion of Resnik (2015:1) is also supported by Ronaghi, Feizi and SooriLaki (2016:7-8) and Friis (2017:182).

This study was approved by the Durban University of Technology's IREC Committee with reference number IREC 107/19, after an application for ethical clearance was submitted. The permission granted to conduct the study and institutional clearance to use the academic staff members of the Faculty of Management Sciences at DUT was obtained via a Gatekeeper's letter. Finally, the ethical enactment that governed the framework in which the study was conducted, embraced the following abiding principles:

3.10.1 Avoidance of Harm

The prime principle of ethical research outlines that no harm should be inflicted towards participants (Walliman, 2011:48; Ketefian, 2015:166). An ethical obligation for the researcher is to protect the participants against any physical and/or emotional harm (Bryman, 2012:135; Dixon, Singleton and Straits, 2016:41). This includes informing the participants beforehand of the possible impact of the study, which will offer the respondents the opportunity to withdraw from the study if they so wish (Engel and Schutt, 2017:55). Before the study commenced, the researcher informed all the participants of their rights. This included their right to withdraw at any time during the study. The questionnaire included a cover letter, informing the participants that they are not coerced to participate in the study should they wish not to do so.

3.10.2 Voluntary Participation

According to Connelly (2014:54), potential participants should have all the information they require to make an informed decision regarding study participation, which should be voluntary at all times and no respondent should be forced to participate, and they should be allowed to withdraw at any time of the project (Joe, Rabin and Phillips, 2016:80). Using the personal hand-delivery method, participants were given letters requesting their participation and only those who agreed to participate were utilised in the study.

3.10.3 Informed Consent

Avoidance of harm and voluntary participation are interconnected to the formalisation of informed consent (De Vaus, 2014:57). Written informed consent is essential (Lune and Berg, 2017:46) and this was obtained from all the participants. In this study, the participants were provided with information in the form of a cover letter, which communicated the identity of the researcher; what the purpose of the study is about; the basis on which participants have

been selected for the study; what the outline of the participation procedure entails; the time and effort required by respondents whose participation was being sought; the voluntary nature of participation and the right to withdraw at any time; the extent of anonymity and confidentiality that was assured; and a signature and date to provide written consent. Furthermore, the participants had to agree to voluntarily participate in the study and this agreement was based on sufficient information and an adequate understanding of the research and the consequences of their participation (Vanclay, Baines and Taylor, 2013:246). In addition, the information that was disclosed did not permit the ability to be traced back to the individual that has provided it (Vanclay, Baines and Taylor, 2013:247).

3.10.4 Deception

Deception includes the misleading of participants (Chambliss and Schutt, 2019:57); deliberately representing research facts as something other than what it is (Bryman and Bell, 2015:144); concealing essential information through omission or partial disclosure (Barrera, 2018:1); or the offering of incorrect information in an attempt to ensure the participation of subjects when they would have otherwise declined participation (Desposato, 2018:740). According to Samoilenko (2017:3), deception can be deliberate or non-intentional on the part of the awareness of the researcher. Erford (2015:19) states that deception is justified when the potential benefits outweigh the risks and there is no alternative way to achieve the desired results. However, Rousu *et al.* (2015:5) assert that deliberate misrepresentation is prohibited. The deception of participants was reduced by all possible measures.

3.10.5 Privacy and Confidentiality

Bryman and Bell (2015:143) state that the objective of research restricts intrusion on the respondent's privacy and respects an individual's values to ensure that confidentiality is assured as the primary safeguard of the information provided by the respondents, and is not made available to anyone (Sekaran, 2003:18). An invasion of privacy occurs when information is

shared without the acknowledgment of the respondent, or against his or her will (Gray, Grove and Sutherland, 2016:168-169). Therefore, the principle of respecting personal autonomy enables the participant to have a reasonable expectation on the basis that the information that is provided will be treated in a confidential manner (Petrovic, 2017:102). Confidentiality signifies the non-disclosure of information in a deliberate or accidental manner that might identify an individual (Wiles, Crow, Heath and Charles, 2008:417-418). Anonymity signifies the inability of the researcher to identify a given response with a specific respondent (Bhattacharjee, 2012:138). The privacy of the participants were ensured by the non-requirement of participants to include their name in the consent form to participate in the study. Moreover, the identification of participants will not be displayed on their responses. Therefore, they remain anonymous.

3.11 CONCLUSION

This chapter described the research design, the description of the target population and how the sample was drawn. In addition, this chapter highlighted the sampling technique utilized; provided an overview of the questionnaire and how it would be administered; and the method of data collection. Lastly, the ethical principles that governed this study were also highlighted. The next chapter presents an overview of the analyses of the results and the discussion of the findings.

CHAPTER FOUR

ANALYSIS OF DATA AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

Mehmetoglu and Jakobsen (2016:3) highlight that in the social sciences, statistics involves the systematic collection of data with the intent of achieving knowledge by induction, by making inferences from observed regularities to general theories. For university-community engagement to work, it is paramount to recognise the different perceptions and culture that academics attach towards it. This chapter systematically outlines these perceptions and discussions of the findings of the study. A structured open and closed-ended quantitative questionnaire was utilised as the primary data collection tool. The researcher utilised the random probability sampling technique in selecting the sample respondents. A total of 74 questionnaires were collected. The personal method of delivering and collecting questionnaires was successful in ensuring a 93% response rate. After collecting the data, the researcher captured the responses on an Excel spreadsheet, which were analysed with the Statistical Package for the Social Sciences (SPSS) Version 24.0 for Windows.

4.2 ANALYSIS OF THE BIOGRAPHICAL DATA – SECTION A

4.2.1 Gender Breakdown for Sample Respondents

FIGURE 4.1 ANALYSIS OF GENDER BREAKDOWN (n=74)

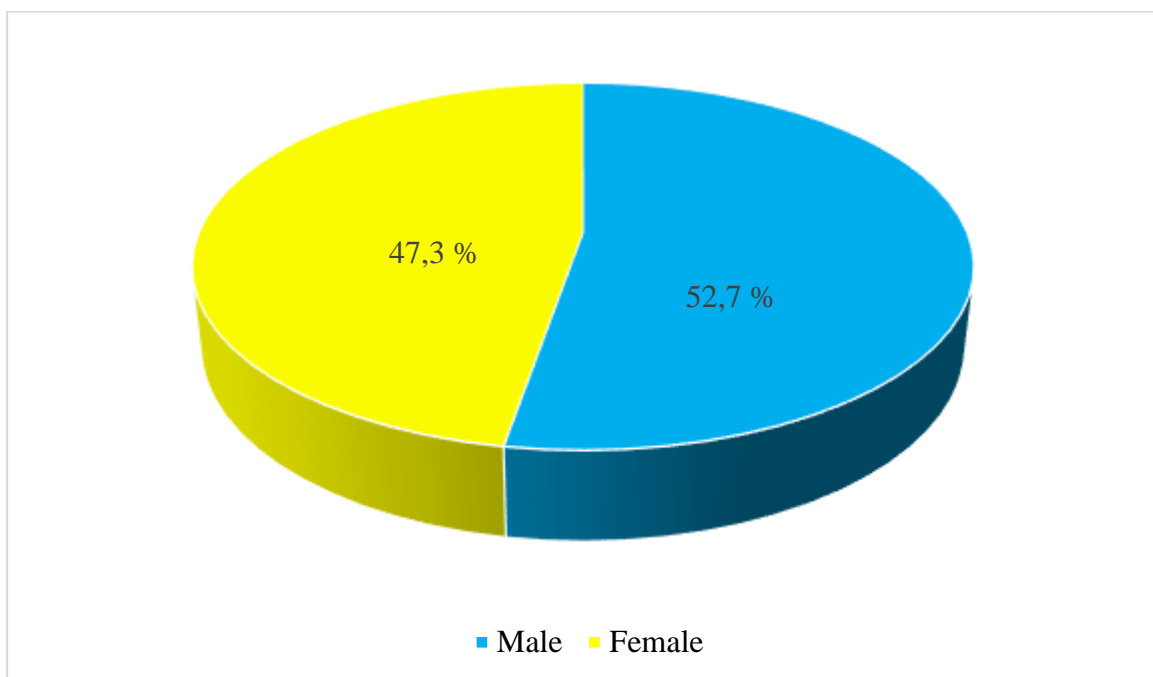


Figure 4.1 above illustrates the gender breakdown for the overall sample of the respondents in the study. Males were slightly in dominance by 5.4% against females in the study, as they constituted 52.7% of the respondents; whilst females constituted 47.3% of the respondents. This implies that the ratio of males to females is 1:1 respectively. The implication of this ratio is that both, male and female academic staff are likely to be involved in CE, equally. However, despite the gender comparison being equal in quantity to each other, the percentages of the gender breakdown aligns roughly with the situation at a national level. According to the Department of Higher Education and Training (DHET, 2016:26), male academics are a greater

number than female academics in South African HEIs. Furthermore, the labour force population indicates a total of 10 203 for males and a total of 9 011 for females. This is a profound finding in the understanding of Badat (2010:4), that social inequalities reflective within the constructs of HE have emerged systematically from the exclusion of woman under apartheid. This introduces a possible conundrum in the study of Maphalala and Mpofo (2017:36-38), that woman in HE academia encounter challenges from the dimensions of leadership, delayed attainment of post-graduate qualifications and low research publication output.

However, the findings of Cole, Howe and Nelson Laird (2016:15) have shown that female faculty members are more likely to encourage student participation in engagement programmes, than their male colleagues, whereas Demb and Wade (2012:357) found that male faculty members are more exceedingly involved in CBR and SL than their female counterparts. The findings of Cole, Howe and Nelson Laird (2016:15) have a potentially significant correlation that is compatible with the gender findings of Vuong, Rowe, Hoyt and Carrier (2017:257).

4.2.2 Age Breakdown for Sample Respondents

TABLE 4.1 AGE OF RESPONDENTS (n=74)

AGE	RESPONDENTS	PERCENTAGE
20-25	9	12.2%
26-30	15	20.3%
31-35	7	9.5%
36-40	10	13.5%
41-50	15	20.3%
>50	18	24.3%
TOTAL	74	100%

Table 4.1 above depicts the overall response rate according to the age groups of the sample respondents. The data in Table 4.1 above is also illustrated graphically in Figure 4.2 below:

FIGURE 4.2 ANALYSIS PER AGE GROUP (n=74)

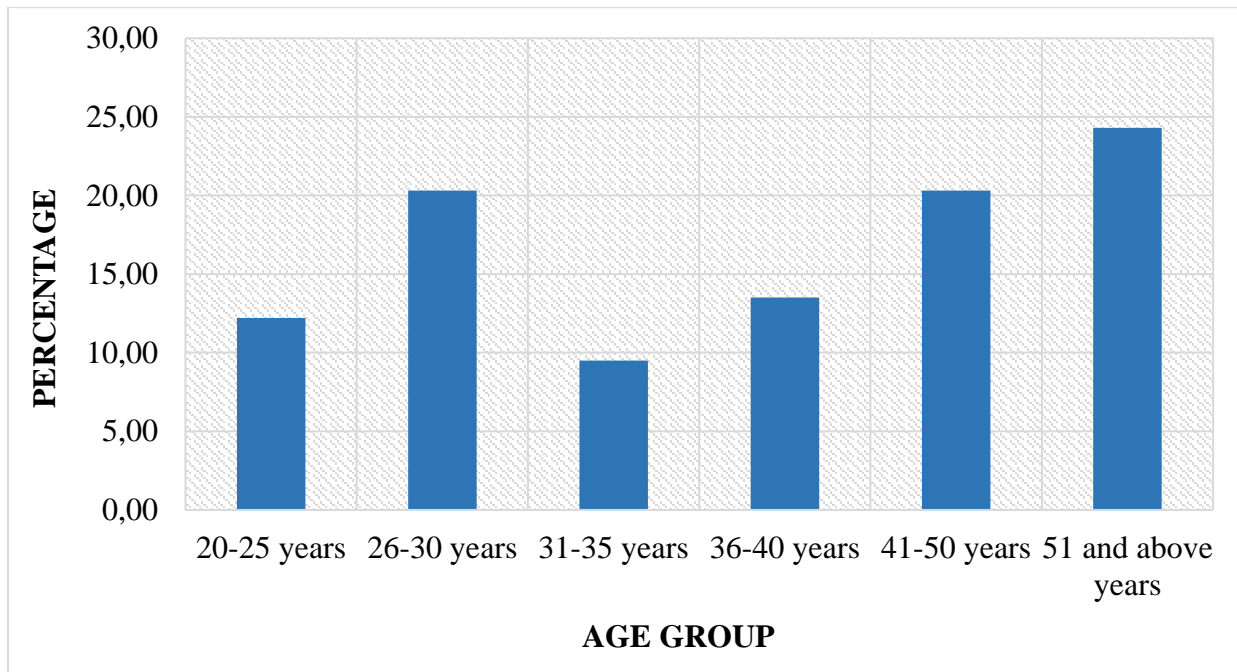


Table 4.1 and Figure 4.2 above, depict and illustrates, the percentage response rate by the sample respondents per age category respectively. High responses of 24.3% were received from respondents aged 51 years and above, whilst those aged between 31 and 35, merely constituted 9.5% of the responses. This indicates that a majority of the respondents are established within a significantly higher structure of the institution. A study conducted by Hertzberg (2013:103) on age differences and motivation in CE revealed that younger academic staff possess a stronger desire to make their engagement work more meaningful, with an increased value to society. In addition, it is significant to highlight the fact that the 13.5% of Generation Y employees aged 36 to 40 years old require opportunities for growth that will instil motivation to perform beyond their job confines within the community. However, high expectations for this effort are placed on benefits, flexibility and compensation (Robyn and Du Preez, 2013:2).

In contrast, Blanco-Portela, Pertierra, Benayas and Lozano (2018:9) found that older academics are commonly reluctant to participate in any activity that they were not employed for. In contrast, the findings of Nnadozie (2015:463) reveal that community engagement was found to be significantly pursued as the employment rank of the academic increases. Kruss, Haupt and Visser (2016:14) found that established academics at senior ranks are primarily motivated towards engagement by reputational concerns due to the increased pressure they face to publish. A similar conclusion was reached by Robyn and Du Preez (2013:14). Furthermore, a study on research productivity for tenure and promotion by Kuzhabekova and Ruby (2014:9), concluded that there was a shift in motivation when conducting relevant research as an employee gets older.

Wiltz, Veloria, Harkins and Bernasconi (2016:15-16) found that younger academics from the United States of America were motivated by the support of an immediate department supervisor to balance the tripartite function of teaching, service and scholarship due to their increasing conflicting demands. Moreover, Hoole and Hotz (2016:5) concluded that the older South African generation placed more emphasis on rewards such as a fixed long-term compensation, whereas the younger generation favoured a variable and mixed reward structure. Therefore, it can be considered that the creation of specific targeted incentives aids in the

motivation for younger academics to establish their reputation (Kruss, Haupt and Visser, 2016:14).

4.2.3 Age and Gender Cross-Tabulation (n=74)

TABLE 4.2 GENDER DISTRIBUTION OF RESPONDENTS BY AGE GROUP (n=74)

AGE GROUP		GENDER		TOTAL
		MALE	FEMALE	
20 to 25 years	Count	4	5	9
	Percentage total	5.41%	6.76%	12.17%
26 to 30 years	Count	6	9	15
	Percentage total	8.10%	12.16%	20.26%
31 to 35 years	Count	6	1	7
	Percentage total	8.10%	1.35%	9.45%
36 to 40 years	Count	4	6	10
	Percentage total	5.40%	8.10%	13.5%
41 to 50 years	Count	11	4	15
	Percentage total	14.86%	5.40%	20.26%

51 years and older (≥51)	Count	8	10	18
	Percentage total	10.81%	13.51%	24.32%
TOTAL	COUNT	39	35	74
	Percentage total	52.70%	47.30%	100%

Table 4.2 above depicts a comparison between the gender and age of the sample respondents of the study. The cross-tabulation above affirms that males significantly dominated the sample respondents. This is consistent with the South African National Development Plan literature, which states that the contribution of females in the HE labour force has increased over the years, despite the continued existence of male domination in the HE sector (The Status of Women in the South African Economy Report, 2015:44). According to Shober (2014:320), the percentage of female academics in higher education employment is only 43% in South Africa, which is below that of males across all age groups. Furthermore, the relatively low percentage (9.45%) for those between 31 to 35 years of age may be attributed to the prioritisation of an increased educational attainment for career mobility in South African HE (Higher Education and Skills in South Africa Statistics Report, 2017:72).

4.2.4 Education Levels of Respondents

FIGURE 4.3 ANALYSIS OF THE LEVEL OF EDUCATION (n=74)

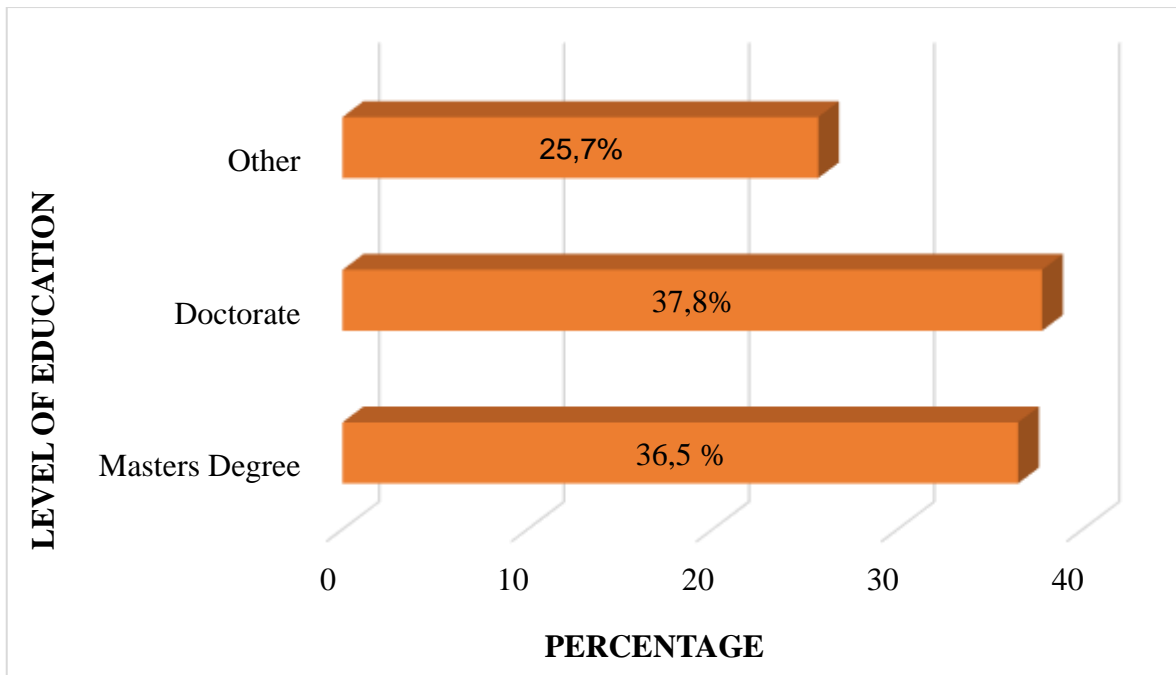
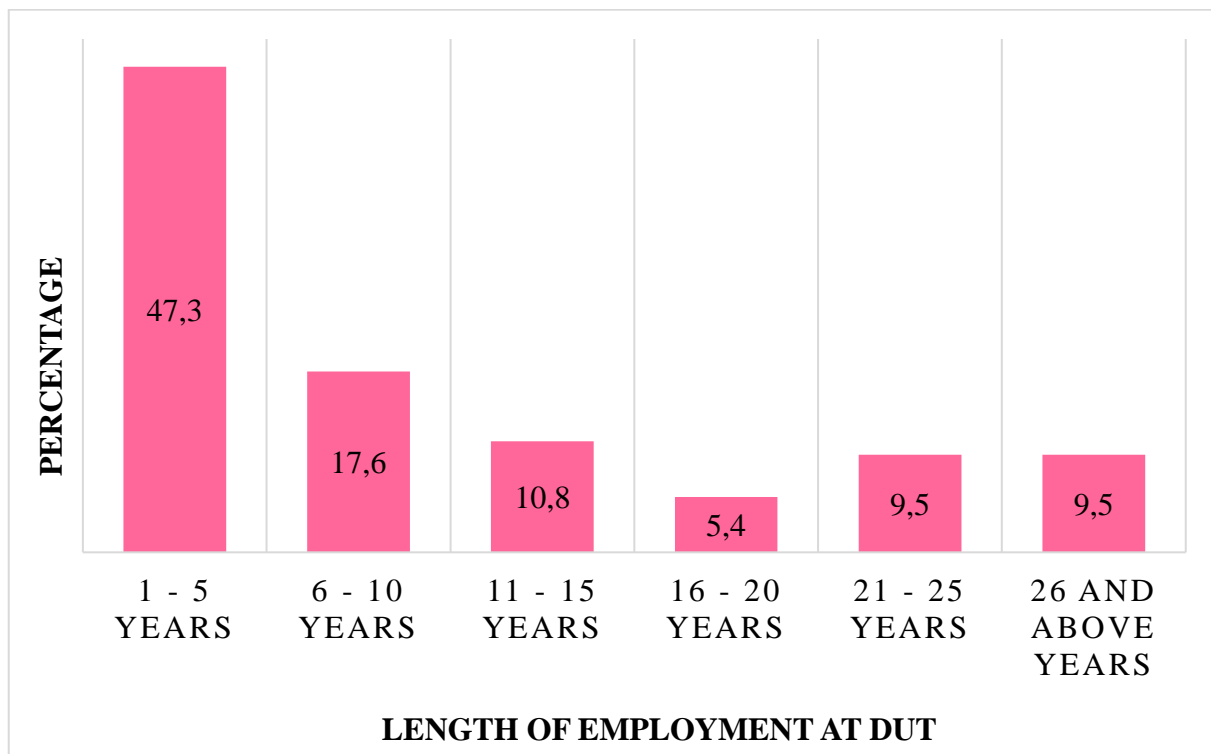


Figure 4.3 above illustrates the sample respondents' educational levels. The majority of respondents (37.8 %) held a Doctorate (PhD) qualification; whilst a Master's Degree comprised 36.5% of the respondents; and a marginal 25.7% of the respondents can be understood to be in possession of a BTech Degree. For the purpose of this study, the level of education is useful as it indicates that the responses gathered are from a well-educated source. However, a study conducted by Wade and Demb (2009:11) found that participation in engagement declines in value as the professional prestige of the academic rises.

4.2.5 Length of Service

FIGURE 4.4 ANALYSIS OF THE LENGTH OF SERVICE (n=74)



The length of service of the sample respondents is illustrated in Figure 4.4 above, which illustrates that 100% of the sample respondents had been employed for more than twelve months in the institution, with 47.3% of the respondents having worked for a minimum of five years at the institution. This implies that the sample respondents had been employed for a reasonable period. Therefore, the responses are from experienced academics, which suggests that most of the respondents have acquired some exposure or experience in teaching, research and CE. A study conducted by Jessani, *et al.* (2020:4) on academic incentives for enhancing engagement revealed that senior academics involved in more policy-relevant institutional research have a more dominant perspective of the institutional mission and therefore consider it implicit and embedded in all their work. Glass, Doberneck and Schweitzer (2011:18) concluded that academics who had a length of service of five years or less were unlikely to disseminate their non-profit and sponsored research, whereas academics who had six and ten-

years' length of service were more likely to report their non-profit or foundation sponsored research in the HE industry in the United States of America.

4.3 ANALYSIS OF DATA PERTAINING TO THE UNDERSTANDING OF COMMUNITY ENGAGEMENT AT DUT - SECTION B

FIGURE 4.5 FREQUENCIES EXPRESSED AS A PERCENTAGE BY SAMPLE RESPONDENTS IN RELATION TO THE UNDERSTANDING OF COMMUNITY ENGAGEMENT AT DUT (n=74)

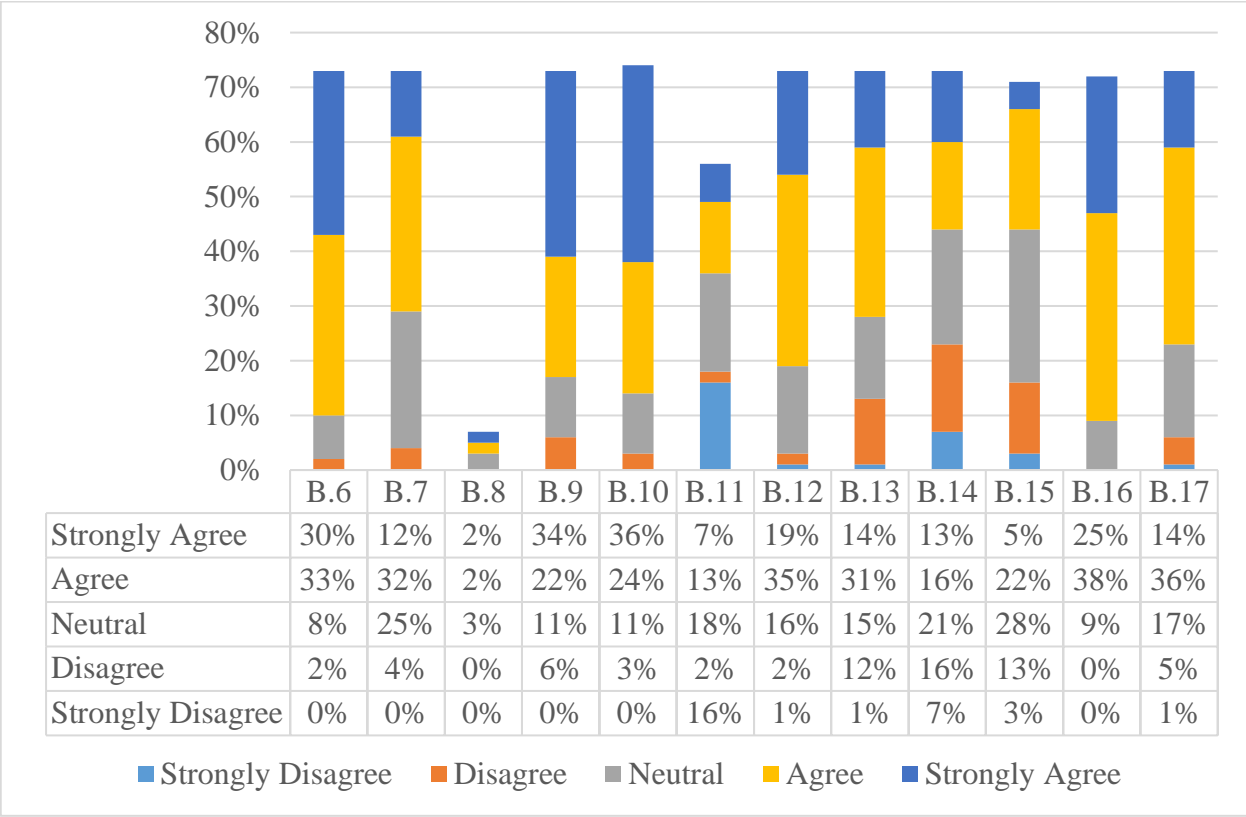


Figure 4.5 above illustrates the responses of the sample respondents, which relate to their understanding of community engagement at DUT. As illustrated, a multitude of statements indicate a significant level of agreement, whereas the indication of strong agreement was lower, despite being significantly greater than both levels of disagreement. Moreover, the consistency of a neutral response has maintained a notable impact on the dimension between agreement and disagreement.

The analysis indicates that 30% of respondents strongly agreed with statement B.6 that “Community engagement is a priority for a University of Technology”. A similar conclusion was reached by Martinez, Carolan, O’Donnell, Diaz and Freeman (2019:371), that the importance of community engagement ranked 92% as a paramount societal contribution. In addition, statement B.16 indicate that 38% of respondents agreed that “Community could also involve the various stakeholders at DUT”. A study in Uganda implemented by Sheila, Zhu, Kintu and Kataike (2021:1) revealed that the involvement of all stakeholder’s harness a reciprocal engagement, which creates many opportunities for the institution to establish efficient structures, allocation of time management, financial support and communication. Furthermore, a high rate of 25% of respondents indicated a neutral response to statement B.7, that “Dut practices community engagement” and statement B.15, that “Community engagement in a University of Technology only involves a group of people”. In conjunction, Kearney, Wood and Zuber-Skerritt (2013:127) revealed that the power structures entrenched in the institutional culture disempowered certain individuals who lack familiarity with its processes and cultural norms. Therefore, this exclusion can be attributed to the 16% of respondents who have strongly disagreed with statement B.11, that “Dut has trained me in community engagement”.

Six statements indicate a notable level of strong disagreement, namely B.11, B.12, B.13, B.14, B.15 and B.17. Moreover, these statements respectively highlight: “Dut has trained me in community engagement”, “I have an interest in assisting with planning community engagement ideas”, “Community-engaged participatory research is valued in my department”, “My teaching effort within the last 5 years had involved community-engaged activities”, “Community engagement in a University of Technology only involves a group of people” and

“Adequately trained and skilled academic staff is a common issue for community projects”. The analysis of these statements imply a fluctuated perception of university-community engagement, which lacks the core alignment of the DUT. Furthermore, the articulation of these fluctuated perceptions reveals five significant barriers for academics to undertake community engagement at DUT, as illustrated in Figure 4.6 below.

FIGURE 4.6 THE FIVE SIGNIFICANT BARRIERS TO ACADEMICS’ COMMUNITY ENGAGEMENT EFFORTS

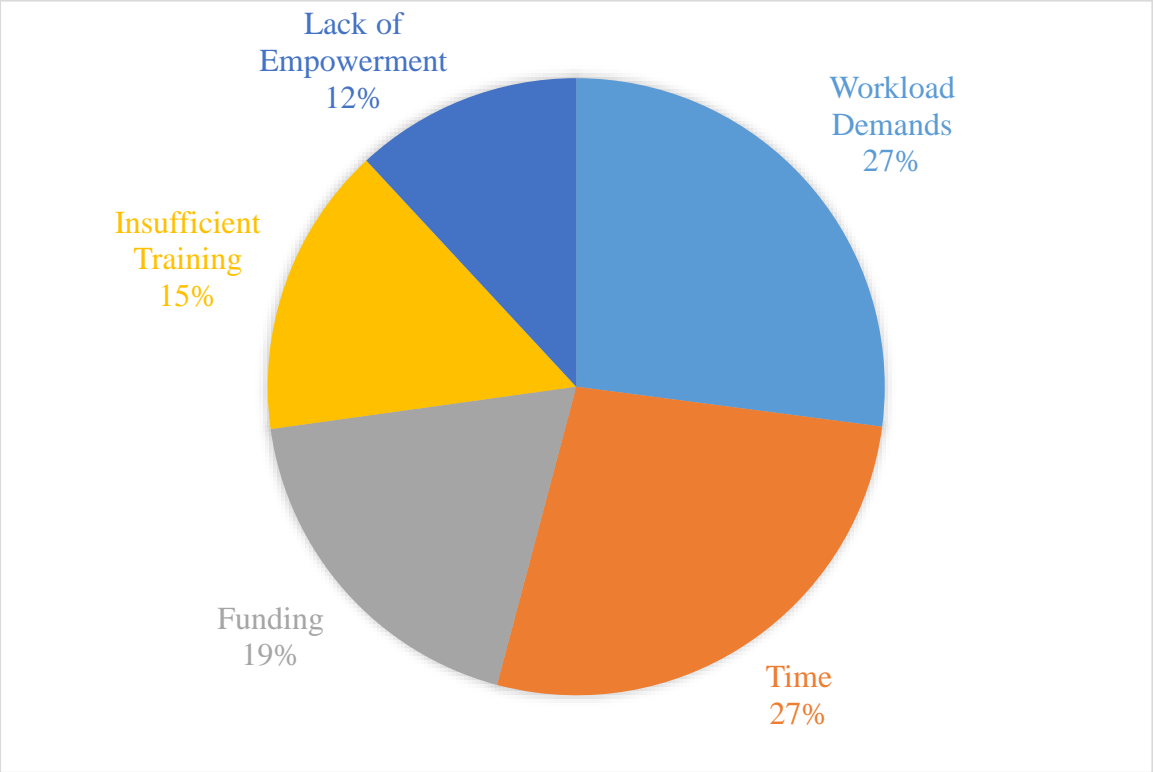


Figure 4.6 above illustrates the top five barriers that inhibit academics’ community engagement efforts at the DUT. These barriers highlight workload demands, time, funding, insufficient training and a lack of empowerment. Workload demands and time constitute 27% respectively, and 54% collectively. In addition, funding contributes 19% whereas insufficient training contributes 15%. Furthermore, a lack of empowerment contributes 12%.

4.3.1 Workload Demands

Harden, *et al.* (2015:64) found that competing agendas exist within both HEIs and the community-based environment. A workload and performance management study conducted at the University of South Africa (UNISA) by Hülsmann, Makoe and Zawada (2016:54) discovered that community engagement was not considered a key priority due to the more immediate institutional academic demands. In addition, 43% of academics spent an average of 3.7 hours on post-graduate supervision and tuition; 25% spent 2.2 hours for academic administration; 17% spent 1.4 hours for research; and 14% spent 1.2 hours for academic citizenship, whereas 1% spent 0.1 hours for community engagement, respectively. However, the study by Nnadozie (2015:462) developed a model for the management of academic workload within a UoT in South Africa, which revealed that senior academics are afforded more scope for the implementation of community engagement.

4.3.2 Time

From the results, it is evident that time is the most significant barrier to engaging community, as supported by the findings of Sahan, Pell, Smithuis, Physo, Maung, Indrasuta, Dondorp, White, Day, Seidlein and Cheah (2017:1) and Martinez, Carolan, O'Donnell, Diaz and Freeman (2019:371). Bringle and Hatcher (1996:228) emphasized that academic development demands a distinct conceptualization of service learning; the expected benefits; and the requisite investment of time. According to Woodley (2017:15), a significant variable in his study was the time required for the development of engagement courses. Moreover, the improvement of skills and confidence was found to be insufficient for the facilitation of effective community participation, which requires active implementation through participation (Skinner, 2009:90-94).

4.3.3 Funding

The comparison of 19% with prior studies reveals that the lack of funding for community engagement reflects an increased generalization of many HEIs, both in a global and local context (Leal Filho, Morgan, Godoy, Azeiteiro, Bacelar-Nicolau, Ávila, Mac-Lean and Hugé, 2018:11). This has enabled the conclusion made by Maphalala (2012:10), whereby engagement initiatives become more individualized and informally restricted to academic disciplines. Therefore, a study by Aggett (2018:306) conducted in Nepal concluded with an increased emphasis on global funding bodies for the promotion and implementation of specific funding support for community engagement initiatives, in addition to research and programme funding. However, Geekiyanage, Fernando and Keraminiyage (2020:10) found that the implementation of community-engaged decision-making approaches are exposed to limited finance, attributed to the Coronavirus outbreak and the global economic recession.

4.3.4 Insufficient Training

Smith, Zou, Nelson and Al-Ghaithi (2020:5) demonstrated that significant levels of training are required for planning, reflection and research implementation for the promotion impact of service-learning within the university context. Moreover, the study by Harden, Sheridan, McKeown, Dan-Ogosi and Bagnall (2015:62) provides evidence on the lack of academic clarity that formulates an ambiguous community expectation. Therefore, it is advised by Smith, Else and Crookes (2014:838-839) that academics engage in efficient practice on an engagement implementation of their initiatives for career advancement. An apparent limitation of this perception creates the lack of academic preparedness for service-learning implementation within teaching practices, which outlined a low mean of 3.60 (Al Barwani, Al-Mekhlafi and Nagaratnam, 2013:119). It is recommended from the inductive analysis conducted by Crisp (2019:21), that coaching groups significantly facilitated knowledge from community practice through a reflective process, higher order thinking and meta-cognition. Therefore, it can be concluded that coaching poses an integral mechanism for academics to equip challenging student-community practice and education.

4.3.5 Lack of Empowerment

It is noted by Skinner (2009:96) that the absence of empowerment created disappointment in the level of community engagement participation. In addition, a popular explanation by Bender (2008:1169) is that many universities have a low throughput rate of students. Therefore, Smith, Else and Crookes' (2014:848) argument can be considered relevant for the low perception on the value of engagement work, which is significantly attributed to the belief that research and teaching are more recognised. It is by now generally accepted by Bhatnagar, Agrawal, Sharma and Singh (2020:1-9) that greater institutional will and compassion for the upliftment of society is required at the academic level. This statement was included to verify that the academic curriculum had produced individuals who lack the capacity for the development of individualized views and innovations that eliminate the challenges experienced by communities.

4.4 ANALYSIS OF DATA PERTAINING TO THE EXTENT OF COMMUNITY ENGAGED EFFORTS UNDERTAKEN AT DUT - SECTION C

TABLE 4.3 FREQUENCIES EXPRESSED AS A PERCENTAGE BY SAMPLE RESPONDENTS IN RELATION TO THEIR PERCEIVED EFFORTS TOWARDS COMMUNITY ENGAGEMENT (n=74)

RESPONSE OPTIONS							
STATEMENT	RESPONSES	SD	D	N	A	SA	TOTAL
C.18	Count	5	19	24	19	6	73
	Percentage	6.8%	25.7%	32.4%	25.7%	8.1%	98.6%
C.19	Count	3	13	31	21	5	73
	Percentage	4.1%	17.6%	41.9%	28.4%	6.8%	98.6%
C.20	Count	6	16	20	24	7	73
	Percentage	8.1%	21.6%	27.0%	32.4%	9.5%	98.6%
C.21	Count	9	13	23	21	7	73
	Percentage	12.2%	17.6%	31.1%	28.4%	9.5%	98.6%
C.22	Count	4	10	32	20	6	72
	Percentage	5.4%	13.5%	43.2%	27.0%	8.1%	97.3%
C.23	Count	3	4	9	24	33	73
	Percentage	4.1%	5.4%	12.2%	32.4%	44.6%	98.6%
C.24	Count	7	10	24	24	7	72
	Percentage	9.5%	13.5%	32.4%	32.4%	9.5%	97.3%
C.25	Count	4	8	15	30	15	72
	Percentage	5.4%	10.8%	20.3%	40.5%	20.3%	97.3%

4.4.1 Statement C.18

In relation to C18, 6.8% and 25.7% of the respondents have strongly disagreed and disagreed respectively with current volunteering efforts to undertake community engagement at DUT. Whereas 32.4% were neutral in their response and 25.7% and 8.1% of the respondents agreed and strongly agreed respectively. Schatteman (2014:17-19) proclaimed that younger aged individuals have negative stereotypes attached to volunteering, whereas older individuals perceive that volunteering is not effectively rewarded and does not make a sustained impact. In addition, female respondents scored higher than male respondents on all the sub-scales of volunteerism. Moreover, the finding of Barber, Mueller and Ogata (2013:314) indicates that the sustained participation of voluntary community-based initiatives are more prominent amongst individuals that have an adolescent history of intense religiosity; participation in extracurricular activities in school; and parent involvement in civic engagement activities.

4.4.2 Statement C.19

In terms of C19, 4.1% and 17.6% of the respondents have strongly disagreed and disagreed respectively with their students' involvement in volunteering, whereas 41.9% were neutral in their response, and 28.4% and 6.8% of the respondents agreed and strongly agreed respectively. In line with the neutral tendency and previous study of Chiu (2019:2), many students lack the natural motivation towards general education practices that are offered by non-majored departments. A statistical analysis conducted in the study of Farmer, Perry and Ha (2016:247) outlined that the graduation of students after the year 2011 represented the highest mean scores for volunteering efforts for future employment options and career decisions that were based on community engagement experience. Furthermore, the four case studies conducted by Holdsworth and Quinn (2012:401) determined that enhanced student learning through volunteerism is established from the support of peer students and community members, which provides profound clarification on the student's experience. Holdsworth and Brewis' (2014:217) analysis suggest that students desire the recognition and reward of their volunteerism efforts in order to ensure the consistency of implementation.

4.4.3 Statement C.20

In relation to C20, 8.1% and 21.6% of the respondents have strongly disagreed and disagreed respectively with being involved in community-engaged education through service-learning in their academic courses at DUT. A further 27% were neutral in their service-learning assessment approach and 32.4% and 9.5% of the respondents agreed and strongly agreed respectively. In conjunction, Al Barwani, Al-Mekhlafi and Nagaratnam (2013:119) established from their study that the implementation of a service-learning curriculum within the academic course had presented a significant challenge, which scored a mean of 3.91. Moreover, Smith, Zou, Nelson and Al-Ghaithi (2020:4) concluded that service-learning courses are time-intensive and create a challenge for academics to balance the effective co-ordination of the community service component within their academic courses. Nonetheless, Smith, Zou, Nelson and Al-Ghaithi (2020:12) have justified that the average growth of student engagement in service-learning has significantly expanded within the last two years.

4.4.4 Statement C.21

Regarding C21, 12.2% and 17.6% of the respondents have strongly disagreed and disagreed respectively that community internships is a critical component within their students' courses; whereas 31.1% were neutral in their response and 28.4% and 9.5% of the respondents agreed and strongly agreed respectively. To ensure this consistency, a study conducted in Portugal by Franco, Silva and Rodrigues (2019:1) revealed that students possess a positive perception of community internships, which is acknowledged as a paramount pathway that facilitates entry into the competitive labour market. In conjunction, the findings of the regression analysis suggested by Kilgo, Sheets and Pascarella (2015:509) outlined that active and collaborative learning had positively focused student learning outcomes, which include critical-thinking, cognitive and inter-cultural impacts. Moreover, future career plans and job attainment formed a significant predictor by Miller, Rocconi and Dumford (2018:489) for student participation through skills development and learning opportunities.

4.4.5 Statement C.22

For C22, 5.4% and 13.5% of the respondents strongly disagreed and disagreed respectively with their students' involvement in community service. A further 43.2% were neutral in their response and 27% and 8.1% of the respondents agreed and strongly agreed respectively. Jones and Hill's (2003:536) study found that student involvement in community service requires alienation from the lack of clarity on purposes and participation in order to prevent the discontinuity of meaningful community service. Therefore, community service requires a direct integration into the student's personal learning approach. Furthermore, the study conducted by Marks and Jones (2004:308) outlined that only 59% of first-year students had reported a personal commitment to community service, whereas 41% of students do not efficiently reflect the intended core values of community engagement in higher education. In conjunction, the significant percentage of uncertainty of students, involvement in community service attributed to the articulation gap between the demands of the academic curriculum at DUT and the students' competencies, which created an unbalanced outcome for higher education equity, according to Frith and Prince (2009:83).

4.4.6 Statement C.23

For statement C.23, 4.1% and 5.4% of the respondents have strongly disagreed and disagreed respectively to their students' involvement in work-integrated learning. Moreover, 12.2% were neutral in their response and 32.4% and 44.6% of the respondents agreed and strongly agreed respectively. This result correlates effectively with the previous study of Langworthy (2005:84) in Australia, in which the implementation of work placements constituted a significant component of university programmes. In addition, the findings of Rios, Herremans, Wallace, Althouse, Lansdale and Preusser (2018:739) determined students' learning competence to be significantly correlated through work-integrated learning, rather than a classroom setting. However, the level of disagreement can be attributed to the revelation of Ajjawi, Tai, Huu Nghia, Boud, Johnson and Patrick (2020:304), in which the authenticity of students' perceptions was created on a misalignment with the active role of the student in the assessment process, the incorporation of industry supervisors and the relevance of student placement sites.

4.4.7 Statement C.24

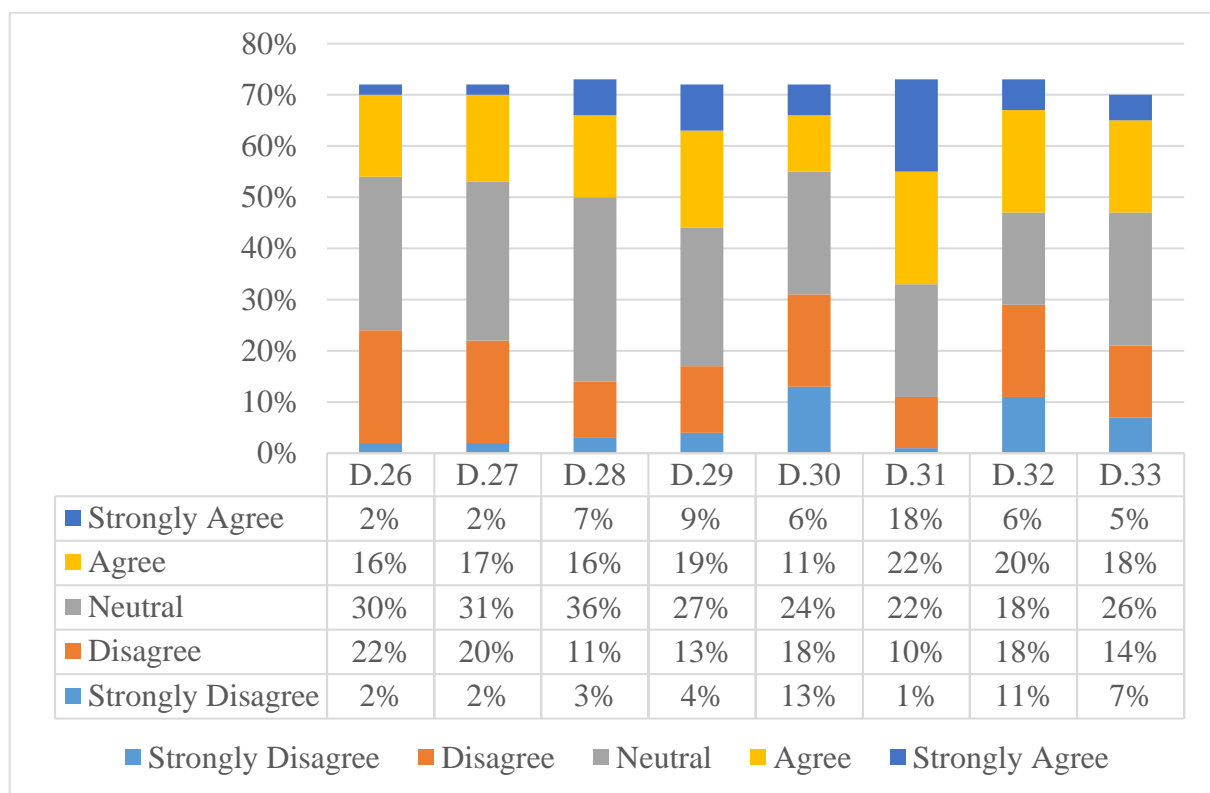
Regarding C.24, 9.5% and 13.5% of the respondents have strongly disagreed and disagreed respectively that the demanding nature of students do not permit their involvement within community engagement at the DUT. A further 32.4% were neutral and agreed in their responses respectively, whilst 9.5% of the respondents strongly agreed. Moreover, Bakker, Sloep and Jochems (2007:143) established from the Fontys University of Applied Sciences in Netherlands that educational technology implementation demands were significantly positive by student perceptions. In addition, a holistic approach for student expectations in engagement implemented by Bowden, Tickle and Naumann (2021:1207) in Australia underpinned that behavioural engagement is determined by self-efficacy and self-esteem. In addition, Mullen and Tallent-Runnels (2006:257) concluded that effective academic support is significantly correlated with students' motivation and learning. This provides an opportunity for the implementation of the conclusion made by Garrison and Kanuka (2004:95) for the consistency of blended learning within the traditional core purpose of the university.

4.4.8 Statement C.25

Relating to C.25, 5.4% and 10.8% of the respondents have strongly disagreed and disagreed respectively that they are involved within the immediate community that they reside in, whereas 20.3% were neutral in their response and 40.5% and 20.3% of the respondents agreed and strongly agreed respectively. David-Chavez and Gavin (2018:1) found that 87% of environment studies outlined a practice model in which individuals utilized indigenous knowledge systems in their own capability, with a minimal participation or decision-making authority from the community members who are in possession of such knowledge. In addition, a qualitative study conducted in Myanmar by Sahan, Pell, Smithuis, Phyo, Maung, Indrasuta, Dondorp, White, Day, Seidlein and Cheah (2017:1) revealed that individuals were reluctant to participate in their community based on the isolation of the community, its limited infrastructure and history of conflict.

4.5 ANALYSIS OF DATA PERTAINING TO THE ENABLERS THAT SUPPORT COMMUNITY ENGAGEMENT AT DUT - SECTION D

FIGURE 4.7 FREQUENCIES EXPRESSED AS A PERCENTAGE BY SAMPLE RESPONDENTS IN RELATION TO THEIR MOTIVATION (n=74)



As shown in Figure 4.7 above, at least 50% of respondents agree with all eight statements, namely D.26, D.27, D.28, D.29, D.30, D.31, D.32 and D.33. A majority of 22% of the sample respondents stated that community engagement is included in their staff promotion criteria at DUT (Statement D.31). However, 22% of the respondents have indicated a neutral response, whilst 10% and 1% of the respondents disagreed and strongly disagreed respectively. This is consistent with the previous study of Smith, Else and Crookes (2014:836), which found that the promotion criteria and performance expectations at the University of Wollongong revealed

an insufficient understanding of engagement by staff and senior management, which created a challenge for career development integration within promotion processes. Moreover, Doberneck (2016:4) states that outreach and engagement activities are not recognized and encouraged within the promotion and tenure policy of the University of Chicago. Moreover, the study of Doberneck (2016:4) revealed that 53% of institutions considered engagement as a subsidiary to their traditional practice.

According to 18% of the respondents, an increase in encouragement to take on governance roles within community engagement interventions in their departments (Statement D.33) will result in them (20% of the respondents) feeling involved in the strategic decision-making for community engagement practices at DUT (Statement D.32). A study conducted by Re'em (2010:40) revealed that increased responsibilities intensely motivate younger employees. A significant number of 24% of academics responded neutrally towards the clear incentives and recognition they are provided with for collaborative community-engaged work in their department (Statement D.30). According to Re'em (2010:36), rewards and recognition require a systematic alignment of fairness to achieve an optimum motivational perception of the academic's community engagement performance.

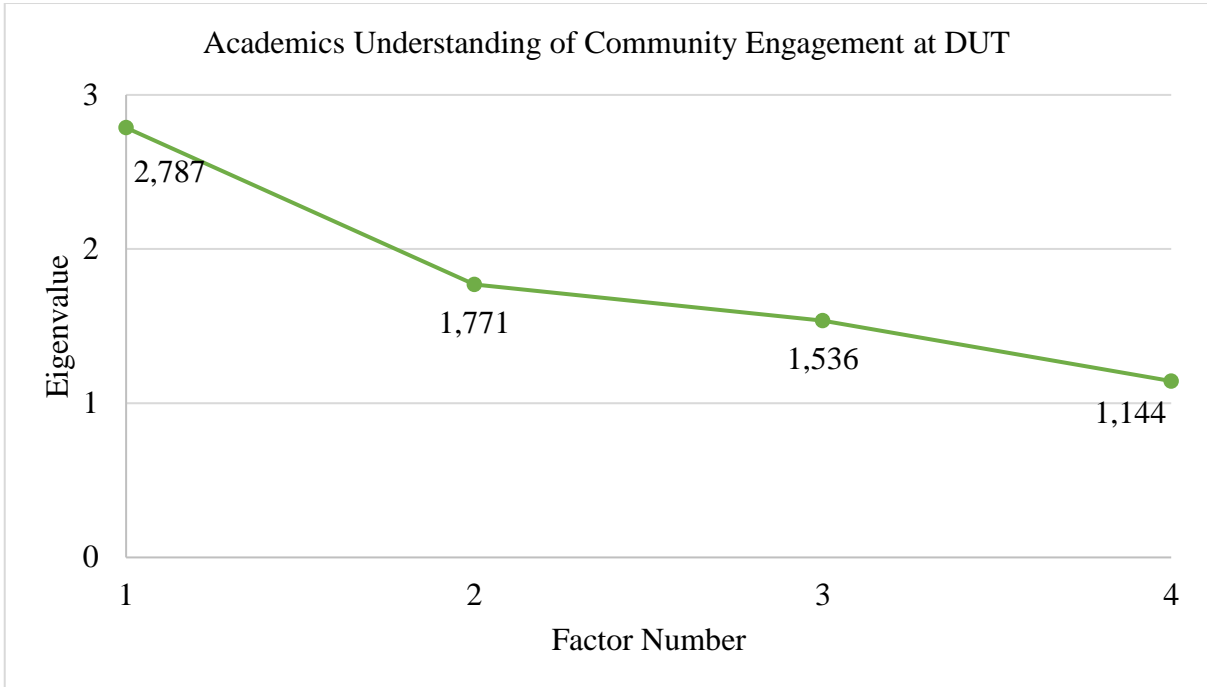
4.6 FACTOR ANALYSIS

TABLE 4.4 TOTAL VARIANCE IN RELATION TO ACADEMICS' UNDERSTANDING OF COMMUNITY ENGAGEMENT AT DUT (SECTION B)

Component	Total	Initial Eigenvalues	
		% Of Variance	Cumulative %
1	2.787	23.221	23.221
2	1.771	14.755	37.977
3	1.536	12.798	50.775
4	1.144	9.537	60.312
5	.954	7.950	68.262
6	.760	6.330	74.591
7	.734	6.114	80.705
8	.626	5.219	85.925
9	.524	4.367	90.291
10	.446	3.719	94.011

Table 4.4 above depicts the factor variance of the questions that formed Section B of the questionnaire. Furthermore, the principal component method of extraction has used a factor analysis with an eigenvalue that has an extraction criterion, which is significantly greater than one. This has resulted in four factors being extracted, since the eigenvalues of 2.787, 1.771, 1.536 and 1.144 are greater than the minimum value of one. According to Table 4.4 above, these four factors explain 60.3% of the total variance of the questions in Section B. In addition, Figure 4.8 below illustrates Table 4.4 above through the conduit of a Scree Plot.

FIGURE 4.8: SCREE PLOT OF ACADEMICS' UNDERSTANDING OF COMMUNITY ENGAGEMENT AT DUT (SECTION B)



Furthermore, the results depicted from Table 4.4 have been applied to a varimax rotation with Kaiser Normalisation and has resulted in the formation of the rotated component matrix, as depicted in Table 4.5 below.

TABLE 4.5 ROTATED COMPONENT MATRIX IN RELATION TO ACADEMICS' UNDERSTANDING OF COMMUNITY ENGAGEMENT AT DUT (SECTION B)

	Rotated Component Matrix			
	Component			
	1	2	3	4
Section B. 6	.713	.023	.243	.138
Section B. 7	.219	.613	.251	.065
Section B. 8	-.009	.800	-.073	.087
Section B. 9	.760	.065	-.140	.047
Section B. 10	.684	.000	.152	-.178
Section B. 11	-.050	.747	.235	-.067
Section B. 12	.018	.107	.833	.119
Section B. 13	.398	.136	.623	.105
Section B. 14	.079	.402	.558	-.242
Section B. 15	-.255	.339	-.159	.565
Section B. 16	-.158	-.117	.490	.675
Section B. 17	.291	-.034	.040	.761

Table 4.5 above depicts the rotated factors that have the most influence on factor loadings, which have high variables on the questions of Section B within the particular factor. According to Table 4.5, Factor 1 has strong loadings that have values of 0.713, 0.760 and 0.684, which load on questions labelled statement B.6, B.9 and B.10. These questions relate to the importance and prioritization of community engagement at the DUT. Bringle and Hatcher (1996:228) advise that a common understanding of service learning should be embedded within the institutional culture, which will ensure a non-limited effectiveness of academics that lack service-learning knowledge (Bringle and Hatcher, 1996:225).

Within Factor 2, there are high loadings that have values of 0.613, 0.800 and 0.747, which load on questions labelled statement B.7, B.8 and B.11. These questions relate to the community engagement policy and training implementation within DUT. Within Factor 3, there are loadings that have values of 0.833, 0.623 and 0.558, which load on the questions labelled statement B.12, B.13 and B.14. These questions relate to the personal and departmental participation in community engagement. According to Beaulieu, Breton and Brousselle (2018:11), the participation in academic CE is focused on the significant dimensions of the HEI mission, reward structure, logistical support and students. Within Factor 4, there are loadings that have values of 0.565, 0.675 and 0.761, which load on the questions labelled statement B.15, B.16 and B.17. These questions relate to the involvement and training in community engagement at the DUT.

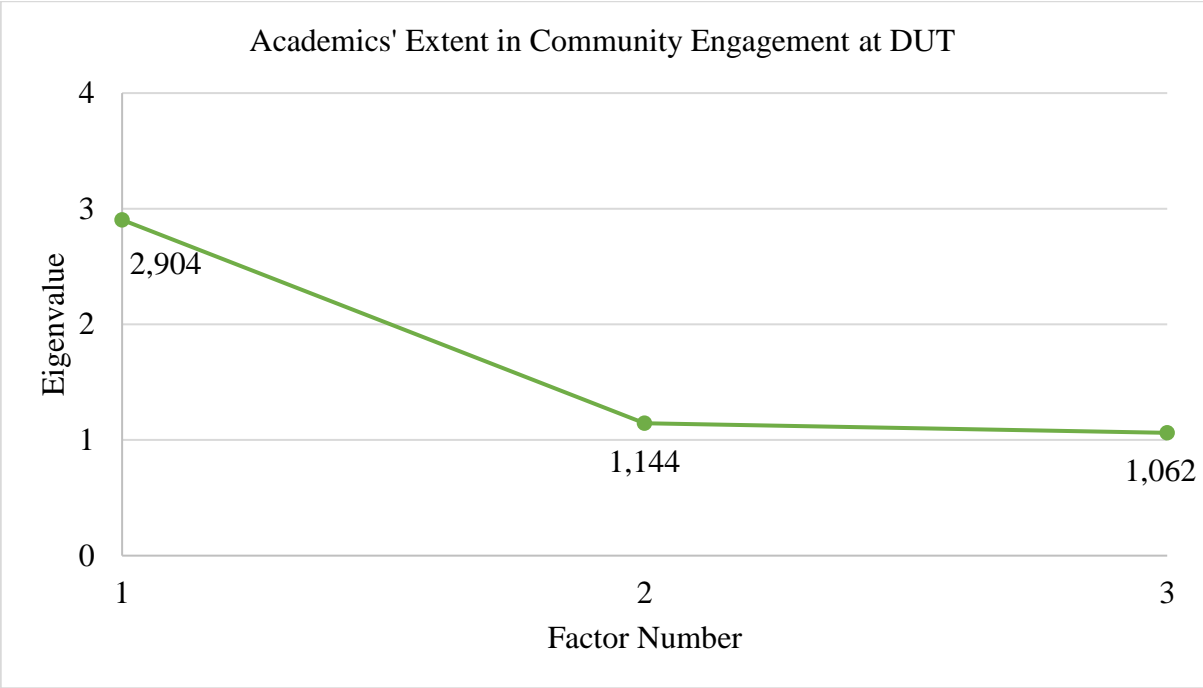
TABLE 4.6 TOTAL VARIANCE IN RELATION TO ACADEMICS' EFFORT IN COMMUNITY ENGAGEMENT AT DUT (SECTION C)

Component	Total	Initial Eigenvalues	
		% Of Variance	Cumulative %
1	2.904	36.304	36.304
2	1.144	14.306	50.610
3	1.062	13.273	63.884
4	.820	10.250	74.134
5	.694	8.675	82.809
6	.612	7.651	90.461
7	.410	5.127	95.588
8	.353	4.412	100.000

Table 4.6 above depicts the factor variance of the questions that formed Section C of the questionnaire. According to Table 4.6 above, the principal component analysis has used a factor analysis with an eigenvalue significantly larger than 1-extraction criterion. This has resulted in three factors being extracted, since the eigenvalues of 2.904, 1.144 and 1.062 are larger than the minimum value of one. Table 4.6 depicts that these three factors explain 63.9%

of the total variance of the questions in Section C. In addition, Figure 4.9 below illustrates Table 4.6 above through the conduit of a Scree Plot.

FIGURE 4.9: SCREE PLOT OF ACADEMICS' EXTENT OF COMMUNITY ENGAGEMENT AT DUT (SECTION B)



In addition, a varimax rotation has been applied with Kaiser Normalisation and has resulted in the formation of the rotated component matrix, as depicted in Table 4.7 below.

TABLE 4.7 ROTATED COMPONENT MATRIX IN RELATION TO ACADEMICS' EXTENT IN COMMUNITY ENGAGEMENT AT DUT (SECTION C)

	Rotated Component Matrix		
	1	2	3
Section C 18.	.324	.604	-.338
Section C 19.	.757	.198	.129
Section C 20.	.693	.102	-.007
Section C 21.	.768	.026	-.036
Section C 22.	.668	.332	.329
Section C 23.	.140	.040	.902
Section C 24.	.052	-.805	-.273
Section C 25.	.250	.726	-.021

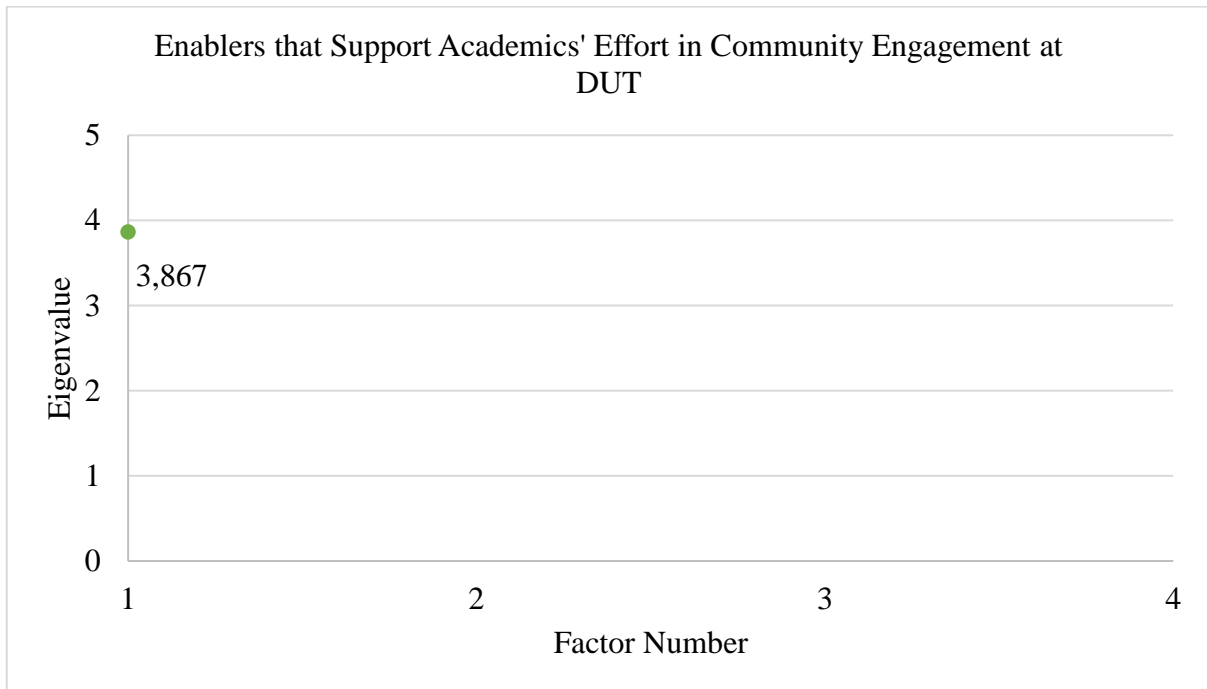
Table 4.7 above depicts the rotated factors that hinge on factor loadings which have high values for the questions in Section C, within the particular factor. According to Table 4.7 above, within Factor 1, there are loadings that have values of 0.757, 0.693, 0.768 and 0.668, which load on questions labelled statement C.19, C.20, C.21 and C.22. These questions relate to the aspect of student involvement in CE. Within Factor 2, there are loadings that have values of 0.604, -0.805 and 0.726, which load on questions labelled statement C.18, C.24 and C.25. These questions relate to academics' involvement in community service. Within Factor 3, there is a value of 0.902, which loads on statement C.23. This question relates to student work-integrated learning.

TABLE 4.8 TOTAL VARIANCE IN RELATION TO THE ENABLERS THAT SUPPORT ACADEMICS' EFFORT IN COMMUNITY ENGAGEMENT AT DUT (SECTION D)

Component	Total	Initial Eigenvalues	
		% Of Variance	Cumulative %
1	3.867	48.336	48.336
2	.998	12.472	60.808
3	.856	10.694	71.502
4	.665	8.310	79.812
5	.568	7.100	86.912
6	.423	5.282	92.194
7	.374	4.679	96.873
8	.250	3.127	100.000

Table 4.8 above depicts the factor variance of the questions that formed Section D of the questionnaire. According to Table 4.8 above, the principal component analysis has used a factor analysis with an eigenvalue significantly larger than 1-extraction criteria. This has resulted in only one factor being extracted, since the eigenvalue of 3.867 is larger than the minimum value of one. In addition, according to Table 4.8 above, this factor explains 48.3% of the total variance of the questions in Section D. In addition, Figure 4.10 below illustrates Table 4.8 above through the conduit of a Scree Plot.

FIGURE 4.10: SCREE PLOT OF THE ENABLERS THAT SUPPORT ACADEMICS' EFFORT IN COMMUNITY ENGAGEMENT AT DUT (SECTION D)



Furthermore, a varimax rotation has been applied with Kaiser Normalisation and has resulted in the formation of the rotated component matrix, as depicted in Table 4.9 below.

TABLE 4.9 ROTATED COMPONENT MATRIX IN RELATION TO THE ENABLERS THAT SUPPORT ACADEMICS’ EFFORT IN COMMUNITY ENGAGEMENT AT DUT (SECTION D)

Rotated Component Matrix	
	Component 1
Section D 26.	.636
Section D 27.	.667
Section D 28.	.778
Section D 29.	.784
Section D 30.	.709
Section D 31.	.443
Section D 32.	.759
Section D 33.	.724

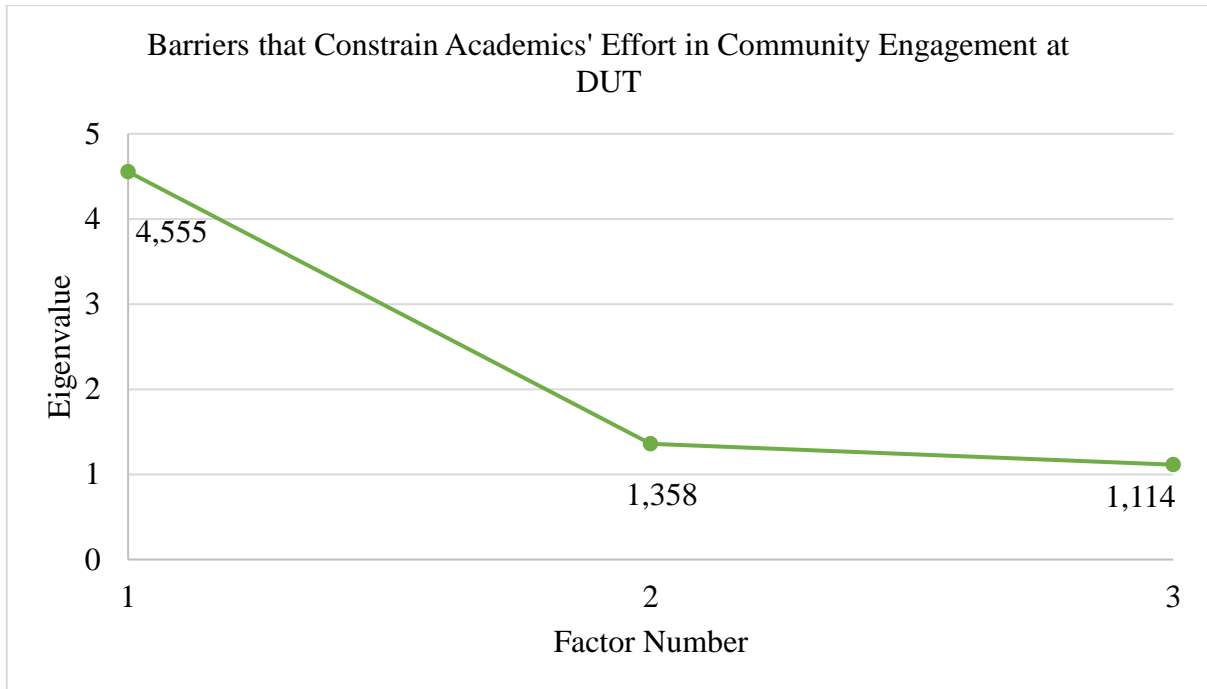
Table 4.9 above depicts the rotated factors that hinge on factor loadings which have high values for the questions in Section D, within the particular factor. According to Table 4.9 above, the factor loadings depict an approximately even distribution across the questions in Section D. These results are closely aligned to the study of Dyer and Dyer (2017:111), who have implemented a framework for sustainable development that provided the necessary foundation for new initiatives that support consistent community engagement improvements. Moreover, a community engagement project developed for effective transparency in the United States indicated that procedures should be developed to ensure that the academics involved are consulted through benchmarks and best academia practices for a sustained societal interaction (Firestone, Hoen, Elliott, Hübner and Pohl, 2018:370).

TABLE 4.10 TOTAL VARIANCE IN RELATION TO THE BARRIERS THAT CONSTRAIN ACADEMICS’ EFFORT IN COMMUNITY ENGAGEMENT AT DUT (SECTION E)

Component	Total	Initial Eigenvalues	
		% Of Variance	Cumulative %
1	4.555	37.960	37.960
2	1.358	11.313	49.273
3	1.114	9.283	58.556
4	.977	8.139	66.695
5	.844	7.030	73.725
6	.747	6.222	79.946
7	.570	4.752	84.698
8	.533	4.440	89.138
9	.432	3.602	92.740
10	.347	2.893	95.633
11	.298	2.483	98.116
12	.226	1.884	100.000

Table 4.10 above depicts the factor variance of the questions that formed Section E of the questionnaire. According to Table 4.10 above, the principal component analysis used a factor analysis with an eigenvalue significantly larger than 1-extraction criteria. This has resulted in three factors being extracted, since the eigenvalues of 4.555, 1.358 and 1.114 are larger than the minimum value of one. Table 4.10 above depicts that these three factors explain 58.6% of the total variance of the questions in Section E. In addition, Figure 4.11 below illustrates Table 4.10 above through the conduit of a Scree Plot.

FIGURE 4.11: SCREE PLOT OF THE BARRIERS THAT CONSTRAIN ACADEMICS' EFFORT IN COMMUNITY ENGAGEMENT AT DUT (SECTION E)



In addition, a varimax rotation has been applied with Kaiser Normalisation and has resulted in the formation of the rotated component matrix, as depicted in Table 4.11 below.

TABLE 4.11 ROTATED COMPONENT MATRIX IN RELATION TO THE BARRIERS THAT CONSTRAIN ACADEMICS' EFFORT IN COMMUNITY ENGAGEMENT AT DUT (SECTION E)

	Rotated Component Matrix		
	1	2	3
Section E 34.	.407	.045	.653
Section E 35.	.699	-.012	.201
Section E 36.	.446	.352	.467
Section E 37.	-.094	.333	.841
Section E 38.	.632	.079	.411
Section E 39.	.687	.433	.057
Section E 40.	.796	.302	-.084
Section E 41.	.239	.504	.177
Section E 42.	.276	.756	.079
Section E 43.	.025	.859	.088
Section E 44.	.455	.422	.086
Section E 45.	.087	.612	.219

Table 4.11 above depicts the rotated factors that hinge on factor loadings which have high values for the questions in Section E, within the particular factor. According to Table 4.11 above, within Factor 1, there are loadings that have values of 0.699, 0.632 and 0.687, which load on questions labelled statement E.35, E.38 and E.39. These questions relate to the lack of ability for the academic to perform community engagement. Within Factor 2, there are loadings that have values of 0.504, 0.756, 0.859 and 0.612, which load on questions labelled statement E.41, E.42, E.43 and E.45. These questions relate to the institutional and community effectiveness to enable community engagement interventions. Within Factor 3, there are loadings that have values of 0.653 and 0.841, which load on questions labelled statement E.34 and E.37. These questions relate to the lack of motivation for the academic to being involved in community engagement.

4.7 LIMITATIONS OF THE STUDY

The timeframe allocated to complete the study restricted the sample size to a manageable time within a constrained budget. Therefore, the findings of the study cannot be generalised to all academics at the Durban University of Technology.

4.8 CONCLUSION

This chapter highlighted the discussion of the findings and linked the results with relevant literature. The results of the study are presented through descriptive analyses. A factor analysis with the most prominent variables were carried out using the Statistical Package for the Social Sciences (SPSS) Version 24.0 for Windows. This study was an in-house investigation at the DUT, and the results of the study can only be generalised to academic employees from the Faculty of Management Sciences. As this was an in-house investigation at the DUT in KwaZulu-Natal, the results of the study cannot be generalised to other higher education institutions or UoTs in KwaZulu-Natal and in South Africa as situational factors may differ. Chapter Five which follows focuses on the conclusions and tentative recommendations arising from the analysis of the data, as well as the directions for future research.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter concludes the study and provides pertinent recommendations for future research. The purpose of the study was to ascertain the perceptions of academics on community engagement, namely from the Faculty of Management Sciences at the Durban University of Technology. In an attempt to achieve this purpose, a quantitative methodology was adopted, which entailed a structured open and closed-ended questionnaire (Annexure E) that was distributed to the sample respondents. The collected responses formed a data set and were analysed using the Statistical Package for the Social Sciences (SPSS) version 24 for Windows. Furthermore, the researcher discussed the findings through the modes of descriptive and inferential statistics. The development of a Factor Analysis established the relationship between the existing prominent variables. The findings of the analysis were utilised to highlight recommendations for the study. The study recommendations seek to contribute knowledge against the barriers and enablers that occupy an instrumental role, which influence the perception and behaviour of academics in community engagement.

5.2 RECOMMENDATIONS

As stated in Chapter One, the recommendation for possible strategies that could lead to improved community engagement for academics formed the last objective of this study. Therefore, based on the findings of this study, the recommendations are:

5.2.1 THE GENERATION OF FUNDING RESOURCES FOR SUSTAINED COMMUNITY ENGAGEMENT IMPLEMENTATION

Consistent support of funding will enable the achievement of full academic efforts towards departmental community engagement goals and objectives. The study has distinctly articulated the inconsistency of government funding for outreach initiatives within higher education institutions such as the DUT. Therefore, it is imperative for DUT to tabulate a strategic funding plan for community engagement that creates the orientation and decision-making platform within a specific timeframe. This should be continuously reinforced within the mission statement of the various academic departments within the Faculty of Management Sciences, which will ensure that potential funders are abreast of the departmental public purposes. Furthermore, management and department heads should assess the departments' current operating budget, physical assets, staffing and volunteer impacts. This assessment should seek to examine the departments' strengths, weaknesses, opportunities and threats within the existing funding structure. Moreover, a funding plan can be generated that will highlight the grant funding opportunities within activities that require effective funding support and the expected percentages for efficient funding generation. Therefore, the department can consistently evaluate and monitor the success of its funding plan through findings and reports to ensure a consistent flow of revenue for an efficient engagement implementation.

5.2.2 CONSISTENT AND PRIORITIZED ACADEMIC WORKLOAD DEMANDS

The duplication of internal and external academic roles require eradication through a new academic work profile that acknowledges the variations in academic work within the same discipline. Heads of departments should discuss with their respective individual staff the academic work profile that is closely aligned with their work. It is important for the academic work profile to change upon constant evaluations of the career trajectory of the academic to ensure that the needs of the traditional work agreement are aligned between the academics and

their respective department head. The academic should be allowed to co-ordinate or implement community engagement instructions based on a fair and manageable amount of lecturing preparation. To ensure the consistency of workload demands, management should ensure that targets and procedures are communicated timeously, and that staff are informed of changes within the department through a consistent message. Conflicting roles can be alleviated through the re-distribution of tasks, as well as revised work schedules and job description policies that reflect a defined area of delegation and decision-making. Moreover, an individual personal academic profile analysis can provide insight to management on the strengths, limitations and motivation impacts towards community engagement. This will also ensure that academics are aware of their own work style and improve their self-awareness, which consolidates their strengths and behavioural limitations.

5.2.3 MEANINGFUL EMPOWERMENT THROUGH EFFECTIVE MANAGEMENT SUPPORT

The allocation of empowerment based on the effectiveness of academics is community engagement performance in the various operating departments within the Faculty of Management Sciences requires differentiation that is simultaneously integrated, controlled and co-ordinated systematically. This should incorporate the different types of technology available to support initiatives; the orientation of the department's strategy; and experience in the management of the strategy. Moreover, senior management and Heads of Departments can contribute to this strategy through the adoption of policies and practices aimed at the most effective use of community engagement within the department. However, this should require a continuous and considerate review of each departmental practice, which should incorporate a homogenous and diverse culture; a centralised and decentralised control method; the degree of government interference; and communication facilities that will significantly influence an outreach implementation. In addition, management can provide support in transforming academics into community leaders completely by involving community members, representatives and academic staff to create a platform of inspiration through the dissemination of sharing knowledge to encourage students to become actively involved in community engagement. Advisory groups within respective departments can be established in which

community members and academics meet on a constant basis to reflect on decision-making for institutional improvement plans, budgets and progress reports. Moreover, a management audit can identify the academics' strengths and limitations within community engagement competencies such as decision-making, communication and planning. This will enable management to ascertain the perceived impact of individualized support for engagement.

5.2.4 SIGNIFICANT AWARENESS OF COMMUNITY ENGAGEMENT THROUGH AN INFORMED POLICY

It is imperative for the departmental community engagement policy to be grounded in the vision and mission of the DUT. As such, management should increasingly create awareness on the guidelines for best practices and ethical standards which must be adhered to during outreach initiatives. The policy should enable the inclusiveness of the promotion of engagement as a form of institutional transformation tool that promotes the production of active citizenship within communities. This development needs to be a holistic approach that includes mobility. It is evident from the study that many academics remain uncertain of the community engagement policy present at DUT. Therefore, to create awareness and enable consensus on the university strategy for community engagement, it is suggested that parity across the large faculty be established first, which will distinctly identify key strategic community operations for the university.

5.2.5 THE ESTABLISHMENT OF GREATER AWARENESS FOR COMMUNITY ENGAGEMENT

The results of the study indicate that academics have made a concerted effort to insert community engagement across the academic curriculum. However, the evolution of this component to learning approaches is unclear. Triple helix in action demonstrators are paramount to breakdown silos and improve the mobility of the institutional knowledge base. Furthermore, a community engagement business-partner role will assist various academic

departments in the implementation of their community engagement frameworks. For example, a particular academic unit within the Faculty of Management Sciences can oversee the implementation of the community management framework model for respective departments, whereas the support for community engagement learning and growth will be consistently supported by the faculty community engagement strategic plan. Moreover, the development of the strategic partner role is critical to the development of a collaborative relationship between the community members and academics, which will ensure that academics are knowledgeable about the demands and challenges that are experienced in the community.

5.2.6 CONSISTENT RECOGNITION OF ACADEMIC EXCELLENCE

It is distinct that community engagement is conventionally manifested by academics. However, academics are largely involved in this attempt because of the strong interest towards community engagement and not because there is adequate professional recognition provided for it. Therefore, it is recommended that the rewards and recognition enhance community engagement to be viewed as a prioritisation of teaching, learning and research. Recognition requires a reflective and critical teaching practice that documents the engagement growth of the academic. Furthermore, the criteria for rewards should be designated by the emotional state of the academic; the academic's satisfaction within the current position; and the positive evaluation of management practice at the DUT. Lecturing that leads to high student success rates and the achievement of learning outcomes through service-learning modules should be effectively recognised through the philosophy of the academic. On this basis, awards for teaching excellence should provide the opportunity for the recognition, reward and promotion of excellent academic practice that will retain a consistent and motivated engaged faculty.

5.2.7 EFFECTIVE TRAINING PRACTICES THAT SUPPORT THE COLLABORATIVE FUNCTIONS OF ACADEMIC STAFF

It is significantly evident from the study analysis that academics require an effective adjustment for successful community engagement initiative. In order to ensure efficient training implementation, it is paramount that the length of the engagement activity is anticipated; local community norms are familiarised; and the knowledge and skills necessary for the engagement implementation exist. The evaluation of these aspects can create purposeful direction for a most effective training programme. Furthermore, it is recommended that the preparation of community engagement training programmes should acknowledge the existing experience of academics, as well as the linguistic, personal and professional characteristics within a simultaneous evaluation against community characteristics. This is paramount for academic preparation within a new community setting and its differences. The orientation of training programmes should ensure that informational packages are created; mentors are assigned to academics; and that academics are encouraged to highlight their experiences gained within the community.

5.2.8 DISTINCT MONITORING AND EVALUATION OF DEPARTMENTAL COMMUNITY ENGAGEMENT REPORTING PRACTICES

The control and monitoring of systems are critical for the sustainability and growth of effective community engagement programmes or practices within the Faculty of Management Sciences. It is paramount that the Faculty of Management Sciences adopt an ethnocentric approach that compels academics to analyse how their behaviour is oriented towards a competitive and international institutional strategy. The establishment of a performance measurement framework should be mandatory, in which strategic non-financial performance measures are incorporated with the institutional traditional financial metrics. This will provide the Heads of Departments or EXCO members at the DUT a much more balanced view of the various academic departmental performances of community engagement. This process will ensure consistency for the 18% of respondents who have indicated that they require encouragement

to take on governance roles within community engagement interventions in their department in an attempt to feel involved within the strategic decision-making of community engagement practices at DUT. As a result, academics will be continuously informed on the internal institutional processes and external outcomes, which will seek to continuously improve strategic CE performance and results.

Furthermore, the attachment of targets to be achieved through financial and non-financial measures will enable HODs and EXCO to collectively review whether the current performance of academics is consistent to the expectations. This alert notification to management through the conduit of a Balanced Scorecard can be encouraged to exemplify increased consciousness on areas in which academic performance deviates from engagement expectations and therefore creates an improved performance within the academic departments they oversee. The agreement of Key Performance Indicators (KPIs) can serve as a benchmark against the level of engagement initiatives implemented by academics that can be measured and quantified against. The performance measures that have been obtained should be shared internally within the institution, which will create a sustained commitment of motivation towards being socially responsive.

5.3 CONCLUSION

The purpose of this research was to investigate academics' perceptions of community engagement at the DUT. Premised on the analysis of this study, it can be concluded that academics are not entirely positive in their assessment of the relevance of community engagement as a conduit within their teaching and learning practices. The relevance of community engagement is perceived as a mode for learning that does not significantly differ in perception for both, male and female academics. The identification of workload demands, and time emerged as the major constraints that require effective reconceptualization. However, it is encouraging that a significant proportion of academics rate the inclusion of community engagement in their promotion criteria and a sense of involvement in strategic decision-making for community engagement projects as a major enablement for their effective practice of

community engagement education in the Faculty of Management Sciences. For a successful community engagement experience, it is imperative that the academic departments adapt to the dynamic challenges by creating a holistic integrated approach to ensure the effective fulfilment within society. This ability to meet the conforming expectations of society is significantly dependent on management's identification of key enablers to motivate academics and create consistency of engaged efforts that inspires a sense of involvement, which is spiritually interconnected within the confines of academia.

5.4 DIRECTIONS FOR FUTURE RESEARCH

The investigation proposed tentative recommendations that can be used to enhance academic motivation and the effectiveness of community engagement at the DUT. In addition, the study highlighted significant insights on academic enablers, barriers, motivation and community engagement in higher education. The research design adopted for this study was quantitative in nature. Therefore, future research may adopt a qualitative paradigm, or both, to provide a broader picture. As this was an in-house investigation, future research could focus on the provision for the perceptions of academics and Heads of Department from other faculties at the DUT to enable a comparison between the perceptions of these two groups and possibly resolve the differences. Moreover, research may be expanded to other potential HEIs across different regions to establish a methodology that will provide direction and guidelines for the analysis of challenges that academics encounter. This influence higher education policy in South Africa. Future research could also focus on a comparative analysis to enhance the understanding of academics' perspectives towards community engagement and the identification of trends. Lastly, the findings and recommendations of this study are expected to add significant value to the higher education sector, with a distinct orientation towards the scholarship of engagement and having to encourage academic staff to undertake community engagement.

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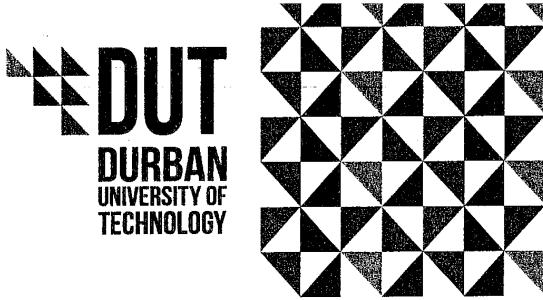
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Institutional Research Ethics Committee
Research and Postgraduate Support Directorate
2nd Floor, Berwyn Court
Gate 1, Steve Biko Campus
Durban University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375
Email: lavishad@dut.ac.za
http://www.dut.ac.za/research/institutional_research_ethics

www.dut.ac.za

11 October 2019

Ms T Patchappan
4 Emerald Drive
Everest Heights
Verulam
4340

Dear Ms Patchappan

Academics' perception of community engagement at a selected university of technology in South Africa.

I am pleased to inform you that **PROVISIONAL APPROVAL** has been granted to your proposal subject to:

- Piloting of the data collection tool. *Please note that should there be any changes to the data collection tool, in a letter signed by the researcher and supervisor, list the changes to the documents and submit to IREC with the final data collection tool. Even when there are no changes to the data collection tool, IREC has to be notified.*
- Obtaining and submitting the necessary gatekeeper permission/s to Institutional Research Ethics Committee (IREC).

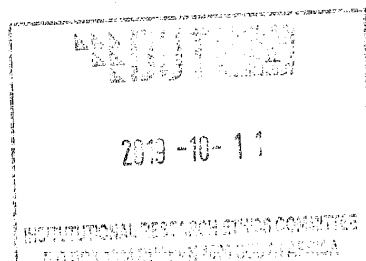
PLEASE NOTE THAT THIS IS NOT A FINAL APPROVAL LETTER. KINDLY SUBMIT THE ABOVE MENTIONED DOCUMENTS WITHIN THREE MONTHS TO THE IREC OFFICE. DATA COLLECTION CAN ONLY COMMENCE WHEN IREC ISSUES FULL APPROVAL

The Proposal has been allocated the following Ethical Clearance number **IREC 107/19**. Please use this number in all communication with this office.

Approval has been granted for a period of **ONE YEAR**, before the expiry of which you are required to apply for safety monitoring and annual recertification. Please use the Safety Monitoring and Annual Recertification Report form which can be found in the Standard Operating Procedures [SOP's] of the IREC. This form must be submitted to the IREC at least 3 months before the ethics approval for the study expires.

Yours Sincerely

Professor J K Adam
Chairperson: IREC



21 October 2019

Annexure B

Acting Director
Research and Postgraduate Support
Durban University of Technology
Professor Kevin Duffy

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Dear Prof K Duffy

My name is Terslina Patchappan, a Master's in Business Administration student at the Durban University of Technology. The research I wish to conduct for my Masters dissertation involves ascertaining the perception of academics within the Faculty of Management Sciences, towards community engagement at DUT.

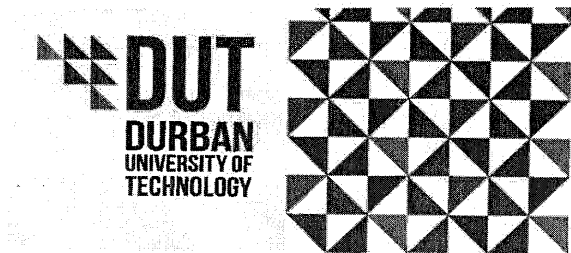
I am hereby seeking your consent in the form of a Gatekeepers letter, to conduct my research at the DUT.

I have provided you with a copy of my proposal, which includes copies of the data collection tools and consent and/ or assent forms to be used in the research process, as well as a copy of the approval letter, which I received from the Institutional Research Ethics Committee (IREC).

If you require any further information, please do not hesitate to contact me on my contact number, 062 617 3753 and my email address, Terslinapatchappan@gmail.com. Thank you for your time and consideration in this matter.

Yours sincerely,

Terslina Patchappan
Durban University of Technology



*Directorate for Research and Postgraduate Support
Durban University of Technology
Tromso Annexe, Steve Biko Campus
P.O. Box 1334, Durban 4000
Tel.: 031-3732576/7
Fax: 031-3732946*

1st November 2019

Ms Terslina Patchappan
c/o Department of Entrepreneurial Studies and Management
Faculty of Management Sciences
Durban University of Technology

Ms Patchappan

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 and Innovation Committee (IRIC) has granted Full Permission for you to conduct your research "Academics' perception of community engagement at a selected university of technology in South Africa" at the Durban University of Technology.

The DUT may impose any other condition it deems appropriate in the circumstances having regard to nature and extent of access to and use of information requested.

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

Kindest regards.
Yours sincerely

PROF KEVIN DUFFY
ACTING DIRECTOR: RESEARCH AND POSTGRADUATE SUPPORT DIRECTORATE

Annexure D

Faculty of Management Sciences Department of Entrepreneurial Studies and Management

Telephone: 031-373 5694
Cell: 083 653 2121
Email: ivang@dut.ac.za

Durban University of Technology
PO Box 1334
DURBAN
4000

Dear Participant

ASSISTANCE: QUESTIONNAIRE COMPLETION

I am a registered student at the Durban University of Technology in the Department of Entrepreneurial Studies and Management. I am currently pursuing my Masters in Business Administration in the Faculty of Management Sciences. My topic is titled: **Academics' perceptions of community engagement at a selected university of technology in South Africa**. To successfully complete the latter part of my research, the secondary component deals with the empirical investigation. This involves the completion of a structured close and open-ended questionnaire. You have been identified as one of the respondents that formed the sample for this study.

I shall be most grateful if you could please complete the attached questionnaire and return it to me by the 2019-11-13. The researcher will plan to personally pick up the questionnaire. The questionnaire will take about 20 minutes to complete and only requires you to tick the relevant pre-coded response in an objective manner. Your participation is voluntary, and you are at liberty to withdraw from answering this questionnaire at any time. Please be aware that your responses will be treated with utmost confidentiality and no names will be divulged to any third party. The collated responses will be only used for statistical analysis. If you so desire, a summary of the main findings will be posted to you on completion of the project.

Your co-operation in assisting me with this important component of my study is highly appreciated and I look forward to a speedy return of the completed questionnaire. Please answer all the questions and do not leave any question or Likert scale statement blank. If there are any queries, please do not hesitate to contact me at the email address below or via my cell phone. I take this opportunity to thank you once again for your kind assistance in completing this questionnaire in an informed and objective manner.

Sincerely

Terslina Patchappan

Email: Terslinapatchappan@gmail.com

Cell: 062 617 3753

SECTION A: BIOGRAPHICAL INFORMATION

INSTRUCTIONS TO RESPONDENTS:

- (a) Please select **ONLY ONE** response with a tick ✓ for each question.
 (b) Answer **ALL** the pre-coded questions in this section.
 (c) Please **DO NOT** leave any question blank.

1. Please indicate your position of employment:

1.1	HOD	1
1.2	Senior Lecturer	2
1.3	Lecturer	3
1.4	Tutor	4
1.5	Other:	5

2. Please indicate your gender:

2.1	Male	1
2.2	Female	2

3. Please indicate your age group:

3.1	20-25 years	1
3.2	26-30 years	2
3.3	31-35 years	3
3.4	36-40 years	4
3.5	41-50 years	5
3.6	> 51 years	6

4. For how long have you been employed at DUT?

4.1	1-5 years	1
4.2	6-10 years	2
4.3	11-15 years	3
4.4	16-20 years	4
4.5	21-25 years	5
4.6	>26 years	6

5. Please indicate your highest level of qualification:

5.1	Masters	1
5.2	Doctorate	2
5.3	Other:	3

SECTION B: UNDERSTANDING OF COMMUNITY ENGAGEMENT AT DUT

INSTRUCTIONS TO RESPONDENTS:

1. Please select **ONLY ONE** response with a tick ✓ for each statement below.
2. Answer **ALL** the pre-coded statements in this section.
3. Please **DO NOT** leave any statement blank.

KEY: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

		SD	D	N	A	SA
6.	Community engagement is a priority for a university of technology.	1	2	3	4	5
7.	DUT practices community engagement.	1	2	3	4	5
8.	DUT has a formal community engagement policy.	1	2	3	4	5
9.	Community engagement is critical for students.	1	2	3	4	5
10.	Community engagement is important for professional development.	1	2	3	4	5
11.	DUT has trained me in community engagement.	1	2	3	4	5
12.	I have an interest in assisting with planning community engagement ideas.	1	2	3	4	5
13.	Community-engaged participatory research is valued in my department.	1	2	3	4	5

14.	My teaching effort within the last 5 years had involved community-engaged activities.	1	2	3	4	5
15.	Community engagement in a university of technology only involves a group of people.	1	2	3	4	5
16.	“Community” could also involve various stakeholders at DUT.	1	2	3	4	5
17.	Adequately trained and skilled academic staff is a common issue for community projects.	1	2	3	4	5

SECTION C: EXTENT OF COMMUNITY ENGAGEMENT AT DUT

INSTRUCTIONS TO RESPONDENTS:

- Please select **ONLY ONE** response with a tick ✓ for each statement below.
- Answer **ALL** the pre-coded statements in this section.
- Please **DO NOT** leave any statement blank.

KEY: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

		SD	D	N	A	SA
18.	I currently volunteer to undertake community engagement at DUT.	1	2	3	4	5
19.	My students are involved in volunteering.	1	2	3	4	5
20.	I am involved in community-engaged education through service learning in one of my courses.	1	2	3	4	5
21.	Community internships is a critical component within my students' courses.	1	2	3	4	5
22.	My students are involved in community service.	1	2	3	4	5
23.	My students are involved in Work-Integrated Learning.	1	2	3	4	5

24.	The demanding nature of students do not allow me to undertake community engagement.	1	2	3	4	5
25.	I am involved within my immediate community in which I reside in.	1	2	3	4	5

SECTION D: ENABLERS TOWARDS UNDERTAKING COMMUNITY ENGAGEMENT AT DUT

INSTRUCTIONS TO RESPONDENTS:

- Please select **ONLY ONE** response with a tick ✓ for each statement below.
- Answer **ALL** the pre-coded statements in this section.
- Please **DO NOT** leave any statement blank.

KEY: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

		SD	D	N	A	SA
26.	DUT provides a variety of settings for community members to discuss community issues with staff.	1	2	3	4	5
27.	DUT addresses the power imbalances between community members and staff within community engagement interventions.	1	2	3	4	5
28.	The materials and information that my department provides me on pending community engagement issues is complete and understandable.	1	2	3	4	5
29.	There are clear communication channels for community engagement within my department at all times.	1	2	3	4	5
30.	There are clear incentives and recognition for collaborative community-engaged work in my department.	1	2	3	4	5
31.	Community engagement is included in academic staff promotion criteria.	1	2	3	4	5
32.	I feel involved in strategic decision-making for community engagement projects at DUT.	1	2	3	4	5
33.	I am encouraged to take on governance roles within community engagement interventions in my department.	1	2	3	4	5

SECTION E: BARRIERS TOWARDS UNDERTAKING COMMUNITY ENGAGEMENT AT DUT

INSTRUCTIONS TO RESPONDENTS:

- Please select **ONLY ONE** response with a tick ✓ for each statement below.
- Answer **ALL** the pre-coded statements in this section.
- Please **DO NOT** leave any statement blank.

KEY: SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree

		SD	D	N	A	SA
34.	There is a lack of a clear community engagement policy at DUT.	1	2	3	4	5
35.	There is inadequate funding for me to undertake community engagement projects at DUT.	1	2	3	4	5
36.	I do not feel enabled to participate in community engagement projects that truly interest and motivate me.	1	2	3	4	5
37.	I do not have the appropriate skills and knowledge to collaborate with members of the larger community in my teaching efforts.	1	2	3	4	5
38.	I am not provided with training for staff that lecture to facilitate community engagement.	1	2	3	4	5
39.	I do not have the time needed to undertake community engagement.	1	2	3	4	5
40.	The workload of my job is stressful and do not allow me to undertake community engagement.	1	2	3	4	5
41.	The quality of my students creates the unpreparedness to participate in community development projects.	1	2	3	4	5
42.	Communication tools that are utilised in my department do not advance a collaborative approach to decision-making.	1	2	3	4	5
43.	There is a lack of support from my department for community engagement in teaching.	1	2	3	4	5
44.	There is a lack of support from my faculty for community engagement in teaching.	1	2	3	4	5
45.	Community expectations are unreasonable within community projects.	1	2	3	4	5

SECTION F: OPEN-ENDED QUESTIONS

46. How do you define community engagement?

47. Please identify conditions that support your community-engaged teaching efforts.

48. Please identify conditions that hinder your community-engaged teaching efforts.

THANK YOU FOR COMPLETING THE QUESTIONNAIRE

Annexure F

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10 000	370
150	108	750	254	15 000	375
160	113	800	260	20 000	377
170	118	850	265	30 000	379
180	123	900	269	40 000	380
190	127	950	274	50 000	381
200	132	1000	278	75 000	382
210	136	1100	285	1000000	384

Source: Sekaran and Bougie (2016:264). Adapted.

Annexure G

102 Random Numbers

051 066 069 088 032 022 080 083 045 058 095 009 091 041 042 039 049 020 033 047 079
030 029 060 040 046 078 094 090 054 072 053 035 062 082 048 023 076 093 016 071 008
014 073 050 061 086 007 084 087 004 013 101 063 011 027 059 057 067 037 024 038 097
019 064 096 010 100 034 025 068 081 012 074 015 017 036 055 001 006 044 089 099 070
056 028 052 077 085 098 092 021 005 065 075 102 026 043 002 003 018 031

Source: StatTrek (2021:1). Adapted.

EDITOR'S LETTER

Researchers Beyond-Borders (PTY) LTD
51 Myro Drive
Glenmoore
Durban
16 August 2021

To whom it may concern

Editing of Master's dissertation: Terslina Patchappan

**ACADEMICS' PERCEPTIONS OF COMMUNITY ENGAGEMENT AT A SELECTED
UNIVERSITY OF TECHNOLOGY IN SOUTH AFRICA**

This letter serves as confirmation that the aforementioned dissertation has been language edited.

Any queries may be directed to the author of this letter.



Regards

Maleni Pillay
For the Researchers Beyond-Borders
consult@researchersbeyondborders.com
www.researchersbeyondborders.com