



**Evaluating the University of Cape Town's pilot
Discover Commerce Programme**

Zayaan Noordien

(NRDZAY001)

A Research Dissertation submitted in partial fulfilment of the requirements for the award for
the Degree of Master of Philosophy in Programme Evaluation

Faculty of Commerce
University of Cape Town
2020

Academic supervisor: Dr Adiilah Boodhoo

COMPULSORY DECLARATION:

This work has not been previously submitted in whole, or in part, for the award of any degree.
It is my own work. Each significant contribution to, and quotation in, this dissertation from the
work, or works of other people has been attributed, cited and referenced.

Signature:

Signed by candidate

Date: 30 July 2020

The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.

Acknowledgments

I would like to express my gratitude to my supervisor, Dr Adilah Boodhoo, for her valuable feedback and guidance.

My gratitude also goes out to Alison Meadows and the rest of the Discover Commerce Programme team for their contributions and ensuring access to all programme information. I greatly appreciate their willingness to support me in my educational endeavour.

I would also like to thank my family and friends who have provided unwavering support, prayers and encouragement throughout this process.

Table of contents

Acknowledgments.....	1
List of Tables	5
List of Acronyms	6
Executive Summary	7
Background.....	7
Evaluation Focus.....	7
Methodology	8
Key Evaluation Findings from the Theory Evaluation and Needs Assessment	8
The evaluation findings informed the key recommendations in this dissertation which include the following:	10
Chapter One: Introduction	12
Situational analysis of the higher education context in South Africa	12
Programme description	14
Development of the programme.	14
Target population.....	15
The DC Programme model.....	16
In addition to the online modules, students have to complete an individual reflective assignment that requires them to reflect on their first-year at university. Key focus areas include: what they have learnt about themselves during the course of the year as a result of their academic and/or other experiences; whether the first-year at university has had a positive or negative impact on their lives; and the defining choices they have made during the year.	20
DC Programme implementers.	23
This chapter was divided into two key sections. The first section presented a situational analysis of the HE context in South Africa and the challenges experienced by first-year students in the local context. The second section provided a detailed description of the DC Programme. The following chapter presents an overview of literature pertaining to FYE programmes.....	24
Chapter Two: Broad Overview of FYE Programmes	25
Defining FYE programmes.....	25
Underlying theories of student development and integration	26
The history and context of FYE programmes.....	28
FYE programmes in a South African context.	28
Common approaches in FYE programmes	34
First-year seminar.	34
Service learning.	35
Mentoring.	35

Early alert warning systems.....	36
Chapter Three: Evaluation Approach and Questions.....	37
Scope of evaluation.....	37
Evaluation questions	38
Theory evaluation.....	38
Needs assessment.....	39
M&E framework.....	39
Chapter Four: Method	40
Method for the programme theory evaluation	40
Evaluation question 1: What are the assumptions which underlie the DC Programme? ..	40
Evaluation question 2: Is there evidence that the DC Programme’s outcomes, causal linkages and activities are plausible?.....	42
Evaluation question 3: What elements of the DC Programme theory could be modified to maximise the intended outcomes?	44
Method for the needs assessment.....	44
Evaluation question 4: What are the personal, academic and social needs of first-year university students in a South African context?	44
Method for the M&E framework	46
Evaluation question 5: What needs to be incorporated into the M&E framework for the DC Programme?	46
Ethical considerations	49
Chapter Five: Results and Discussion.....	51
Evaluation question 1: What are the assumptions that underlie the DC Programme?	52
Evaluation question 2: Is there evidence that the DC Programme’s activities, outcomes and causal linkages are plausible?	60
Collaborative group work	61
Evaluation question 3: What elements of the DC programme theory could be modified to maximise the intended outcomes?	66
Needs assessment results	74
Evaluation question 4: What are the personal, academic and social needs of first-year university students in a South African context?	74
The M&E framework results	81
Evaluation question 5: What needs to be incorporated into the M&E framework for the DC Programme?	81
Chapter Six: Recommendations and Limitations.....	106
Recommendations.....	107
Limitations	111

Conclusion	112
References	113
Appendix A: First-year Experience Programmes in the Top 200 Google Search Results	128
Appendix B: Informed consent for theory of change discussion.....	139
Appendix C: Glossary of terms and guiding definitions for theory of change	140
Appendix D: Questions guiding the theory of change discussion	141
Appendix E: Informed consent for M&E framework	142
Appendix F: Permission letter of agreement	142
Appendix G: Ethics approval letter from the UCT Faculty of Commerce Ethics in Research Committee.....	145
Appendix H: Clearance letter from UCT Human Resources Director	146
Appendix I: Example of word tree on NVivo.....	147
Appendix J: Final code book for the needs assessment.....	148
Code book	148
Nodes	148
Appendix K: Students’ engagement and academic confidence scales	149
Appendix L: Questions for needs assessment and focus group protocol.....	154

List of Figures

Figure 1. Service utilisation plan for the DC Programme	22
Figure 2. Organisational plan for the DC Programme	23
Figure 3. Initial DC Programme theory	55
Figure 4. Programme logic for the DC Programme	56
Figure 5. Final draft DC Programme theory	59
Figure 6. Conceptual model of first-year success	63
Figure 7. DC Programme components incorporated into the conceptual model	64
Figure 8. Final reconstructed DC Programme theory	73
Figure 9. Word cloud of the 100 most frequently mentioned words	74
Figure 10. Work plan for the first year of implementation of M&E framework	110

List of Tables

Table 1. Eleven South African universities with first-year experience programmes.....	30
Table 2. Summary of plausibility assessment of activities	61
Table 3. Summary of plausibility assessment of outcomes	62
Table 4. Stakeholder mapping matrix	82
Table 5. Monitoring plan for the DC Programme	85
Table 6. Evaluation plan for the DC Programme	91
Table 7. Data collection plan for the DC Programme	97
Table 8. Data management and analysis plan for the DC Programme	99
Table 9. Reporting and dissemination plan	104

List of Acronyms

CHE	Council for Higher Education
DAC	Development Assessment Committee
DC Programme	Discover Commerce Programme
DHET	Department of Higher Education and Training
EDU	Educational Development Unit
FYE	First-year Experience
FYSE	First-Year Student Experience
HE	Higher Education
HEI	Higher Education Institution
HIP	High Impact Practice
MCQ	Multiple Choice Questions
M&E	Monitoring and Evaluation
SANRC	South African National Resource Centre
SMART	Specific Measurable Attainable Relevant and Time-bound
SPSS	Statistical Package for the Social Sciences
UCT	University of Cape Town
USA	United States of America

Executive Summary

Background

First year experience (FYE) programmes are standard offerings across a number of higher education institutions (HEIs), both locally and internationally. The increase in FYE programmes has been due to the fact that many first-year university students struggle with the academic and social transition from high school to university (Anderson, Wason, & Southall, 2016; Briggs, Clark, & Hall, 2012).

The Discover Commerce (DC) Programme is a FYE programme that was first implemented at the University of Cape Town (UCT) in 2019. The DC Programme targets all first-year students enrolled in any degree programme offered by the Faculty of Commerce. The overarching aims of the programme are: (a) to equip students with the requisite knowledge and skills to successfully transition from high school to university and thrive academically within this higher education environment, and (b) to provide students with a strong foundation for success at university and in their careers post university. The programme includes an online learning component, face-to-face group work sessions and peer mentoring.

Evaluation Focus

The main objectives of this evaluation were to determine: (a) whether or not the DC Programme had been designed in a way to achieve its intended outcomes, (b) to clarify whether the personal, academic and social needs of first-year students were correctly identified by the stakeholders who designed the DC Programme, and c) to use the DC's reconstructed programme theory and logic produced in the theory evaluation to inform the development of a Monitoring and Evaluation (M&E) framework. As such, a theory evaluation and needs assessment were conducted. An M&E framework was also developed for the programme. The following questions were addressed:

1. What are the assumptions that underlie the DC Programme?
2. Is there evidence that the DC Programme's activities, outcomes and causal linkages are plausible?
3. What elements of the DC Programme theory could be modified to maximise the intended outcomes?

4. What are the personal, academic and social needs of first-year university students in a South African context?
5. What indicators, implementation and outcome measures need to be incorporated into the M&E framework for the DC Programme?

Methodology

The evaluator used Donaldson's (2007) five-step process for developing and assessing the programme theory. An initial programme theory was developed for the programme by engaging a purposive sample of three programme stakeholders in a structured discussion session (evaluation question 1). A plausibility assessment of the initial programme theory was conducted through an extensive literature review to address evaluation question 2. Based on the plausibility assessment findings, the evaluator was then able to make recommendations on how the programme theory could be reconstructed to improve the likelihood that the DC Programme will achieve its intended outcomes.

A needs assessment was conducted by qualitatively analysing the data from a sample of 60 reflective assignments completed by first-year Commerce students who participated in the DC Programme. This needs assessment was conducted to shed light on whether the programme had correctly identified the needs and challenges of its target population.

The evaluator used a modified five-stage process developed by Markiewicz and Patrick (2016) to outline the M&E framework. The evaluator used the reconstructed DC Programme theory and logic produced in the theory evaluation to inform the development of the evaluation questions, indicators, and targets for the framework (evaluation question 5).

Key Evaluation Findings from the Theory Evaluation and Needs Assessment

The final output of the theory evaluation was a critically reconstructed programme theory of the DC Programme (evaluation question 1). The evaluation found that the activities, outcomes and causal linkages of the programme theory were plausible (evaluation question 2). However, the literature suggests that the success of these types of programmes is dependent on the programme incorporating best practices and several design considerations. These include:

a) appropriate staff recruitment, training and support; b) content and grading of assessments; c) structure and dosage of the programme; and d) quality of programme staff-student relationship (evaluation question 3).

- The literature review findings indicated that the DC Programme did incorporate some of the design requirements for an effective FYE programme. For instance, content offered in the programme was aligned to best practice literature which includes problem-solving activities, collaborative group work and a reflective assignment.
- In terms of the structure and dosage of the programme, the DC Programme has small class sizes for the face-to-face component and runs for a full academic year, which is in accordance with best practice literature for effective FYE programmes.
- There are, however, various areas of improvement for the design of the DC Programme. According to best practice literature, students should receive written feedback on assessments and these assessments should be letter-graded to ensure that expectations for students are set at appropriately high levels. The group sessions and major assessments in the DC Programme are not letter-graded and students do not receive written feedback on tasks or assessments.
- In terms of appropriate staff and recruitment, literature review findings indicate that the face-to-face component in FYE programmes are most effective when taught by academic staff. The DC Programme does not meet this design requirement as it uses third-year undergraduate students to facilitate the group sessions of the programme.
- Literature review findings emphasise that ongoing professional development opportunities for FYE programme staff is a best practice for FYE programmes. In the case of the DC Programme, although programme staff undergo training before being recruited onto the programme, the programme does not have ongoing professional development opportunities for programme staff.

Several key themes emerged from the needs assessment which related to the personal, academic and social needs of first-year university students (evaluation question 4).

- Students reported various academic challenges and successes experienced during the first-year of university. The DC Programme has addressed these academic challenges in the programme through the online modules that provide structured academic guidance and support.
- Students were also positive about the exposure to different disciplines and courses during the first-year of university. This need has been addressed by the programme as the face-to-face component of the course exposes students to different Commerce disciplines in the various group case study projects.
- In addition, students reflected on their personal growth during the year. The DC Programme considered the need for students to reflect on their overall experience of university through the reflective assignment.
- The needs assessment findings, however, indicated that not all of the needs of first-year university students were adequately addressed by the programme. For instance, students placed importance on social engagement with their peers. Although the DC Programme incorporates group work which is meant to facilitate student engagement, this group work is academic-focused and may not provide students with sufficient opportunities for social interaction.
- Students also reported experiencing mental health challenges due to academic demands and other external factors experienced during the first-year of university. Although the DC Programme does include online modules that contain stress management strategies, it does not include specific initiatives to support students who experience mental health challenges.

Recommendations

The evaluation findings informed the key recommendations in this dissertation which include the following:

- It is recommended that the DC Programme uses a letter-grading system for the tasks that have to be completed as part of the programme and award a final grade on completion of the course. Grading rubrics could be designed for major assignments (e.g. the reflective assignment) to help students understand what the expectations

are for each assignment. These grading rubrics may also guide the instructor or the marker on how to give constructive written feedback.

- It is recommended that the DC Programme appoints faculty staff to facilitate the face-to-face group discussions (if resources permit). Peer mentors could still be involved in a support capacity (i.e. to assist faculty staff during the sessions and with grading of assignments).
- The DC Programme should consider providing structured professional development opportunities to programme staff. This is an essential component of successful FYE programmes. These structured development opportunities could take the form of check-in meetings before and after each of the face-to-face group sessions. These meetings could serve as a platform to share insights, strategise on how to tackle common or unique challenges encountered and develop new facilitation skills.
- To increase the opportunities for social interaction and foster a sense of community amongst the groups, it is recommended that students are given an opportunity to engage and connect meaningfully with peers on a social level. Small-group social gatherings could be arranged at different points during the academic year.
- It is recommended that the DC Programme strengthens its linkages with the UCT Wellness Service, and provide structured in-person guidance on how to access this service. Peer mentors could be involved in the referral and information dissemination process.

Chapter One: Introduction

This dissertation reports on an evaluation that was conducted on a first-year experience (FYE) programme that was first implemented at the University of Cape Town (UCT) in 2019. The Discover Commerce (DC) Programme targets first-year students enrolled in any degree programme in the Faculty of Commerce. The programme seeks to support students during their transition in the first-year of university.

The introduction chapter begins with a situational analysis of the higher education (HE) context in South Africa. In the situational analysis, the main challenges experienced by first-year students in the local context are discussed. This section is followed by a description of existing initiatives for first-year UCT Commerce students.

This chapter concludes with a description of the DC Programme. Firstly, the programme description describes the history and the target population of the programme. The online and the face-to-face components of the programme as well as the reflective assignment are then discussed. Information on the roles of the DC Programme implementers is also presented.

Situational analysis of the higher education context in South Africa

More than two decades into democracy, the significant increase in black students attending university and higher research outputs are among the notable advancements in HE in the post-apartheid South Africa (Council on Higher Education, [CHE], 2016). However, despite this progress, recent developments such as the #FeesMustFall student-led protests against university fees increases, calls for the decolonisation of curricula and uncertainties around government funding have all emphasised the precarious state of HE (Case, Markell, Mckenna & Mogashana, 2018).

In addition to wider systemic challenges, it is recognised that South Africa's HE institutions consistently fail to produce graduates required for the economic development needs of the country and to respond to the educational goals of students (Scott, 2018). Recent statistics indicate that less than 30% of students (enrolled in residential universities) graduate in time; less than two-thirds graduate within a six-year period; and one-third only graduate 10 years post enrolment (CHE, 2017; Department of Higher Education and Training [DHET], 2017). In addition, approximately 30% of students drop out during their first year of studies and over a

five-year period, 55% of students who register for an undergraduate degree never graduate (CHE, 2013).

Given the complexity of the HE landscape in South Africa, entry into university can be a particularly daunting experience (McKay, Naidoo, & Simpson, 2018). Numerous studies have highlighted the challenges faced by first-year university students. For instance, Pather and Dorasamy (2018) found that there is a significant gap between students' expectations and their actual university experience in terms of academic engagement, academic support and social engagement. A more diverse student complement (post-apartheid) also implies that students from different educational and socio-economic backgrounds are entering universities - some students are inevitably more advantaged/disadvantaged than their peers (Chetty & Pather, 2015). In addition, first-generation university students often have access to fewer resources compared to their peers who come from households where tertiary education is the norm (McMillan, 2014). These issues are compounded by the standard adjustment challenges experienced at first-year level (Jaffer & Garraway, 2016; Mouton, Louw, & Strydom, 2013).

Despite the difficult transition into a university environment, the value of HE cannot be overstated. A recent Quarterly Labour Force Survey found the unemployment rate amongst graduates to be significantly lower than that of young people with lower education levels (South African Census Bureau, 2019). HE plays a critical role in resolving the shortage of skills and expertise in the country (Fisher & Scott, 2011). It is therefore imperative that civil society, academic institutions and student bodies re-prioritise their goals and focus on mechanisms that support the success of university students (Scott, 2018).

FYE programmes represent one such mechanism. They typically facilitate the transition from high school into university. Various academic units and programmes at UCT offer transitional support to first-year students, in particular to those who come from previously disadvantaged backgrounds and achieved low matric marks (despite meeting the entrance requirements for the degree programme). For instance, the UCT Educational Development Unit (EDU) provides peer mentoring, tutor training, learning workshops and forums to students across various degree programmes in the Faculty of Commerce. Two notable interventions implemented in the Faculty of Commerce include the Actuarial Science Mathematics Programme to improve prospective students' readiness for the degree (Urson & Chapman,

2019) and the JumpStart Programme to improve the progression of at-risk students enrolled in the Accounting degree programme (Winfield & Luyt, 2013).

Both of the aforementioned interventions have been subject to systematic programme evaluations. A formative evaluation of the pilot Actuarial Science Mathematics Programme found that the programme was well received by students and facilitators identified a positive change in confidence, mathematical thinking and social cohesion among participating students (Urson & Chapman, 2019). Similarly, an outcome evaluation of the JumpStart Programme showed that progression rates for JumpStart students were significantly higher than for those who were not enrolled in the programme, irrespective of their gender or race (Winfield & Luyt, 2013). These findings suggest that the Faculty of Commerce has successfully implemented effective interventions targeted at a select group of first-year students (extended degree programme students). The DC Programme is characteristically different in that it is targeted at all first-year students, including mainstream students.

Programme description

The programme description was constructed based on the information derived from UCT's online portal and learning management system (Vula), funding proposals and consultations with the DC Programme convenor.

Development of the programme.

UCT Commerce Faculty staff are cognisant of the various challenges reported by students during their first year of study, including the following:

- The lack of student integration despite a core curriculum prescribed to first-year students in different degree programmes and specialisations offered by the faculty.
- Students, particularly first-year university students, lack social capital and feel alienated from the university experience due to inadequate preparation for HE.
- Students struggle to apply the concepts they are exposed to in their courses to real-life situations.
- With most specialisation subjects only offered in the second year, many students have unresolved questions about their degree of choice.

It is against this backdrop that the Faculty of Commerce embarked on the design of an integrated and structured case study, and a peer mentoring programme for all first-year students enrolled in the faculty. As part of the planning process, a three-day workshop was held with first-year convenors as well as second and third-year discipline specialists within the faculty. The workshop involved the mapping of the learning outcomes for all first-year courses. The proposal for the DC Programme was presented to the different heads of departments in March 2018, and Faculty approval for the inclusion of the case study intervention in all first-year Commerce courses was obtained shortly after. Over the period of March-December 2018, online resources and assessments were also developed, and the recruitment and training of the programme staff was undertaken. The DC Programme was first introduced to prospective first-year Commerce students during the UCT Orientation Programme in January 2019 and piloted over the course of the 2019 academic year (February to October 2019). The programme is funded by University Capacity Development Grant for the period 2019 to 2021.

The overarching aims of the programme are: (a) to equip students with the requisite knowledge and skills to successfully transition from high school into university and thrive academically within this HE environment, and (b) to provide students with a strong foundation for success at university and in their careers post university.

In an attempt to achieve its goals, the DC Programme seeks to:

- Provide accessible information on campus resources as well as advice on academic, career development and psycho-social life skills relevant to first-year students.
- Expose students to real-world business challenges through a series of group case study projects. This exposure seeks to enhance students' awareness of themselves in the larger macro- and micro South African environment and encourage collaborative learning.
- Provide peer mentoring to all first-year students in order to assist them with transitional challenges.

Target population.

All first-year students registered in the Faculty of Commerce qualify for the DC Programme. Participation in the programme carries five academic credits and is a compulsory requirement for all first-year students in the faculty. A total of 1 124 first-year Commerce students participated in the first programme cycle (pilot).

The DC Programme model.

The DC Programme has two main components: The Commerce Toolkit and the Commerce Case Study. This programme uses a blended learning approach whereby some activities are completed online, and others, including the peer mentoring component, are offered in a face-to-face group set up.

The Commerce Toolkit.

The Commerce Toolkit consists of 13 structured online modules geared to promote self-development and career development. One module is released at a time on Vula and students work through the content independently, at their own pace and in their own time. In other words, students are expected to engage in self-directed learning. The estimated time for completion of these modules ranges between 60 to 120 minutes. Learning outcomes tied to each module are not assessed for marks.

Site statistics allow programme staff to estimate the number of participants who have been exposed to the programme. The main statistics recorded include: the number of students who have accessed each module and the number of times the site has been visited by each student.

The interface of the online learning platform (including the layout) was developed in close collaboration with students. The aim was to develop a site that appeals to students across different backgrounds.

The content, activities and learning objectives of each of the 13 online modules are described below.

Module 1: How to learn.

The first module exposes participants to the learning methods best suited for different learning styles. The module includes a self-assessment of the student's learning style via a 10-item questionnaire (sample item with associated response categories includes: *Do you usually remember more from a lecture when: You do not take notes but listen very carefully; You sit near the front of the room and watch the lecturer; or You take notes*). Participants are

able to determine their particular learning style - auditory (by hearing), kinaesthetic (by moving or touching) or visual (by seeing) - based on their responses.

A description of each learning style is then provided, followed by advice on how to maximise learning outcomes based on individual learning preferences. This module also exposes students to the different learning environments (lectures, tutorials, course Vula sites and computer labs) at UCT. Information about the different learning spaces within the library are also provided. The main objectives of this module are to help students identify their individual learning styles and introduce them to the different learning environments that they will encounter over the course of their degree.

Module 2: Assessment at UCT.

The second module focuses on the different types of assessment at UCT. Formative assessments (smaller exercises, essays and projects) and summative assessments (final exams) are explained. Strategies on how to best approach challenging Multiple Choice Questions (MCQs) are discussed and a glossary of terms used in assignment questions are also provided. The main objectives of this module are to expose students to the different forms of assessment used at UCT and to equip them with the skills to successfully approach and tackle these assessments.

Module 3: Managing your time.

The third module focuses on time management skills. The difference between urgent and important tasks is explained. As part of this module, students have to complete an exercise which requires them to determine the nature (urgent or important) of different tasks. The main objectives of this module are to equip students with the knowledge and skills to engage in effective time management strategies and respond to tasks with different priority levels.

Module 4: How to study.

The fourth module consists of structured guidance on how to best prepare for tests and examinations. Some of the strategies described include: starting the exam/test preparation early, proper organisation of the study space, and the use of flow charts or diagrams to map out the study content. This module also promotes awareness of counter-productive study habits.

By the end of the module students should have a consolidated understanding of how to best approach their tests and examinations preparation.

Module 5: Avoiding procrastination.

The fifth module contains structured guidance on how to avoid procrastination. The module includes a self-assessment of the student's tendency to procrastinate. The objectives of this module are to equip students with the knowledge and skills to identify instances of procrastination and learn tools on how to avoid this habit.

Module 6: Mid-term reflection.

The sixth module contains structured guidance on how to reflect on the academic and personal experience since starting university. As part of this module, students have to complete The Oxford Happiness Survey to assess their current level of happiness via a 30-item questionnaire. Sample items include, *"I don't feel particularly pleased with the way I am, I am intensely interested in other people, and I rarely wake up feeling rested"*. The objectives of this module are to equip students with the knowledge and skills to identify their current level of happiness, identify sources of unhappiness and to develop strategies to tackle these issues.

Module 7: Managing your social media.

The seventh module exposes students on how to use social media in a positive manner. The module also promotes awareness of counter-productive social media habits. The main objective of this module is to equip students with knowledge to identify positive and negative social media habits.

Module 8: Wellness self-check.

The eighth module focuses on stress management. As part of this module students have to complete a self-assessment to identify their stress levels via a 26-item questionnaire. Sample items include, *"I frequently study after midnight"* and *"There are not enough hours in the day to do all the things that I must do"*. The module also contains structured guidance on stress management. The main objectives of this module are for students to identify whether their stress levels are safe or harmful and to equip students with tools to manage stress.

Module 9: Exam preparation.

The ninth module contains structured guidance on how to prepare for final exams. The module contains strategies for students on how to manage exam related-stress and make the best use of their memory. The main objectives of this module are to equip students with skills and awareness on how to successfully prepare for final exams.

Module 10: The world of work: What does it look like.

The tenth module exposes students to skills required to thrive in the fourth industrial revolution. The module also contains information on the UCT Career Services Centre. The objectives of this module are to promote awareness on valuable skills to have in the fourth industrial revolution and how to access career development support at UCT.

Module 11: Me and my degree.

The eleventh module exposes students to different degrees and associated job outcomes. The module includes an assessment where students have to match individuals with various qualifications to the correct job. The main objective of this module is to promote awareness that the work people do may not directly relate to what they have studied.

Module 12: Understanding yourself and developing skills.

The twelfth module provides structured guidance for students to identify their personality traits and describe themselves in terms of their values, attributes and experience. The objectives of this module are to equip students with skills and knowledge to identify the most suitable working environment for their personality type.

Module 13: Building your CV

The thirteenth module focuses on CV building skills. Information on the layout and the contents of a comprehensive CV are presented. As part of the module, students have to list their school and university involvement. The objectives of this module are to equip students with skills and knowledge on how to compile a CV for internship/employment opportunities.

In addition to the online modules, students have to complete an individual reflective assignment that requires them to reflect on their first-year at university. Key focus areas include: what they have learnt about themselves during the course of the year as a result of their academic and/or other experiences; whether the first-year at university has had a positive or negative impact on their lives; and the defining choices they have made during the year.

The Commerce Case Study.

The Commerce Case Study comprises four tasks (three business challenges are addressed in a group and an assignment is incorporated into the first-year Accounting course). Students are allocated to small groups during the first semester and are required to work together on the different case study tasks (framed around a fictitious food truck business scenario). These students have to engage in joint decision-making and problem-solving by drawing on learning from core courses in the UCT first-year Commerce degree programmes. These core courses include Mathematics, Introduction to Financial Risk, Marketing and Accounting. It is envisioned that case study tasks will promote student engagement, visibility of how the concepts covered in core courses feed into real-world business decisions, and the development of group work skills.

The business challenges involve decision-making in four different areas. The first decision relates to finance principles: groups must recommend one of three different loan offerings to finance the food truck business. The second decision relates to risk management principles: groups have to choose among three different insurance plans for the food truck business, anticipate the consequences of selecting a particular insurance plan, and assess whether the plan provides sufficient protection for the food truck business. The third decision relates to human resources and marketing principles: groups are required to deliberate on the legal and ethical implications of running a small business. The fourth decision relates to accounting principles: students complete an applied accounting project, which they submit as part of their first-year Accounting course. This project involves students preparing invoices and other accounting source documents pertinent to the food truck business. The project is marked out of 100, and counts 5% of the students' final result for the Accounting course.

A total of 187 groups (comprising 7 to 10 students each) were created for the 2019 programme cycle. Each group was assigned a case study facilitator. The role of the case study facilitator is to keep the discussion on track and create an environment for constructive

engagement, the sharing of ideas, and the exploration of different approaches to the issue at hand. The case study facilitator also serves as a peer mentor.

A total of 45 case study facilitators were recruited for the 2019 programme cycle and were tasked to facilitate a maximum of seven groups each. It is the responsibility of each group to arrange the working sessions, engage with the business challenge/task at hand, develop a solution, and submit their proposal to their designated case study facilitator. Thereafter, groups met with the case study facilitator to unpack their proposed solutions and the reasoning underlying their decisions and recommendations. After each group meeting, the case study facilitator compiled a feedback report, which details the participation and engagement of each group member.

Figure 1 presents the service utilisation plan of the DC Programme. This plan captures the assumptions and expectations of how the DC Programme intends to reach the target population, cascade the different interventions and conclude the programme at the end of each delivery cycle (Rossi, Lipsey, & Henry, 2019).

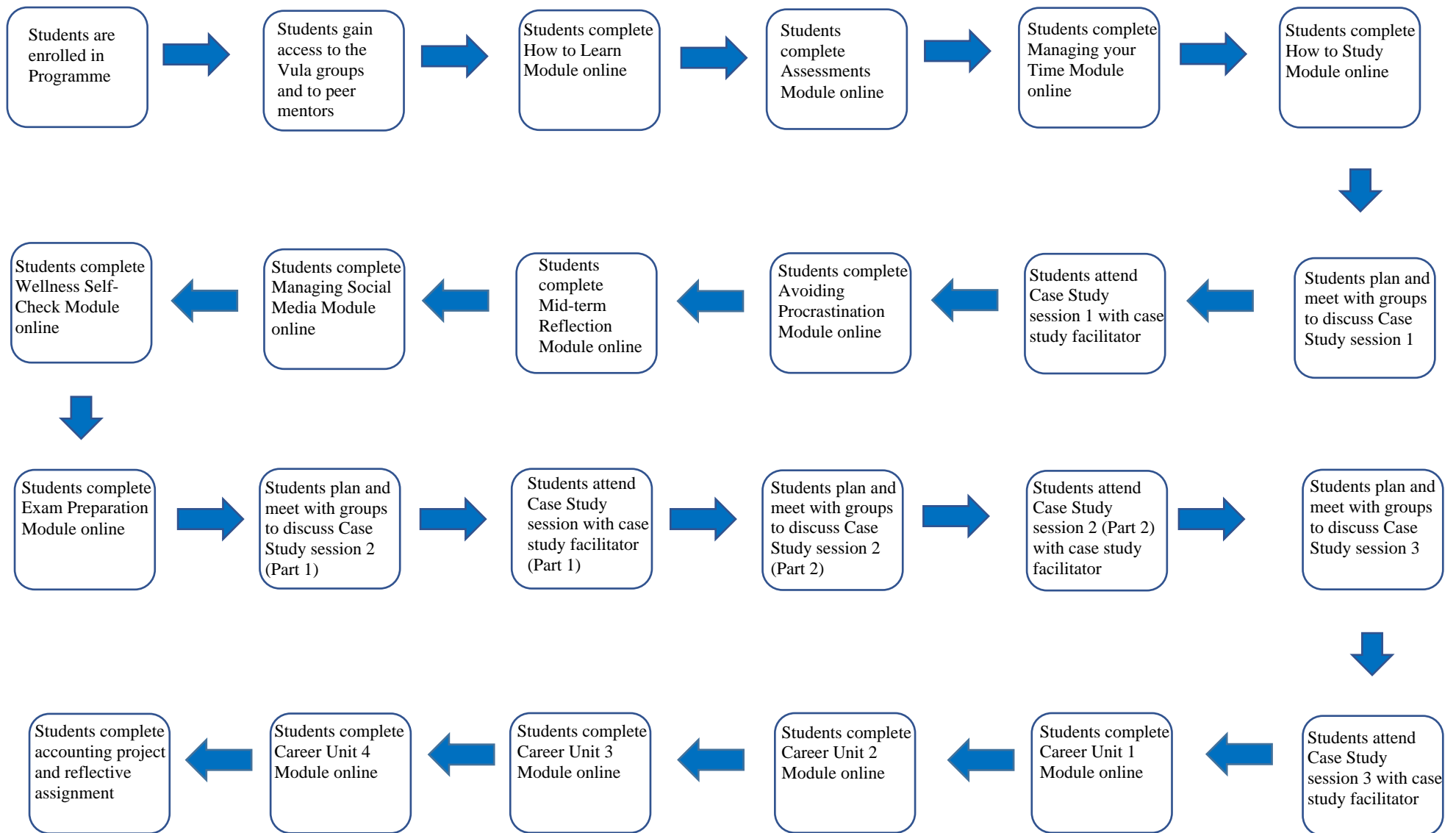


Figure 1. Service utilisation plan for the DC Programme

DC Programme implementers.

The DC Programme convenor is responsible for planning, organising and arranging the logistics for each course module. The case study facilitators are responsible for guiding group sessions, evaluating participation of students and providing mentorship to students. These case study facilitators are recruited via an open application call to third-year students who have previously served as orientation leaders. Once recruited, facilitators are offered the same training as EDU facilitators. Four structured meetings are held with case study facilitators over the course of the programme cycle.

Figure 2 depicts the organisational plan of the DC Programme. This plan captures the administration, organisation and resources required to implement a viable programme.

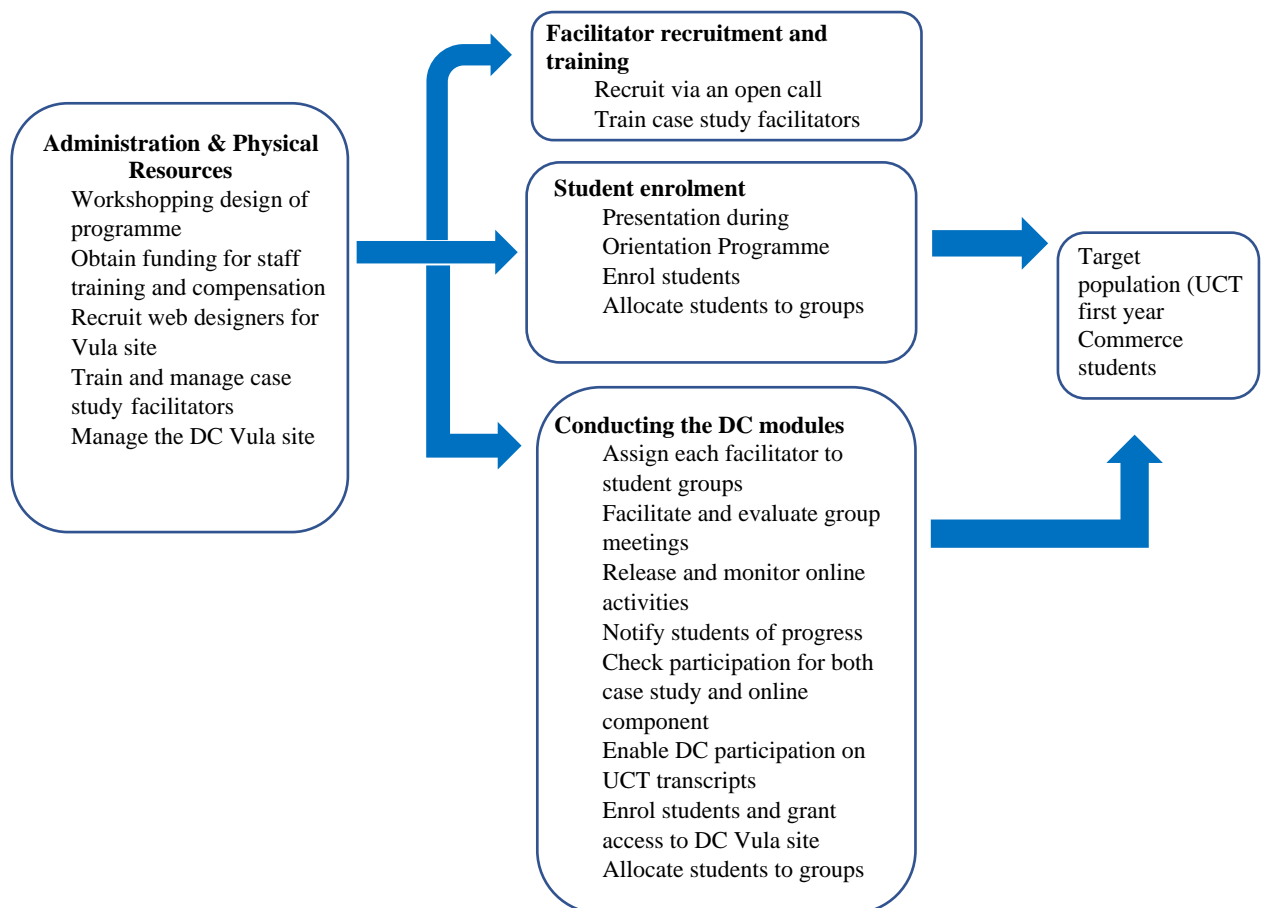


Figure 2. Organisational plan for the DC Programme

This chapter was divided into two key sections. The first section presented a situational analysis of the HE context in South Africa and the challenges experienced by first-year students in the local context. The second section provided a detailed description of the DC Programme. The following chapter presents an overview of literature pertaining to FYE programmes.

Chapter Two: Broad Overview of FYE Programmes

This chapter focuses on providing a background on literature which relates to FYE programmes. This chapter begins by defining and conceptualising FYE programmes. Student development theories for higher education (HE) which are often used as a basis for designing FYE programmes are then discussed.

The next section includes an overview of the structure, content and focus of FYE programmes currently available at higher education institutions (HEIs) globally, including South Africa. The evaluator conducted a targeted Google search to identify these FYE Programmes.

This chapter concludes by providing a description of several of the common approaches used in FYE programmes. These include first-year seminars, service learning, mentoring and early alert warning systems.

Defining FYE programmes

A broad body of literature refers to the first-year of university. This period signifies an important change in students' lives (Anderson, Wason, & Southall, 2016). Many students struggle with this transition and experience difficulties in adapting to the academic norms and expectations of university or college (Briggs, Clark, & Hall, 2012). Even in cases where students are considered to be well adapted, they may still experience academic, intellectual and social challenges due to being exposed to an unfamiliar environment (Mayo, 2013). Brook, Jones, and Burt (2013) report that certain pre-university characteristics contribute to first-year students leaving university which include academic under-preparedness, financial need, anxieties of being away from home and an absence of students with similar cultural backgrounds.

FYE programmes at HEIs have become one of the prominent ways of addressing the challenges discussed above (Schrader & Brown, 2008). These interventions vary in terms of function, intensity and form (Young & Hopp, 2014). Given this, there is no single definition for a FYE programme. Researchers have however proposed various definitions; a few examples are presented below:

- “a course intended to enhance the academic and/or social integration of first-year students by introducing them (a) to a variety of specific topics, which vary by seminar type; (b) to essential skills for college success; and (c) to selected processes” (Barefoot, 1992, p. 49).
- “these programs are specifically designed to create an engaging learning experience for students and to improve student academic success and retention” (Kim & Schumaker, 2015, p. 449).
- “first-year seminars are designed to provide new students with the knowledge, skills, and abilities that are necessary to overcome the different challenges of the first-year of college” (Permzadian & Credé, 2016, p. 280).

In light of the above, a FYE programme can be understood as a multi-dimensional intervention which seeks to develop a range of knowledge and skills amongst students who have limited or no experience of university. It is evident that FYE programmes are directed at addressing a particular challenge confronted by first-year university students and serve as structured means of support to students entering new educational and personal environments.

Underlying theories of student development and integration

There are a number of notable models and theories which have focused on students entering HEIs (Bean & Metzner, 1985; Pascarella, 1980). A prominent theorist in the field, Tinto (1975) proposed a longitudinal model to explain the different processes and elements which interact with each other and influence an individual’s decision to leave university. Tinto (1975) proposed that the extent to which a student is integrated into the social and academic life of university as well as the level of commitment towards university are central to student persistence. The model also places emphasis on the different types of individual attributes which influences a student’s pre-enrolment commitment to attaining goals. These individual attributes include race, sex and school grades as well as family background characteristics such as social status and family expectations.

Tinto later revised the Student Integration Model where links were made between pre-enrolment characteristics to the university experience and eventual educational outcomes and retention (McCubbin, 2003). The pre-enrolment characteristics outlined in the model are particularly relevant in a South African context where many students are first-generation university students coming from diverse backgrounds and varying levels of inequality,

schooling and socio-economic resources (Pather, Norodien-Fataar, Cupido, Mkonto, 2017; Schrieber, Luescher-Mamashela, & Moja, 2014). Tinto's broad perspectives on student retention, the complex nature of student experiences and the focus on the social nature of student decision making have been central to the implementation of the University of Johannesburg First-Year Experience Initiative (Motsabi & van Zyl, 2017).

Another commonly used theoretical framework is Astin's (1984) Model of Student Involvement. The key aspects of this theory consists of three elements. The first, "inputs" includes the demographics, previous experiences and background. The second includes the "environment" which encompasses all the experiences a student would have during university. The third are "outcomes" which accounts for the knowledge, beliefs and characteristics of a student after he/she has graduated from university. Astin also devised five basic assumptions about student involvement. The first is that the student devotes physical and psychological energy in various aspects of their academic experience e.g. studying for an exam or engaging in the student experience in general (Astin, 1984). The second is that involvement exists along a continuum where students demonstrate varying degrees of involvement during different time periods. The third is that the degree of involvement can be both qualitative (students comprehends assignments) and quantitative (the number of hours a student spends studying). The fourth is that personal development and student learning associated with an educational programme is proportional to quantity and quality of student involvement. The fifth is that the effectiveness of an educational practice or policy is related to the degree that the practice or policy enhances student involvement. Although this framework identifies the pre-university characteristics it may underplay the importance of external factors influencing student involvement and the complexity of the university environment. For instance, in a South African context, external factors such as financial need and transportation may have a significant influence on student involvement (Pather et al., 2017).

These theoretical frameworks provide different explanations in which students navigate through university and the factors which influence their academic and social experience at university. Many HEIs use these early conceptual frameworks on student development and integration as a basis to develop FYE programmes. Due to South Africa's unique higher education context it would be beneficial to use frameworks that capture both external and internal factors affecting student development and integration.

The history and context of FYE programmes

The benefits of FYE programmes in assisting students to make successful transitions into university has long been recognised (Pascarella & Terenzini, 2005). By the 1980s nearly one-third of institutions based in the United States of America (USA) offered some form of FYE programme (Mamrick, 2005). Since then, there has been evidence of many other universities and colleges across the globe establishing FYE programmes (García-Ros, Pérez-González, Casas- Martínez & Tomás, 2018; Larmar & Ingamells, 2010).

To provide a broad overview of FYE programmes currently available at HEIs globally, a targeted Google search was conducted by the evaluator. The search terms used for the search on www.google.com was [first year experience program*]. This phrase was used to keep the results of the search broad. Using the search ["first year experience" program*], may have restricted the results to only programmes that used the exact phrase within the quotation marks.

The geographic location and the broad structure of each of the first 133 search results for these FYE programmes were recorded (Appendix A). The findings of these searches indicated that of the 133 FYE programmes the majority ($n = 129$) were offered at USA-based universities or colleges. There was a fairly even mix of credit-bearing and non-credit bearing programmes. A large number of these programmes were mandatory, while a few were voluntary. A substantial number ($n = 89$) of these programmes also incorporated a mentoring component. More than half of these programmes were offered for the whole academic year.

FYE programmes in a South African context.

In the South African context, the establishment of the South African National Resource Centre for First-Year Experience (SANRC) and Students in Transition has given rise to a variety of FYE programmes introduced at universities across the country (Nyar, 2018). A targeted Google search was conducted to identify FYE programmes offered at South African universities. Firstly, the evaluator identified the recognised South African universities on the Department of Higher Education and Training (DHET) website. There are 25 universities listed on the DHET website. The evaluator then conducted a search for FYE programmes on each of the South African universities' website through the search functionality. The search terms that were used included the phrases "first year experience" and "first year program*". Based on

these searches, 11 of the 25 listed universities offered structured programmes for all first-year students which are presented in Table 1 (pg. 30) on the next page.

Table 1

Eleven South African universities with similar first-year experience programmes

University and web link	Name of programme	Description about the programme
Cape Peninsula University of Technology (CPUT) (2019) http://www.cput.ac.za	CPUT FYE programme	<ul style="list-style-type: none"> ● Integrated FYE programme to enhance academic performance and well-being of students. ● Includes a series of workshops and videos on how to address challenges during the first-year of university. ● Includes an early warning system to identify student disengagement.
Durban University of Technology (DUT) (2019) http://www.dut.ac.za/	DUH Student First-Year Student Experience (FYSE) programme	<ul style="list-style-type: none"> ● Programme focused on addressing the academic challenges and personal development of the student. ● Student advisors and staff across all departments at DUH are involved in the programme.
University of Johannesburg (UJ) (2019) http://www.uj.ac.za	UJ First-Year Experience Initiative	<ul style="list-style-type: none"> ● A mandatory first-year seminar programme which includes academic orientation. ● Senior students provide mentoring and tutoring roles. ● A tracking system to identify students in need of academic assistance.

University and web link	Name of programme	Description about the programme
North West University (NWU) (2019) https://www.nwu.ac.za	NWU FYE programme	<ul style="list-style-type: none"> • An online component with the introduction of the eLearning environment called the First-year Navigator. • The online component includes information on learning strategies, time management and advice on how to adjust to university. • Peer mentoring, tutoring, academic advice and student workshops are also provided.
University of Western Cape (UWC) (2019) https://www.uwc.ac.za	UWC First year experience project	<ul style="list-style-type: none"> • Provision of student-centred initiatives to enhance the student transition during the first-year. • Programme aimed at developing an inclusive experience that caters for all first-year students.
University of the Witwatersrand (Wits) (2019) http://www.wits.ac.za	WITS FYE Programme	<ul style="list-style-type: none"> • FYE ambassadors (a group of student leaders) provide support to students in their first-year. • Multimodal approach used through the provision of social, academic and resource support.

University and web link	Name of programme	Description about the programme
University of Fort Hare (2019) http://www.ufh.ac.za	Isidima Extended First Year programme	<ul style="list-style-type: none"> • Programme aimed at ensuring that first-year students adjust to the university environment. • Development of learning communities by turning common spaces into study areas.
University of Pretoria (UP) (2019) http://www.up.ac.za	UP FYE programme	<ul style="list-style-type: none"> • Peer mentorship programme provided to all students. • An online app, “Career Appetizer” that is geared for students to explore different careers and courses offered at the university. • Nudging campaign, a new initiative where students are requested to assess their credit load and encouraged to consult with faculty administration about their ideal credit load for the year.
University of the Free State (UFS) (2019) https://www.ufs.ac.za/	UFS Peer Three Mentor Programme	<ul style="list-style-type: none"> • Senior students provide a mentoring role to small groups of first-year students to ease transition from high school to university and to enhance well-being.
Nelson Mandela University (NMU) (2021)	NMU First-Year Success Initiative	<ul style="list-style-type: none"> • Peer facilitated learning and online resources. • Staff-student social activities. • Tracking student progress after assessments.

University and web link	Name of programme	Description about the programme
University of Cape Town (UCT) (2021) https://www.uct.ac.za	UCT FYE Project	<ul style="list-style-type: none"> • Exposure to unique experiences through learning opportunities outside of the classroom. • Reflection on first-year strengths and challenges both in and out of the classroom. <ul style="list-style-type: none"> • Early assessment measures to identify students who are struggling during the early stages of the first year of university. • All faculties have FYE VULA sites that provide online student support hubs. • Centre for Innovation in Learning and Teaching conducts digital literacy training for tutors, mentors and orientation leaders as well provides virtual resources to support students. • Several faculties run an extended orientation programme. The purpose of the programme is to provide specific support to students on academic skills areas, career planning and management of stress, time and finances.

There have been several challenges in the implementation of FYE programmes in a South African context. For instance, Motsabi and van Zyl (2017) reported that a key challenge has been maintaining faculty FYE committees at The University of Johannesburg. In some faculties the lead staff member is enthusiastic about the programme but when there are staff changes or the staff member leaves there tends to be a decrease in the momentum of the programme. Furthermore, Winstead and Knipp (2017) indicated that there is no standalone budget or dedicated staff for the implementation of the Nelson Mandela University First-Year Success Programme which limits opportunities for the programme to evolve when new ideas are proposed.

The information presented above demonstrates that FYE programmes have been implemented at many institutions globally including South Africa. The content of these programmes vary across higher education institutions. This may be due to the fact that the design of a FYE programme is influenced by a number of factors including the availability of resources, the history of the institution, the campus culture and the unique needs of students (Greenfield, Keup, & Gardner, 2013). Despite these factors, there does seem to be common approaches used in the design of FYE programmes. The next section covers four common approaches used.

Common approaches in FYE programmes

First-year seminar.

The first-year seminar is the most common type of FYE programme that frequently forms the basis for other FYE initiatives (Greenfield et al., 2013). First-year seminars usually consist of a class meeting led by an instructor or team of instructors and is often credit-bearing and/ or graded (Jamelske, 2009). Literature has shown that there are five main types of first-year seminars; these are presented below:

- 1) Orientation and academic success seminars provide information on campus resources to enhance success at university which are often referred to as extended orientation (Mamrick, 2005). These seminars may include a discussion on how to successfully transition into university and/or information on basic study skills and time management (Jamelske, 2009).
- 2) Academic enquiry-based seminars require students to work in small groups and engage in applied thinking around a single academic theme (Hunter & Linder,

2005). Academic seminars consist of specific topics which vary according to the faculty (Mamrick, 2005).

- 3) Discipline-linked seminars are designed to prepare first-year students for a specific discipline or related profession (Mamrick, 2005).
- 4) Lastly, the basic study skills seminar is offered to students who have been identified as academically underprepared. The main activities include note-taking, reading and grammar skills (Mamrick, 2005).
- 5) Some first-year seminars incorporate a combination of these approaches which are referred to as hybrid seminars (Young & Hopp, 2014).

Linked to the first-year seminar, some institutions organise learning communities where students are allocated into small study groups and take common courses during their first semester or during their first-year (Jamelske, 2009). In some instances, these learning communities will have a disciplinary theme or are linked to a campus residence.

Common reading programmes are practices that are also sometimes incorporated into first-year seminars (Phillips & Case, 2013). These programmes require first-year students to read the same book to give them a shared intellectual experience (Ferguson, 2006).

Service learning.

FYE programmes also often incorporate a service-learning project by getting students to collaborate with communities and apply what they have learnt during first-year courses to a real-life problem (Keup & Young, 2017). According to Kuh (2008) service-learning is a high-impact practice (HIP) as it requires students to engage in authentic learning in a community.

Mentoring.

A common feature of FYE programmes is to offer standalone mentoring and student advising services. This mentoring would either be made available to specific first-year students who are experiencing difficulty with a particular course or to all first-year students (Hope, 2016). Some first-year seminars have a mentoring component, where the instructors of the seminar also provide a mentoring service to students throughout the academic year (Permzadian & Credé, 2016).

Early alert warning systems.

An early alert warning system serves as a measure to help identify new students who have experienced academic challenges during their first term at university (Greenfield et al., 2013; Hope, 2016).

To conclude, FYE programmes are multi-dimensional and structured programmes to assist first-year students with their academic and social transition at university. In the USA, such programmes first started to emerge in the 1980s. In South Africa, such programmes only started appearing around 2010. International and local FYE programmes vary in terms of content, structure and focus. There are, however, common approaches used which include first-year seminars, service-learning, mentoring and early alert warning systems.

In the case of the Discover Commerce (DC) Programme, it is a structured FYE programme established in a South African context. The DC Programme has a first-year seminar component, i.e. Commerce Case Study group sessions and the case study facilitators also provide peer mentoring to students throughout the year. The other component of the programme is the online modules covering content related to academic, self and career development. The DC Programme's blended-learning approach with its combination of online and face-to-face sessions is seen in a few other FYE programmes offered at South African universities such as The North West University and The University of Pretoria.

This chapter presented a summary of the background of FYE programmes, the content and focus of such programmes and descriptions of common approaches used. The following chapter presents the evaluation scope and questions.

Chapter Three: Evaluation Approach and Questions

This chapter starts with scoping the main aims of the evaluation by clarifying the main challenges that this evaluation aimed to address. Here, the main aims of the theory evaluation, needs assessment and Monitoring and Evaluation (M&E) framework are discussed. This chapter concludes by presenting the evaluation questions which guided this evaluation.

Scope of evaluation

During an initial discussion with the Discover Commerce (DC) Programme convenor it was revealed that the programme had three main challenges. These challenges informed the research questions that this evaluation aimed to address. Firstly, the DC programme convenor was interested in whether the programme had been designed in a way to achieve its intended outcomes. The second challenge was to clarify whether the needs of first-year students were correctly identified by the stakeholders who designed the DC Programme. Thirdly, the DC programme convenor also identified a need for an M&E framework that would allow stakeholders to track progress and evaluate programme implementation and outcomes.

Firstly, when the programme convenor was approached, the DC Programme was in its first year of implementation and the programme did not have a clearly articulated programme theory. A programme's theory can be one that represents the knowledge and understanding necessary to achieve the intended outcomes, or it can be an inadequate one that would not produce the intended results even if it was implemented efficiently (Rossi et al., 2019). Questioning and making judgements of an intervention's programme theory is important as it has been recognised that generally programmes have poor designs because they are based only on stakeholder's beliefs and not on empirical evidence (Weiss, 1997). Therefore, given that the design of the DC Programme had not been evaluated a theory evaluation was deemed appropriate. This theory evaluation would provide stakeholders with evidence to identify whether or not the programme has incorporated the necessary elements in its design to bring about the intended outcomes.

Secondly, the DC Programme had not formally evaluated the personal, academic and psycho-social needs of first-year students. Needs assessment is recognised as an important aspect of evaluation, as it assesses the nature and extent of a social problem as well as the need for a programme (Rossi et al., 2019). In addition, needs assessment is also suitable to identify

whether a programme that has already been implemented responds to the needs or challenges of the target population, which may inform improvement of programme design (Rossi et al., 2019). There are various methods for conducting needs assessments including focus groups, surveys and document reviews (Watkins, Meiers, & Visser, 2012). A document review method was used as the information required to complete the needs assessment had already been collected in the form of reflective assignments completed by first-year Commerce students. The advantage of using a document review method for a needs assessment is that it can be done independently and does not require the input from other sources (Watkins et al., 2012).

Thirdly, the DC Programme does not currently have a systematic way to track progress or evaluate programme implementation and outcomes. An M&E framework is described as an overarching plan and a written product to guide and inform monitoring and evaluation functions during the lifespan of a programme (Markiewicz & Patrick, 2016). M&E frameworks have many uses which include to inform decision-making processes, improve accountability of a programme as well as to guide learning for programme improvement (Markiewicz & Patrick, 2016). Thus, another aim of this evaluation was to design an M&E framework using a programme theory-driven approach. The reconstructed DC programme theory and logic developed in the theory evaluation was used to articulate the M&E framework.

The scope of the evaluation was therefore threefold: Programme theory evaluation, a needs assessment and an M&E framework.

Evaluation questions

The questions guiding the evaluation for the theory evaluation, needs assessment and M&E framework include the following:

Theory evaluation.

- 1.) What are the assumptions that underlie the DC Programme?
- 2.) Is there evidence that the DC Programme's activities, outcomes and causal linkages are plausible?
- 3.) What elements of the DC programme theory could be modified to maximise the intended outcomes?

Needs assessment.

- 4.) What are the personal, academic and social needs of first-year university students in a South African context?

M&E framework.

- 5.) What needs to be incorporated into the M&E framework for the DC Programme?

This chapter presented the evaluation scope and questions. The following chapter describes the methodology for the theory evaluation, needs assessment and then the M&E framework.

Chapter Four: Method

This chapter details the methodology used to answer the questions identified for the programme theory evaluation, needs assessment and then the Monitoring and Evaluation (M&E) framework. The method of the theory evaluation is first presented, followed by the method of the needs assessment and M&E framework. This chapter concludes with the ethical considerations which guided the evaluation.

Method for the programme theory evaluation

The programme theory evaluation was conducted first and sought to answer the following evaluation questions:

- 1.) What are the assumptions which underlie the DC Programme?
- 2.) Is there evidence that the DC Programme's activities, outcomes and causal linkages are plausible?
- 3.) What elements of the DC Programme theory could be modified to maximise the intended outcomes?

To answer the programme theory evaluation questions the evaluator used Donaldson's (2007) five-step process which includes, engaging relevant stakeholders; developing an initial programme theory; conducting a plausibility test of the programme theory using social science literature and finalising the programme theory.

Evaluation question 1: What are the assumptions which underlie the DC Programme?

Step 1: Engage relevant stakeholders.

Donaldson (2007) proposed that the first step in eliciting the programme theory involves engaging with as many relevant stakeholders to gain insight into their understanding of the programme. As a starting point, purposive sampling was used to select participants for the first theory evaluation question. The DC Programme convenor, co-convenor and the co-creator were included in the sample as they have the most knowledge of the development of the programme and created the content of the programme.

The conceptualised programme theory was elicited for the DC Programme in a 90 minute structured discussion session. The DC Programme convenor assisted with the arrangements for

a suitable venue. Each participant was asked to sign an informed consent (Appendix B) and the evaluator explained the confidentiality and the voluntary nature of participation.

Steps 2 & 3: Develop an initial programme theory.

The evaluator anticipated that the selected participants did not have prior experience participating in a programme theory discussion or have knowledge of the programme theory process. Thus, before the discussion began the evaluator handed out printouts and went through a glossary explaining basic evaluation terminology (Appendix C). Common everyday language was used during the discussion. The evaluator asked some specific questions in order to elicit the programme activities, outcomes and other elements of the programme theory (Appendix D). For example, one question asked during the discussion included: *“What are the long term/overall goals of the Discover Commerce Programme?”*

The objective of this step was to devise a programme theory based on various descriptions of the participants about the long-term outcomes, intermediate outcomes, short-term outcomes, outputs and inputs. The evaluator used several sheets of paper which were presented on a board that were labelled “needs”; “inputs”, “activities”, “outputs”, “short-term outcomes”, “intermediate outcomes” and “long-term outcomes”. The evaluator used a backward and forward reasoning process to extract the different components of the DC Programme theory. Forward reasoning begins with asking stakeholders about the activities and then based on these activities identifying the outcomes (Chen, 2005). Backward reasoning starts with stakeholders identifying outcomes and then logically working backwards to identify what elements are necessary to achieve these outcomes (Chen, 2005). Following the completion of these sheets the evaluator asked about the causal links between the different components of the programme theory (e.g. how each activity leads to an output and how the output links to a short-term outcome). The evaluator then drew the links as described by the participants. Based on this feedback, the evaluator worked independently to develop an initial draft of the programme theory and programme logic using Markiewicz and Patrick’s (2016) model. The programme theory is illustrated in a variable-oriented diagram (p. 55)

The programme logic was depicted in a separate diagram and provides more detail of the programme theory by illustrating how the inputs, activities and outputs lead to the short-term, intermediate and long-term outcomes. The assumptions and the external factors of

the DC Programme are also presented in the programme logic. Assumptions are factors that need to be in place in order for intended outcomes and for high quality implementation to occur (Markiewicz & Patrick, 2016). The external factors refer to factors that exist outside of a programme which are likely to influence the achievement of outcomes (Markiewicz & Patrick, 2016). The programme logic was later used as a reference point to articulate the M&E framework.

The evaluator analysed the initial programme theory and checked whether the causal linkages were logical. The evaluator then emailed all of the involved stakeholders a copy of the initial programme theory and programme logic and requested that the participants comment on the two diagrams in order to gain consensus on whether anything should be deleted or added. Once feedback was received, the evaluator then put together a final draft of the DC Programme theory. The construction of the programme theory concludes the first phase of the logic analysis process (Tremblay, Brousselle, Richard, & Beaudet, 2013).

Evaluation question 2: Is there evidence that the DC Programme's outcomes, causal linkages and activities are plausible?

Step 4: Plausibility test of programme theory.

The second phase in the logic analysis process is to develop an integrative framework (Tremblay et al., 2013). This involved assessing the programme theory against an extensive literature review on similar programmes. This allowed the evaluator to make a judgement about the validity of the initial programme theory (Brousselle & Champagne, 2011). A plausibility assessment was conducted to indicate whether the activities, outcomes and causal linkages in the DC Programme theory are consistent with other FYE programmes. The evaluator then indicated strengths and weaknesses of the DC Programme and recommended improvements for the reconstructed programme theory.

The literature search findings were documented using a modified literature search strategy proposed by Kable, Pich, and Maslin-Prothero (2012) which is presented below:

Documentation of databases and search engines used.

As the DC Programme is a type of FYE programme, the evaluator started the literature search by conducting an electronic search for international and local FYE programmes on UCT's Primo search engine and Google Scholar. The evaluator also searched the following electronic databases: EBSCOHost, Elsevier, ProQuest and JStor.

Limits applied to the search.

The search was limited to English language articles published between 2000-2019.

Inclusion and exclusion criteria for the search.

The inclusion criteria for the review included peer-reviewed research articles, published evaluation reports or books which discussed FYE programmes targeted at first-year university or college students. Papers were excluded if they focused on first-year university programmes targeted at second-year students or postgraduate students.

The search terms used.

The preliminary search included the following search phrases: first-year experience and first-year seminar. The evaluator then conducted more targeted searches using the Boolean operator 'AND'. These search phrases included the preliminary search terms first year experience; first year seminar; first-year experience program*; and first year program* supplemented with the following terms: AND evaluation; AND content; AND impact; AND activities; AND (best practice); AND effect; AND retention AND (higher education); AND (blended learning); AND outcomes; AND impact; AND theory; AND implementation; AND (high impact); AND (peer mentoring).

Assessment of relevance of retrieved articles.

Each of the articles were assessed for relevance by reading the abstract of each article and if necessary the whole paper. The evaluator used the inclusion and exclusion criteria to exclude papers which were not relevant to the literature review.

Evaluation question 3: What elements of the DC Programme theory could be modified to maximise the intended outcomes?

Step 5: Finalise the programme impact theory.

The final step of the logic analysis process consists of revising the programme theory (Tremblay et al., 2013). To do this, the evaluator identified best practices and design considerations for successful FYE programmes in the social science literature. An assessment was made whether these best practices and design considerations were incorporated into the design of the DC Programme. These components were incorporated into the final reconstructed programme theory diagram.

Method for the needs assessment

Evaluation question 4: What are the personal, academic and social needs of first-year university students in a South African context?

The data collection tool.

The evaluator identified that data in the reflective assignments completed by first-year Commerce students in the 2019 cohort were relevant to the underlying personal, academic and social needs of first-year university students. Thus, these reflective assignments were analysed for the needs assessment. The assignment questions were devised by the DC Programme convenor. It was intended that students reflect on their first-year of university in general and not specifically on their experience of the DC Programme. The reflective assignment included the following broad questions:

- What have you learnt about yourself, as a result of your academic or other experiences?
- How have you grown as a student (and/or person) as a result of these experiences?
- Has your first-year had a positive or negative impact on your life?
- Looking at the choices you have made do you think these are good choices?

Sampling.

The evaluator was granted access to the total number of reflective assignments ($n = 1019$) submitted by first-year Commerce students. The needs assessment aimed to identify the high-level personal, academic and social needs of students (irrespective of their Commerce

degree of choice or whether they were mainstream/EDU students). Thus, a random selection of these reflective assignments was considered a suitable sampling method.

According to the literature, a saturation sampling model is usually used as a methodological principle to determine sample size for qualitative research (Trotter, 2012). This saturation sampling should be operationalised in a way that is in alignment with the research question (Saunders et al., 2018). Based on these findings as well as practical considerations, a total of $n = 100$ reflective assignments were randomly selected by using the unique number generator feature on Microsoft Excel.

Procedure and data analysis.

After the reflective assignment files were imported into the NVivo 12 qualitative software, the evaluator conducted a word search query of the 100 most frequently mentioned words in the data. This word search query allowed the evaluator to identify broad themes in the data. The word search query also generated a word cloud (p. 74) , i.e. a graphical representation of the most frequently mentioned words.

Text search queries were then conducted on several of the most frequently mentioned words in the word cloud to identify the references which included these words. The results of these text search queries also generated a word tree. The evaluator then examined the context of these words in the data by selecting the branches on the word tree.

The evaluator identified three broad areas which served as a framework for analysing this data for the needs assessment, which included:

- The main challenges reported by students regarding their first year at university.
- The main strengths reported by students regarding their first year at university.
- The types of services or support most needed by students.

If the references forming part of the word tree focused on any of the three areas listed above, the evaluator categorised it as a “node” on NVivo. A “node” is a collection of references within the data that relate to a specific theme. A node can either be categorised as a parent node

or a child node. A parent node represents a main theme, while a child node represents a sub-theme related to a parent node.

Once all the relevant data was coded, the evaluator refined the codes by assessing whether the data correctly related to a specific parent node or child node and made corrections where necessary. Thereafter, a code book¹ was then finalised on NVivo.

Several key themes emerged from the reflective assignments and are reported in the needs assessment results chapter. Groundedness is a numerical value which indicates how many quotations are associated with a particular theme. The groundedness score for the key themes were presented in the results of the needs assessment. According to Maxwell (2010) the use of numerical data in qualitative research helps to adequately show evidence for interpretations.

Method for the M&E framework

Evaluation question 5: What needs to be incorporated into the M&E framework for the DC Programme?

The stakeholder that was involved in the design of the M&E framework was the DC Programme convenor. The programme convenor was chosen as she is responsible for the overall management and coordination of the programme; is a co-creator of the programme; and is responsible for the training of case study facilitators. The programme convenor was also selected as the “champion” for the M&E framework as she has the most influence to prioritise data collection and implementation of the framework. The DC Programme convenor was asked to sign an informed consent (Appendix E). The procedure that was used to outline the M&E framework was a modified five-stage process proposed by Markiewicz and Patrick (2016):

Stage 1: Clarification of the purpose of the framework.

The requirements for the design of the M&E framework, the availability of funds and human resource capacity were clarified with the programme convenor. The evaluator also

¹ A codebook is a list of the nodes and the associated descriptions

clarified the expectations and preferred approach for the M&E framework and established how stakeholders would be engaged at various stages of the development of the framework. The selection of stakeholders was determined through a stakeholder mapping process. The stakeholders who were not actively involved in the development of the M&E framework but may have an interest in the findings and reports were also identified.

Stage 2. Developing key constructs and evaluation questions.

The evaluation questions developed were in accordance with the Development Assessment Committee (DAC) criteria². The DAC criteria is based on the notion that evaluation is an assessment of the appropriateness, efficiency, effectiveness, impacts and sustainability of an intervention. The appropriateness domain deals with the extent to which the intervention is suitable for the target population, priorities and funders (DAC Network on Development Evaluation, 2010). Efficiency refers to the extent to which an intervention has been implemented to reach its intended objectives. The effectiveness domain is an assessment of the quality of the intervention and focuses on the extent to which the intervention has achieved its objectives. The impacts are the positive and negative outcomes as a result of the intervention which are either direct or indirect. Sustainability refers to the degree to which the intervention has ongoing benefits (DAC Network on Development Evaluation, 2010).

The DC Programme theory logic was used as a reference point to generate evaluation questions for the five evaluation domains. For instance, the assumption that all first-year Commerce students are enrolled in the programme (presented in the programme logic) informed the appropriateness question, “*To what extent was the DC Programme reaching the target population?*” The outcomes (including shorter and intermediate) presented in the programme theory and logic was used to inform questions around the effectiveness domain (Markiewicz & Patrick, 2016). The outputs indicated in the programme logic was used to inform questions for the efficiency domain. The longer-term outcomes in the programme theory were used to inform questions around impact and sustainability (Markiewicz & Patrick, 2016).

² DAC is an organisation that has defined approaches to performance monitoring and evaluation

Stage 3. Development of the monitoring and evaluation plans.

The monitoring plan outlines what is going to be monitored against the implementation and outcome evaluation questions (Markiewicz & Patrick, 2016). The first step in the monitoring plan was to decide on what will be monitored to assist in answering each of the evaluation questions. The evaluator first worked independently and used the DC Programme theory and logic as a reference point to compile a list of potential outcomes to monitor as well as indicators and targets for these outcomes. The evaluator then facilitated a meeting with the DC Programme convenor and enquired which outcomes should be prioritised and whether the indicators and targets were accurate. The evaluator also worked with the DC Programme convenor to identify suitable monitoring data sources. The evaluator asked a few open-ended questions to guide this process (e.g. *How would you measure this outcome? Does the measure clearly show that the outcome has been achieved?*).

The evaluator used the evaluation questions which focused on implementation to develop implementation indicators (Markiewicz & Patrick, 2016). The evaluator then had to ascertain whether the implementation and outcome indicators were meaningful and easy to understand. The evaluator worked closely with the convenor to decide on targets which would be set and who would be responsible for each implementation monitoring process. In addition, the evaluator asked the programme convenor questions about suitable timeframes for data collection and clarified the capacities and skills of programme staff to conduct monitoring.

The evaluator compiled the evaluation plan independently. During a meeting with the programme convenor the evaluator did, however, clarify the preferred evaluation approach for each of the evaluation questions.

Stage 4: Data collection, data management and analysis.

The evaluator first worked independently to identify the most suitable data collection methods, sampling and analysis procedures, as well as how ethical considerations would be maintained for the evaluation plan. The data collection and data management and analysis plan tabulated information on the data collection tools, the sampling, data analysis procedures, as well as staff training requirements for the monitoring plan (Markiewicz & Patrick, 2016). These plans were presented to the DC Programme convenor for final endorsement.

Stage 5. Approaches to reporting and dissemination.

The evaluator compiled a reporting and dissemination plan which included the type of evaluation reports to be disseminated, the due date of these reports, the audience for the different reports, as well as considerations regarding the types of reporting. These plans were emailed to the DC Programme convenor to provide an opportunity for feedback and final endorsement.

Ethical considerations

The DC Programme convenor consented (in writing) to provide access to relevant programme records (including the reflective assignments) and engaging in the evaluation process (Appendix F). Ethical clearance was obtained from the Faculty of Commerce Ethics in Research Committee prior to data collection (Appendix G). Clearance from the Director of Human Resources was also sought (Appendix H).

Informed written consent was sought from the different stakeholders (UCT staff members) involved in the theory evaluation and the development of the M&E plan (the DC Programme convenor, co-convenor and co-creator of the programme, thereafter referred to as participants) prior to face-to-face engagements. Each participant received a copy of the informed consent form following a verbal explanation of the nature and purpose of the engagement (structured discussion to elicit the programme theory, programme logic and development of the M&E plan), as well as their rights as participants (voluntary participation, withdrawal from the engagement at any point without any penalty). The structured discussions were audio-recorded only if all participants indicated their consent in writing. The audio-recordings were deleted once transcripts were generated. Personal identifiers were removed during the transcription process. Only the evaluator and her supervisor had access to the password-protected transcripts, saved on the evaluator's personal computer. The evaluator referred to the transcripts for the sole purpose of ensuring that all stakeholders' input had been adequately captured in the first draft of the programme theory. Once the programme theory and programme logic had been validated, the transcripts were discarded.

The reflective assignments for the needs assessment were downloaded from the Vula site using the bulk download option. The relevant files in the download folder were relabelled using standardised naming conventions. Any personal identifiers (such as student name and

student numbers) were removed from the original file name and document. Reflective assignments which were not randomly selected for analysis were immediately discarded, while those that were retained for analysis were password-protected. Any quotes used in the dissertation were not linked to any students.

This chapter described the methodology used for the theory evaluation, needs assessment and the M&E framework as well as the ethical considerations. The following chapter presents the results and discussion of the theory evaluation and the needs assessment. The M&E framework is also outlined in this section.

Chapter Five: Results and Discussion

This chapter is divided into three sections. The results and discussion of the theory evaluation is first presented, followed by a discussion of the key findings that emerged from the needs assessment. The chapter concludes with a presentation of the Monitoring and Evaluation (M&E) framework developed for the Discover Commerce (DC) Programme.

Programme theory evaluation results

This section presents the results of each of three distinct phases of the programme theory evaluation. The first phase of the theory evaluation consisted of eliciting the initial DC Programme theory from key stakeholders. An overview of the DC Programme theory is provided followed by a variable-oriented programme theory diagram. The programme theory (Figure 3) indicates how the DC Programme activities lead to both the short-term and long-term outcomes of the programme.

A programme logic was also developed using Markiewicz and Patrick's (2016) model. The DC Programme logic (Figure 4) unpacks the theory further by mapping out how the inputs, activities and outputs lead to the short-term, intermediate and long-term outcomes. The programme logic also specifies the assumptions and external factors of the DC Programme. This programme logic was used as a reference point to develop the evaluation questions, indicators and targets for the M&E framework.

The second phase of the theory evaluation consisted of a plausibility assessment. The evaluator used a three-step approach. The results of each of these steps are presented. Firstly, the evaluator discussed whether or not the activities of the DC Programme were consistent with those found in other FYE programmes in the social science literature. Secondly, the evaluator discussed whether the outcomes of the DC Programme were in alignment with those found in other FYE programmes.

Thirdly, the evaluator reported on whether the causal linkages evident in the DC programme theory were consistent with the literature on other FYE programmes. The reasoning is that if the DC's activities, outcomes and causal linkages are similar with other FYE programmes then the DC's programme design can be considered as plausible. As part of the third phase, design considerations and best practice principles associated with effectively implemented FYE programmes are discussed. An assessment was made whether the DC Programme has incorporated these elements into the design of the programme. This

enabled the evaluator to provide recommendations on how the DC Programme theory could be strengthened.

Evaluation question 1: What are the assumptions that underlie the DC Programme?

The development of the initial theory and logic underlying the DC Programme took place during a structured discussion session. The key stakeholders who participated in the discussion included the DC Programme convenor, the co-convenor and the co-creator of the programme. To gain an understanding of the underlying narrative for the DC Programme theory, the evaluator asked the key stakeholders about the main needs of first-year Commerce students that the DC Programme was aiming to address. The stakeholders reported that the main needs include:

- The lack of student integration across different disciplines during the first-year of university.
- First-year students struggle to apply the basic concepts learnt during first-year courses to real-life situations.
- First-year students have limited exposure to specialisation subjects.
- First-year students lack social capital to integrate into university.
- First-year students lack academic and career development skills to adequately prepare for university.

The programme stakeholders held the view that the broad long-term goals of the DC Programme are: (a) to develop successful students in their first-year at university which, in turn, provides a strong foundation for their future years at university and their careers after university (individual level change); and (b) to maximise integration across the different disciplines (institutional level change).

In order to achieve the long-term goals of the DC Programme the following inputs must be available:

- Funding for programme staff salaries
- Marketing material
- Trained case study facilitators

- Facilitator training and workshops with Commerce faculty staff for the Commerce Case Study
- DC Programme convenor and co-convenor
- Creators of the programme
- Graphic designers and online developers of the Commerce Toolkit.
- Vula specialists for the creation of the Commerce Toolkit.

In terms of the activities, the evaluator elicited that the DC Programme has two main components (the Commerce Toolkit and the Commerce Case Study) each consisting of distinct activities. The Commerce Toolkit consisted of various online self-development and career-development activities. In addition to the online Commerce Toolkit modules, students have to complete an individual reflective assignment. The Commerce Case Study consisted of various face-to-face group work activities, which were coordinated by the case study facilitators. In addition, one of the Commerce Case Study activities was integrated into the Accounting first-year course. Students were also provided with peer mentoring by their case study facilitators.

The main outputs identified were: 1,124 students enrolled in the DC Programme; three Case Study group sessions; the number of reflective assignments submitted; one accounting assignment completed for the Commerce Case Study component; the number of Commerce Toolkit modules released on Vula and the number of course evaluations completed.

While eliciting the short-term outcomes for the different activities of the DC Programme it became apparent that some of the activities had overlapping outcomes. For instance the reflective assignment, the online self-development activities (e.g. study skills) and the career development activities (e.g. UCT Careers Service information) were expected to increase self- and career-development skills and knowledge, as well as an enhanced sense of identity and academic confidence. The Commerce Case Study group work and the business case study challenges were expected to result in enhanced integration of subject matter; knowledge of how university courses relate to real-life business situations, improved group work skills and enhanced student engagement. Shared outcomes imply that although each activity of the Commerce Toolkit and Commerce Case Study had a particular focus, each activity formed part of a multi-dimensional approach to produce students who are well supported and prepared for their first-year academic and social transitions.

If the short-term outcomes were achieved, it was expected that intermediate outcomes would follow. These include: reduced unfamiliarity about different courses; a more engaged student culture and improved academic performance.

These intermediate outcomes were, in turn, expected to result in a university environment where there was strong disciplinary integration, increased graduation rates, and students who are confident to capitalise on their university experience. The achievement of these outcomes would result in effective graduates in positions taken up after university.

The stakeholders also identified several factors necessary for programme success. Firstly, all first-year Commerce students should be enrolled into the DC Programme. Students must also have self-agency to engage in all aspects of the DC Programme. Thirdly, case study facilitators should have adequate skills and be trained to deliver the Commerce Case Study sessions efficiently.

There are various external factors which were identified by the stakeholders. The first relates to the availability of financial resources such as funding for staff salaries, marketing, and development of the DC Programme. Another external factor refers to the availability of human resources (e.g. trained case study facilitators). University activism (e.g. student protests) or events may also impact how students prioritise participation in the DC Programme. Furthermore, individual factors such as personal challenges, social and cultural factors may also impact how students prioritise their participation in the DC Programme. Finally, the expected curriculum workload over and above that of the DC Programme may also impact the students' level of participation and commitment to the programme.

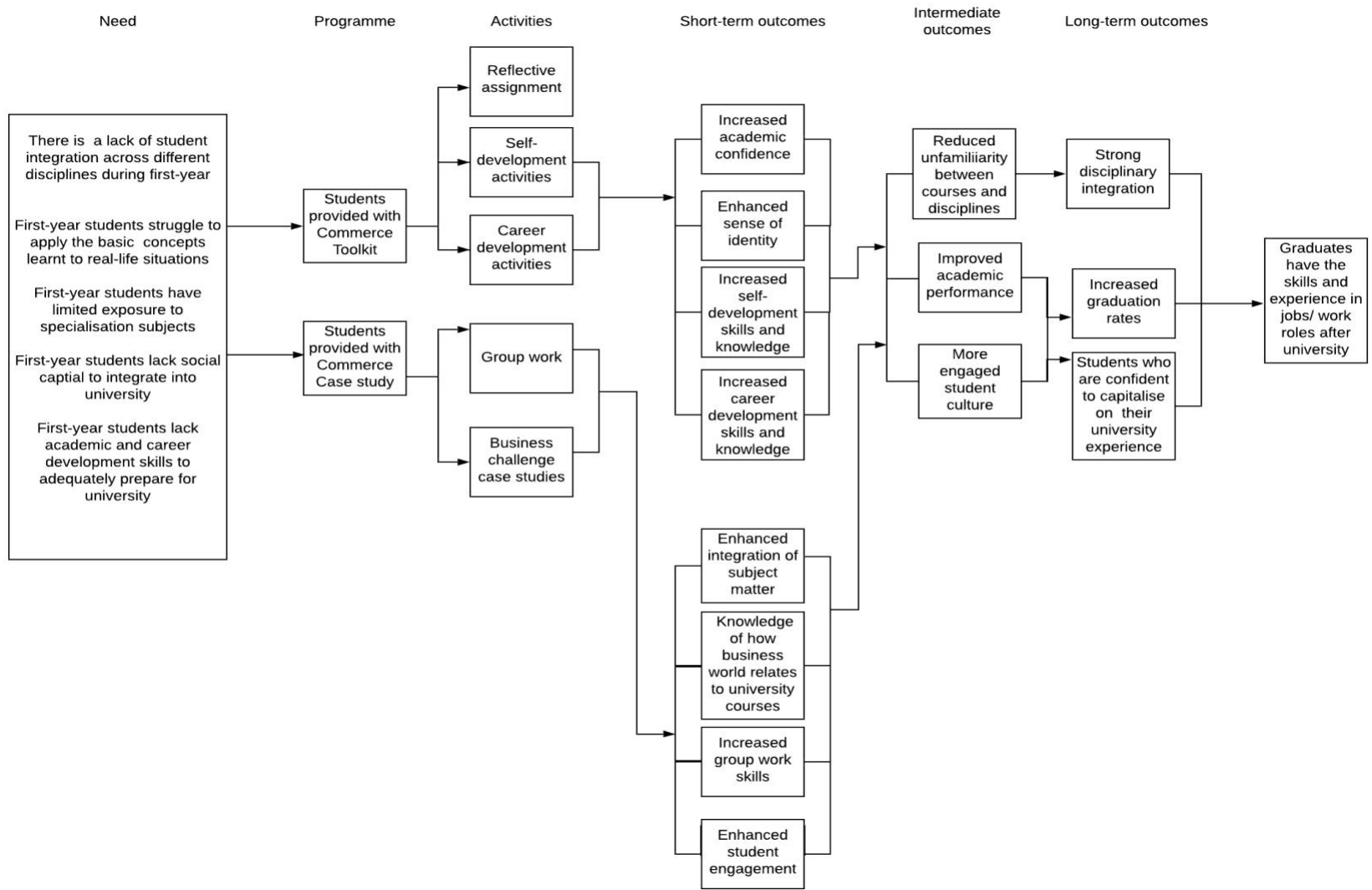


Figure 3. Initial DC Programme theory

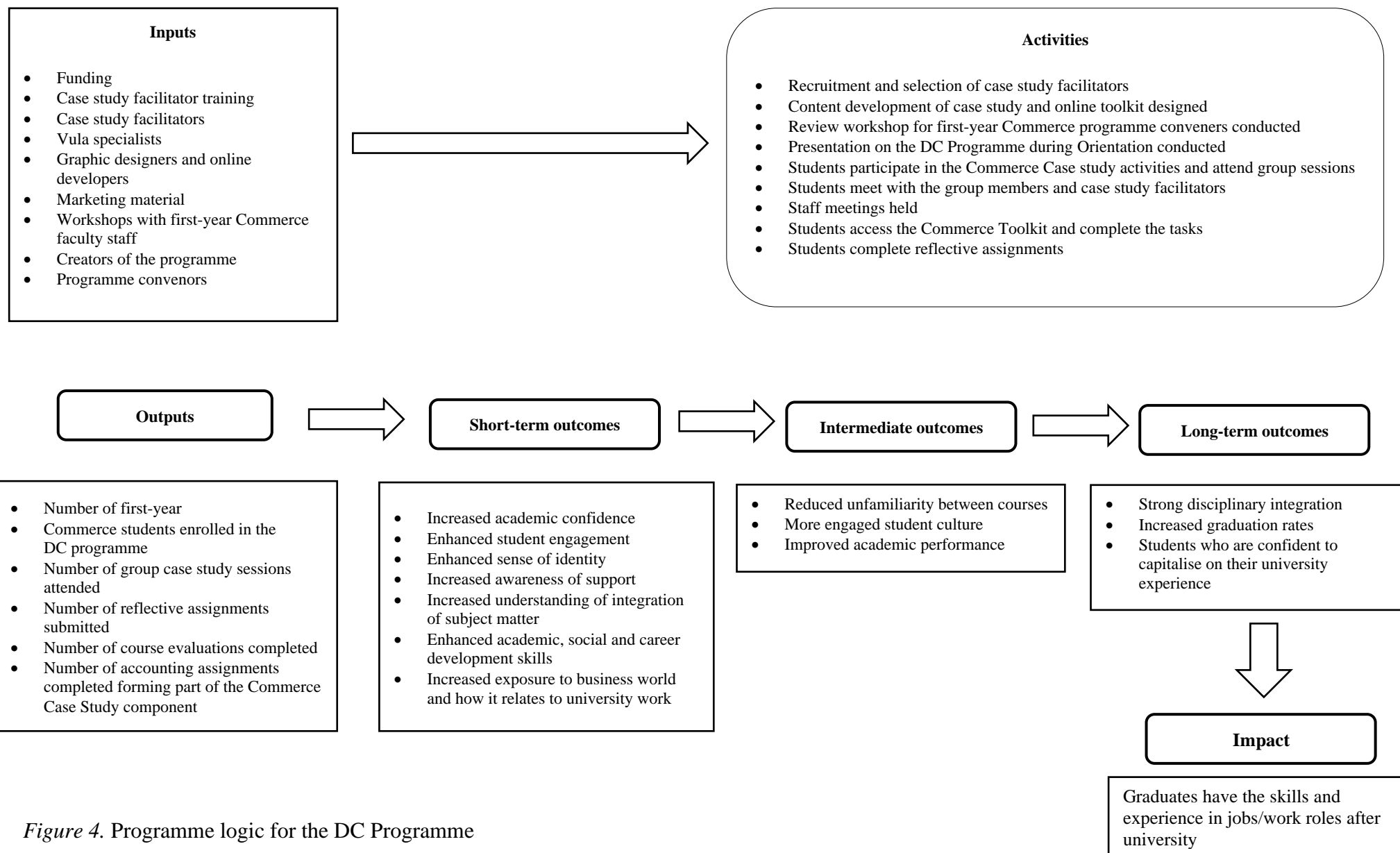


Figure 4. Programme logic for the DC Programme

Assumptions

- Students have self-agency to engage in all aspects of the DC Programme
- All first-year Commerce students are enrolled in the programme
- Case study facilitators have adequate skills to deliver the Commerce Case Study sessions

External factors

- Availability of funding for staff salaries, marketing and development of the DC Programme
- Availability of resources (e.g. trained case study facilitators)
- Individual life challenges, social and cultural factors which may impact how students engage in the DC Programme
- University activism or events which may impact how students prioritise the participation in the DC Programme
- Expected curriculum workload over and above that of the DC Programme may influence students' level of participation and commitment to the programme.

Figure 4. Programme logic for the DC Programme

The initial DC Programme theory (Figure 3) and logic (Figure 4) were presented to the stakeholders. Overall, the stakeholders were in agreement with both the programme logic and programme theory as well as the underlying assumptions of the programme. Minor additions were requested, more specifically adding *mentoring* as a separate activity under the Commerce Case Study component and *increased support and guidance* as a short-term outcome. Mentoring was deemed to be an important activity as it provides additional individual face-to-face support to students throughout the academic year. Stakeholders are also motivated for the inclusion of *retention* as an intermediate outcome, as increased academic performance alone may not represent academic success.

The proposed revisions are incorporated in Figure 5 and are highlighted in blue.

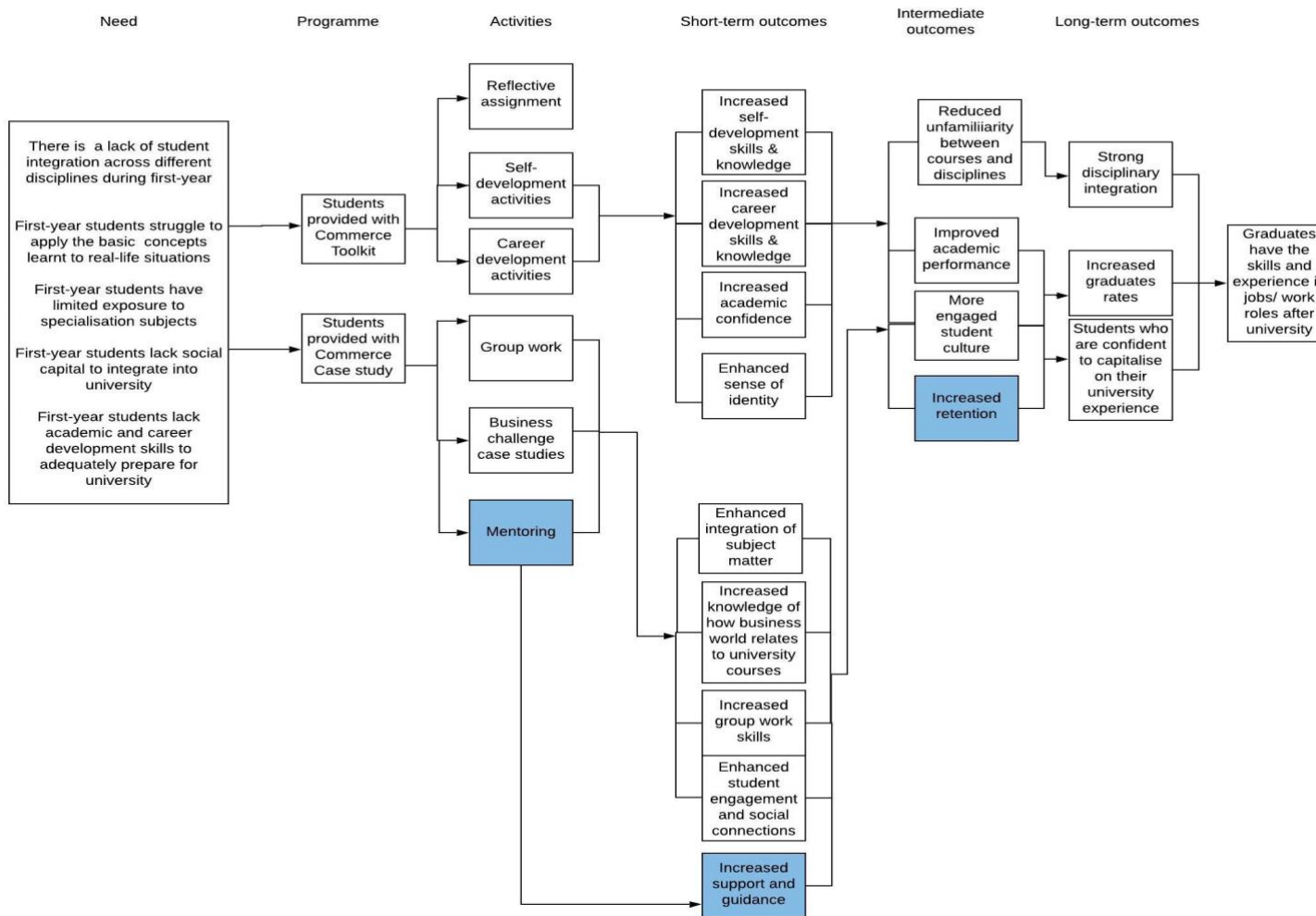


Figure 5. Final draft DC Programme theory

Evaluation question 2: Is there evidence that the DC Programme’s activities, outcomes and causal linkages are plausible?

This section reports on the plausibility assessment of the DC Programme theory depicted in Figure 5. As part of the plausibility assessment, the evaluator examined the activities, outcomes and causal linkages of the DC Programme in relation to the best practice literature on FYE programmes and provided recommendations (where necessary) on how to strengthen the connection among the different elements of the programme theory.

Plausibility of the activities of the DC Programme theory.

In line with the best practice literature, FYE programmes have various goal-directed and structured activities (Ben-Avie et al., 2012; Kim & Schumaker, 2015). These structured activities often include group work and focus on developing skills and knowledge that assist first-year students to cope with their transition from high school to university (Stebbleton, Jenson, & Peter, 2010; Wismath & Newbury, 2019).

The DC Programme comprises structured activities, consistent with the literature. For instance, the programme is made up of 13 topics for the Commerce Toolkit component which consists of a variety of self-assessments and reading material. Each module is released individually and is aligned with the curriculum of first-year Commerce students. For example, the *How to Study* module was released before the mid-year examinations. DC Programme activities are also goal-directed. For instance, the Commerce Case Study groups are structured in a way that encourages collaboration among students of varying disciplines and backgrounds. The intention with these group sessions is that students improve their group work skills, enhance student engagement and social connections as well as increased knowledge of how first-year Commerce courses relate to the business world.

The content of the activities of the DC Programme was also assessed against literature on programmes of a similar nature. The evaluator categorised the content of the DC Programme into six main skills development activities, focusing on institutional awareness skills, socio-emotional skills, general academic skills, collaborative group work, peer mentoring and problem-solving challenges. All of these focus areas and activities are discussed in the best practice literature. Table 2 summarises the different activities/focus areas of the DC programme, and provides references that support their relevance.

Table 2

Summary of plausibility assessment of activities similar to the DC Programme

Content of activity/ component	Description of activity/ components	Academic sources
Institutional awareness	Activities that provide information on campus resources to familiarise students with the university environment.	Adam, Hartigan, & Brown, 2010; Howard & Jones, 2000; Schrader & Brown, 2008
Socio-emotional skills	Activities that relate to soft skills development e.g. improving the psycho-social wellness and self-reflection.	Conley, Travers, & Bryant, 2013; Shircore, Galloway, Corbett-Jarvis, Ryan, & Cook, 2013; Tooker, Richardson, Preskill, & Esser, 2015
General academic skills	Activities that provide opportunities for students to learn effective academic skills such as time management, study skills and career development of the student to prepare for tertiary education.	Adam et al., 2010; Clark & Cundiff, 2011; Jenkins-Guarnieri, Horne, Wallis, Rings, & Vaughn, 2015; Turner et al., 2017
Collaborative group work	Activities that are conducted in small groups with tasks which are thematic, inter-disciplinary and have a focus on fostering group work skills.	Jamelske, 2009; Murray & Wolf, 2016; Pike, Hansen, & Lin, 2011; Wakefield, Knezek, & de Piñeres, 2016
Peer mentoring	A peer mentor providing advice and practical support to first-year university students.	Collings, Swanson, & Watkins, 2014; Holt & Berwise, 2012; Hope 2016; Lamar & Ingamells, 2010; Yomtov, Plunkett, Efrat, & Marin, 2017
Problem-solving challenges	Activities related to developing students' problem-solving skills.	Ben-Avie et al., 2012; Schrader & Brown, 2008; Summerlee & Murray, 2010

It is clear that the focus areas and activities of the DC programme are consistent with existing literature on effective FYE programmes.

Plausibility of the outcomes of the DC Programme theory.

Multiple studies have demonstrated that FYE programmes play an important role in developing skills and knowledge associated with first-year student success (See Table 3). The intended outcomes of the DC Programme are consistent with the outcomes associated with effective FYE programmes (Table 3).

Table 3

Summary of plausibility assessment of outcomes similar to the DC Programme

Outcome	Academic sources
Increased knowledge and utilisation of university resources	Al Sheeb, Abdulwahed, & Hamouda, 2017; Cox, Schmitt, Bobrowski, Graham, & 2005; Jamelske, 2009
Increased retention	Ben-Avie et al., 2012; Clark & Cundiff, 2011; Hotchkiss, Moore, & Pitts, 2006; Huff & Burek, 2016; Pike et al., 2010; Potts & Schultz, 2008,
Increased academic performance	Clark & Cundiff, 2011; Jacobs & Pretorius, 2016; Klatt & Ray, 2014; Noble, Flynn, Lee, & Hilton, 2007
Student engagement and integration	Al Sheeb et al., 2017; Ben-Avie et al., 2012; Jessup-Anger, 2011; Turner et al., 2017; Weisler & Trosset, 2006

As the four main groups of outcomes were found in other comparable programmes, the intended outcomes in the DC's Programme theory are deemed to be realistic.

First-year student success can be defined as a multi-dimensional concept that incorporates passing a degree, successful social integration and developing critical thinking skills that can be used throughout university. To further interrogate the plausibility of the activities of the DC Programme theory, the evaluator assessed whether the activities were in alignment a conceptual framework for first-year student success developed by van Der Zanden, Denessen,

Cillessen, and Meijer (2018). This framework was selected as it provides a holistic view of measuring student success.

This framework includes domains, predictors and variables of student success first-year university level. The domains captured in this framework include academic motivation, socio-emotional well-being and critical thinking (Figure 6). In this framework, the educational psychological variables are associated with academic motivation, psycho-social variables with socio-emotional well-being, and learning environment variables with critical thinking.

According to van Der Zanden et al. (2018), certain predictor variables are relevant to more than one domain of first-year student success. For instance, participation in special first-year programmes are found to contribute to success in all three domains.

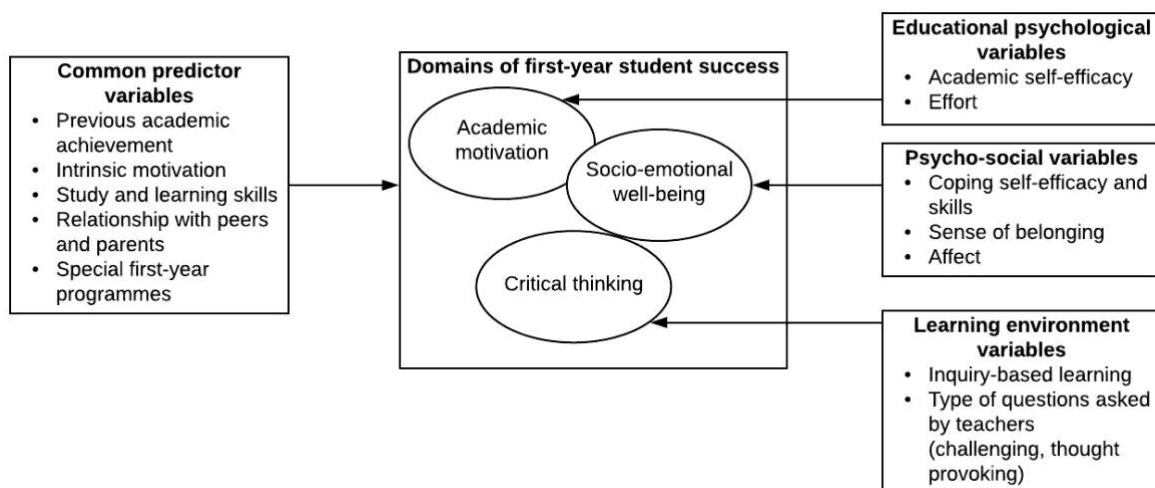


Figure 6. Conceptual model of first-year success indicating the three recurring domains (Adapted from van Der Zanden et al., 2018, p. 73).

In order to facilitate an assessment of whether the DC Programme could realistically expect the positive outcomes captured in Figure 6, the evaluator plotted the activities of the DC Programme onto this model.

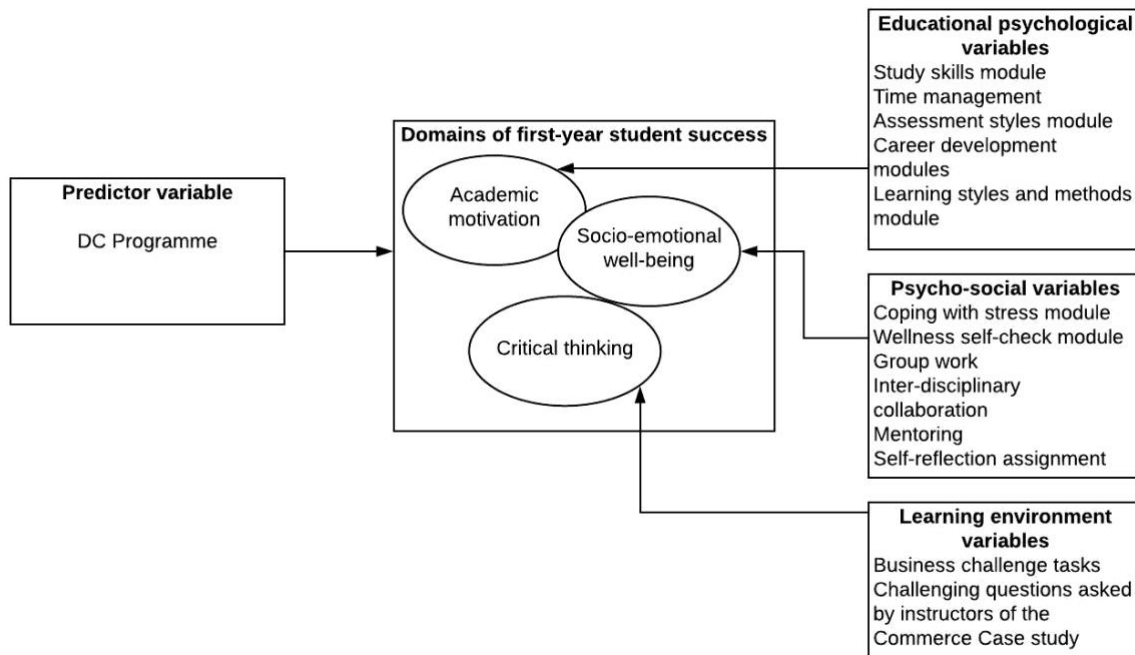


Figure 7. DC Programme components incorporated into conceptual model of first-year success indicating the three recurring domains (Adapted from van der Zanden et al., 2018, p. 73)

Figure 7 graphically presents that the various DC Programme activities (listed under the educational psychological variables, psychosocial variables and learning environment variables) are consistent with the model proposed by van Der Zanden et al. (2018).

Causal links between the programme activities and outcomes.

This section of the plausibility assessment assessed the causal links between the DC Programme activities and outcomes.

A common element of FYE programmes is to incorporate activities related to institutional awareness, for example providing information on campus resources (Hope, 2016; Schrader & Brown, 2008). Through the provision of these types of activities first-year students are able to develop motivation for university, study skills and self-regulated learning (Permzadian & Credé, 2016). These positive effects should then result in increased persistence and retention (Clark & Cundiff, 2011). In this regard, the DC programme theory is consistent with the literature, as the programme’s causal logic states that activities related to institutional awareness (grouped under self-development activities) would lead to increased self-development skills and knowledge. These outcomes are then expected to result in enhanced academic performance and retention of students.

FYE programmes often incorporate group work in the form of classroom-based activities known as first-year seminars. Studies have shown that the interpersonal skills developed through group activities help in improving retention, better academic performance and graduation rates (Alsheeb et al., 2018; Klatt & Ray, 2014; Miller & Lesik, 2014; Pittendrigh, Borkowski, Swinford, & Plumb, 2016). Group work tasks also contribute to individual soft skills development such as greater academic confidence (Foote, 2010; Summerlee & Murray, 2010). The DC Programme's causal logic is consistent with the literature in that it also indicates that group work leads to a range of interpersonal skills which is expected to result in enhanced retention, better academic performance and improved graduation rates. The connection between the group tasks and the individual soft skill (e.g. increased academic confidence) was, however, not explicitly made in the DC Programme theory. It is recommended that the connection between the group work component and this positive outcome be made.

Mentoring has been incorporated into many initiatives for first-year university students (Carragher & Mcgaughey, 2016; Chester, Burton, Xenos, & Elgar, 2013). Some first-year seminars have instructors providing mentoring roles to enhance support, academic and social integration as well as a sense of belonging (Holt & Berwise, 2012; Huff & Burek, 2016; Pernzadian & Credé, 2016). These outcomes would, in turn, enhance retention among first-year students. The DC Programme's causal logic also indicates a link among mentoring, academic and social support, as well as retention.

To conclude the causal linkages between most of the activities in the DC Programme were deemed plausible. It is recommended that a connection needs to be made between group work tasks and increased academic confidence.

In summary, the DC Programme is based on the following theory: providing a broad range of support to first-year students will provide them with the necessary skills and knowledge to succeed in their first-year of study. Participation in self-development and career development activities as well as group work activities would result in a range of positive outcomes for students including increased academic confidence and student engagement as well as enhanced integration of subject matter. These outcomes would, in turn, result in outcomes such as increased retention and academic performance. The plausibility assessment found an alignment between the activities and the intended outcomes of the DC Programme when compared with similar programmes. The causal linkages in the DC Programme theory were broadly consistent with those of other FYE programmes. Thus, the DC Programme theory can be considered plausible.

Evaluation question 3: What elements of the DC Programme theory could be modified to maximise the intended outcomes?

Design considerations.

There is consensus in the literature that the effectiveness of FYE programmes are dependent on the extent to which the programme has incorporated high-impact practices and design considerations associated with successful FYE programmes (Keup & Young, 2017; Kuh & O'Donnell, 2013; Padgett, Keup, & Pascarella, 2013). These design considerations and high-impact practices (also referred to as best practices) include, a) appropriate staff recruitment, training and support, b) content and grading of assessments, c) dosage and structure, and d) quality of programme staff-student relationship. Each one of these design considerations and best practices is explained and discussed below.

Appropriate staff recruitment, training and support.

The main implementers of FYE programmes are instructors of face-to-face sessions referred to as first-year seminars. HEIs use instructors with differing levels of experience to facilitate first-year seminars, with some relying on university lecturers and administrative staff while others use graduate and senior undergraduate students as instructors (Permzadian & Credé, 2016). The literature suggests that programmes that recruit lecturers and administrators to facilitate the seminars are more likely to create effective student engagement opportunities than those seminars that rely on graduate instructors (Bordelon, Sexton, & Vendrely, 2019; Keup & Young, 2017; Permzadian & Credé, 2016).

Research has also shown that academic staff in FYE programmes are an important component of successful programmes of this nature. For instance, studies have highlighted that active engagement of academic staff in first-year seminars allows for higher levels of student-staff interaction, less anxiety around class participation and higher satisfaction ratings for relationships with staff (Foote, 2010; Porter & Swing, 2006). Other studies have also shown that academic staff teaching first-year seminars has a positive influence on satisfaction with teaching and a gained sense of community with other academic staff (Murray & Wolf, 2016; Willis & Allegretti, 2013).

These findings suggest that the DC Programme does not meet the requirement of relying on the most appropriate staff for the first-year seminar component. Although the programme had extensive academic staff involvement during the conceptualisation and design of the programme, these staff members have limited involvement in the implementation of the first-year seminar component of the course. The DC Programme relies on case study facilitators (who are third-year undergraduate students) to coordinate the three Commerce Case Study group sessions.

It should be noted, however, appointing undergraduate students as peer mentors in FYE programmes is considered an educationally effective practice (e.g. Campbell & Hublitz, 2017; DeLuca, Clark, Walters, & Tawil, 2017). In a mixed-methods study, Flores and Estudillo (2018) found that peer mentoring in a FYE programme was effective in enhancing social and academic integration, university involvement and sense of belonging. Similarly, an experimental study on the effectiveness of a peer mentoring programme for first-year university students found that students who had peer mentors felt significantly more integrated and connected to the university than a group of first-year students who were not mentored (Yomtov et al., 2017).

The DC Programme does incorporate peer mentoring into the programme. All first-year Commerce students enrolled in the DC Programme are assigned a peer mentor to assist with transitional challenges.

Literature has shown that training and ongoing support for instructional staff contributes to the efficacy of first-year seminars (Bordelon et al., 2019). Effective training incorporates a strength-based approach where instructional teams are encouraged to build a learning community, engage in discussions on how they would utilise their own strengths to overcome potential challenges, and also develop a schedule to manage first-year seminars (Smith & Barrett, 2018). Training topics can cover themes around understanding the first-year student, diversity at the university, learning styles and workshops to familiarise the instructional team on the objectives of the programme (DeLuca et al., 2017). Ongoing staff development opportunities can include support in the form of instructor mentoring opportunities and regular meetings in addition to initial training (Young & Hopp, 2014). Smith and Barrett (2019) found that ongoing professional development was important as it enhances instructor confidence and responsiveness to the needs of first-year students.

In addition, studies have shown that building a sense of community and a supportive network are essential components for the retention of instructional staff for first-year seminars (Bordelon et al., 2019; Sobel, 2018). Building a sense of community amongst instructional staff increases the likelihood that staff are more motivated and engaged, which will, in turn, affect the quality of the FYE programme delivery and implementation (Bartell & Boswell, 2019; Mayo, 2013).

In the case of the DC Programme, all case study facilitators undergo compulsory training before they are recruited onto the programme and are provided with four formal meetings throughout the year. However, more can be done to create structured professional development opportunities for case study facilitators throughout the duration of the programme.

Programme content and grading of assessments.

FYE programmes that incorporate activities that facilitate collaborative student engagement and applied thinking have been identified as using high-impact educational practices (Kuh, 2008). These activities can include tasks and assignments where groups of students are provided with opportunities to apply knowledge and skills learnt during courses to real-life issues or professional settings (Skipper, 2017). Tinto (2017) argues that these types of problem-based learning tasks allow students to engage in an active learning environment and allow for closer interactions with peers and faculty staff.

Other high-impact activities in first-year seminars can include assessments and activities that provide structured opportunities for personal development and reflection (Keup & Young, 2017; Skipper, 2017). It has also been noted that real-world application is enhanced when first-year seminars include opportunities for reflection, experiential learning and personal challenge (Bell, 2012; Foote, 2010). In addition, it has also been reported that these types of engaging assignments help build confidence amongst students in the first-year seminar as well as in other courses (Foote, 2010).

The DC Programme has incorporated content into the programme that is consistent with best practice principles. For instance, the Commerce Case Study includes problem-solving tasks that require students to apply what they have learnt in their first-year courses to real-life business challenges. In addition, the Commerce Toolkit includes content that focuses on personal

development and self-reflection. The individual reflective assignment in the DC Programme also provides students with an opportunity to reflect on their overall experience of the first-year of university.

Another high-impact educational practice is to provide students with frequent and constructive feedback on assessments (Kuh & O'Donnell, 2013). It has been reported that programmes that provide opportunities for frequent feedback facilitate student engagement and help students to focus on learning - seen as essential components of improvement and growth (Tukibayeva & Gonyea, 2014). According to Padgett et al. (2013) providing frequent feedback to students facilitates feelings of comfort amongst first-year students as well as critical thinking. This feedback is usually in the form of grading of assignments and written feedback on assignments (e.g. Campbell & Hublitz, 2017; Cantwell & McCutchen, 2017).

A meta-analysis found that first-year seminars that have a letter-grading system are significantly more effective than first-year seminars that utilise a pass/fail system (Permzadian & Credé, 2016). Another study found that students in a first-year seminar indicated that A to F grading provided a form of extrinsic motivation to participate in the programme (Jessup & Anger, 2011). In addition, FYE programmes with content that focuses on campus resources, time management, learning strategies and career planning also include graded assessments on this content so as to communicate high expectations for students (Skipper, 2017).

Although the DC Programme is credit-bearing, the programme uses a pass/fail system and does not assign letter grades to the reflective assignment and written feedback for the three Commerce Case Study tasks with the case study facilitator. Although, students receive individual feedback for the one Commerce Case Study task that is incorporated into the Accounting first-year course. As research suggests that a FYE programme is more effective when it is letter-graded and where written feedback is provided, the DC Programme should incorporate these design considerations into the programme.

Dosage and structure.

According to Carrol et al. (2007), dosage is an integral aspect of implementation fidelity. The literature suggests varying doses for FYE programmes. Some intensive programmes are delivered over a semester, while the strongest dose of response is implemented in year-long

programmes (Keup & Young, 2017). Huff and Burek (2016) also report that frequent face-to-face interaction in a FYE programme was essential to students developing a sense of belonging and bonding with other students.

In terms of structure, according to Kuh & O'Donnell (2013) an educationally effective practice is to design FYE programmes in a way that provide students with opportunities for diversity. These include opportunities where students are encouraged to step outside of their routine environments and are exposed to diverse worldviews, practices and ideas through various activities (Everett, 2017; Tukibayeva & Gonyea, 2014).

In terms of the size of the first-year seminar classes, it has been reported that the student groups need to be small enough to allow for meaningful interaction (Keup & Young, 2017; Padgett et al., 2013). It also indicated that first-year seminar class sizes with fewer than 20 students was in accordance with good practice standards for class size (Young and Hopp, 2014). Franco, Hill, and Wesanen-Neil (2017) report that designing a first-year seminar with small class sizes provides students with opportunities to interact with instructors in a more intimate environment.

According to Foote and Mixson-Brookshire (2013), the success of first-year seminars with an online and face-to-face component is contingent on several design considerations. These include: 1) providing detailed information and course instructions on the requirements of students online and in-person, 2) clarification of online communication methods, and 3) differentiating between the communication that will occur online versus in a classroom setting. In addition, Glazer (2012) argues that creating opportunities for reflection in both face-to-face and online learning environments helps students to develop a deeper connection to the content of the programme. This deeper connection facilitates students' participation and engagement in discussions online and in face-to-face sessions (Glazer, 2012).

The DC Commerce Case Study group sessions include between seven and 10 students each which is in alignment with the recommended class size in the literature. The DC Programme has also been designed in a way that ensures that each group for the Commerce Case Study includes students from different academic disciplines and backgrounds. The programme does not, however, incorporate specific activities in these group sessions to enable students to experience diversity during these sessions.

The DC Programme meets most of the design requirements for an effective blended learning FYE programme. For instance, the DC Programme convenor developed detailed instructions on what the objectives and requirements are for each DC Commerce Toolkit module (online) and Commerce Case Study session (face-to-face). The DC Programme convenor also regularly interacts with students via email to remind them when a new module has been released. Although the reflective assignment does allow students to reflect on growth or change at the end of the course, students could be encouraged to engage in self-reflection activities throughout the duration of the programme to facilitate student engagement in online and in-class discussions.

Quality of programme staff and student relationship.

Another key design consideration is the quality of the relationship between students and programme staff. For instance, students who perceive FYE instructors as being respectful, approachable and available both in and outside of the class have higher academic confidence and motivation (Komarruju, Musulkin, & Bhattacharya, 2010). These positive interactions were found to be critical for the development of academic achievement (Komarruju et al., 2010). In addition, in a peer mentoring programme for first-year university students, student mentees who perceived their peer mentors as approachable, friendly and responsive were instrumental to having a positive mentoring relationship (Yomtov et al., 2017). Given that the attributes of programme staff influences the quality of the staff-student relationship, these programme staff need to be carefully selected and vetted to ensure that suitability can be thoroughly assessed (Huff & Burek, 2016).

Moreover, research has shown that poor quality relationships between programme participants and staff may have a negative impact on students. According to Ben-Avie et al. (2012) students develop motivation to succeed in university through their interactions with faculty staff and fellow peers. Students who do not develop these healthy relationships are more likely to become disengaged. Flores and Estudillo (2012), for example, found that mentees who did not manage to establish a close relationship due to conflicting schedules, lack of interest or not being a good mentee-mentor match were more likely to become disengaged in the programme.

In the context of the DC Programme, case study facilitators/peer mentors have direct and sustained contact with students. The programme is structured in a way that student groups and peer mentors/facilitators stay with the same group for the entire duration of the programme. This may allow students to have the necessary amount of interaction to establish quality relationships with

each other. Frequent interaction between peer mentors and students is seen as important to fostering high quality relationships (Holt & Fifer, 2018; Yomtov et al., 2017). As the DC Programme recruits case study facilitators through an open call for applications, the programme management staff may want to consider implementing a more careful selection and vetting process.

Given that these design considerations discussed above are important to the overall success of FYE programmes and for student outcomes, programme implementers need to take into account these factors when designing a FYE programme. The final programme theory of the DC Programme is presented in Figure 8 (green boxes) below and includes the critical reconstruction of the initial programme theory.

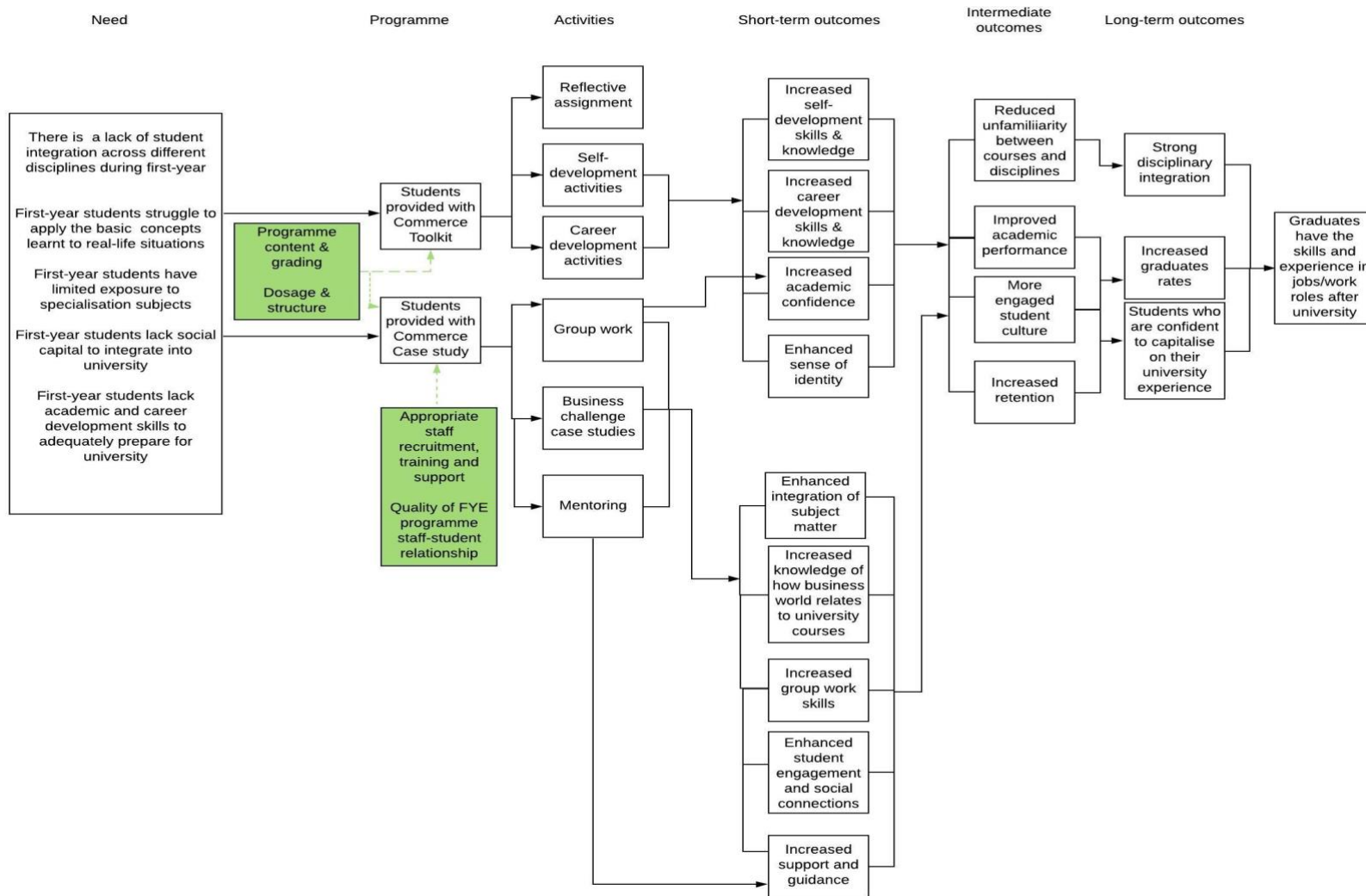


Figure 8. Final reconstructed Discover Commerce programme theory

word trees, where the evaluator examined the context of these words by selecting branches on the word tree (Appendix I).

If the references forming part of the word tree focused on challenges/strengths reported by students or types of services or support most needed by students, the evaluator categorised the data as a parent node (main theme) or child node (sub-theme) in NVivo. Once all the relevant data was coded, the evaluator refined the codes by checking the accuracy of the coding. Thereafter, the evaluator merged some of the parent nodes and re-categorised some codes as a child node. A code book was then generated in NVivo (Appendix J).

Following this process, five main themes, relating to the personal, academic and social needs of first-year students, emerged. These themes included 1) experiences of academic work at university, 2) the importance of student engagement, 3) mental health challenges, 4) self-growth and 5) exposure to disciplines and courses.

The *groundedness* score presented in the results indicates the number of quotations linked with a main theme. A high *groundedness* score indicates that there were many quotations that were associated with the theme. i.e. high relevance of the theme in the data.

Based on these findings, the evaluator assessed whether the stakeholders had correctly identified the needs of first-year Commerce students in the design of the programme.

Theme 1: Experiences of academic work at university.

Theme one refers to the various academic challenges and successes reported by first-year Commerce students [*groundedness score* = 220]. In the reflective assignments, 32 of the 60 students mentioned that they had experienced academic challenges related to managing the workload at university. In addition, 17 students reported challenges with time management in terms of meeting deadlines for assignments and tests, while seven students indicated that they were not aware of suitable study or learning methods. Examples of these academic challenges are presented below:

“The workload piled on, assignment after assignment, I was not used to this kind of workload, by the time I took a step back and looked at how my life was going, I had two judgements: I was not coping and I was not going to make it in this place.”

“I realised that I need to work on my time management because I found myself constantly doing things last minute when I had the potential to produce higher quality work.”

“I had to find a way to adapt to some of the changes but most importantly to allow change to take its course. Some of the reasons why I was struggling to adapt was because I was stuck in my old ways of studying.”

Fourteen students also reflected on how much their academic performance and workload at university differed to that of high school. The following quotations relate to this particular theme:

“The aspect of university that I definitely did not expect was the amount of work that needs to be done in order to achieve high marks is far greater than the amount of work that was needed in school.”

“Up until this year I had not had much experience with failure or having to work hard to do well and so found this year particularly challenging from that point of view.”

In contrast, 16 students seemed to have an awareness that their academic expectations would have to be different to that of high school. These students stated that they had learnt which study methods and learning techniques were most effective for them:

“I’ve learnt how that (sic) I’m most productive in the morning and with a routine. I need to plan my week ahead of time, get up early and catch the worm. Lecture videos do not work for me and I have to attend every lecture because if I don’t then there will be a blank space that I will not have time to fill because the coursework goes on. This has helped me a lot with time management and keeping organised.”

Twenty students discussed that they struggled with establishing a healthy work-life balance. These students either reported that they focused too much on their social lives and not on academic obligations; or indicated that they should have made more effort to get involved in social activities. Ten students felt that if they were involved more in extra-curricular activities or societies at university it may have helped them establish a better work-life balance.

In light of these findings, similar academic challenges were seen in studies of students at other South African universities. For instance, Jaffer and Garaway (2016) reported that first-year students often lacked appropriate study methods. In another study, Mukwevho (2018) found that

first-year students lacked time management skills due to stress and workload. These academic challenges reportedly contributed to their poor academic achievements.

It was evident that the DC Programme did address these academic challenges by allowing students to immerse themselves in academic experiences through the content provided in the Commerce Toolkit and the Commerce Case Study. The Commerce Toolkit includes modules focusing on study skills, learning techniques and time management. In addition, the Commerce Case Study exposes students to a range of problem-solving tasks which relate to Commerce first-year courses.

Theme 2: The importance of student engagement.

This theme related to students' varying perspectives of social experiences during the first-year of university and the importance placed on student engagement with their peers [groundedness score = 74]. Eight students noted that they struggled to open up to their peers and form friendships:

"I had to challenge myself to step out of my comfort zone and make new friends and connections. There were many moments I thought it would have been better to have stuck to the crowd, where my transition would have been easier and more manageable. After all, it is a daunting thought being alone in a city that you do not know well."

In contrast, 33 students noted their positive experiences with university staff and mentors, while others mentioned that they had established new friendships with other students. Twelve students also indicated that social interactions at university made them more confident in social settings and provide a means to gain academic assistance or emotional support.

In addition, 10 students were positive about being exposed to diversity. These students shared their positive experiences engaging with other students of different cultures, religions and backgrounds:

"...the time I spent at UCT has exposed me to a large variety of people each with their own distinct values, beliefs, goals and identities and as such I was able to develop – through trial and error – the skills needed for me to communicate effectively with such a diverse set of people."

Eight students mentioned that the DC Commerce Case Study groups provided opportunities to establish friendships with other students or contributed to an improvement in their social and communication skills.

Similarly, to the findings discussed above, other research also found that first-year students at other South African universities valued social and emotional support (Nel, Govender, Tom, 2016).

The DC Programme has partially addressed the need for student engagement. For instance, the Commerce Case Study sessions are meant to facilitate engagement amongst groups of first-year students. In addition, The Commerce Case Study groups are also structured in a way so that each group was made up of students from different Commerce disciplines and backgrounds. However, student engagement in the Commerce Case Study was academic-focused as the group sessions were centred around the business challenge tasks. Further student engagement could be encouraged by introducing a non-academic activity into the DC Programme.

Theme 3: Mental health challenges.

Theme three refers to the mental health challenges experienced by first-year students [*groundedness score* = 47]. Twenty students noted that the cause of their mental health challenges was due to factors such as living away from friends and family as well as challenges with adjusting to the academic demands at university. Furthermore, 13 students expressed that they were emotionally affected by the gender-based violence incidents, in particular the death of a first-year UCT student:

“The recent events of gender-based violence also caused major heartache for me due to the fact that I have many close friends that feel unsafe and I was also afraid of what might happen to them and also my sisters as they are not in the Western Cape.”

Seven students reported that they had developed coping strategies for their mental health challenges which included using stress management skills such as having a regular exercise routine.

Another recent study highlighted the significant rates of mental health issues/challenges amongst first-years students at several South African universities (Bantjies et al., 2019).

Although the DC Programme has several modules in the Commerce Toolkit that focus on strategies to reduce academic-related stress it does not provide direct mental health or student wellness support. Thus, the DC Programme may need to integrate with other UCT initiatives that promote student wellness and provide student counselling services.

Theme 4: Self-growth.

Theme four refers to students' reflections on their growth in different areas of their personal lives during the first year of university [groundedness score = 33]. Eighteen students indicated that they became more independent as it was the first time they were living on their own and taking responsibility for themselves:

“Not only have I adapted to cooking, cleaning and doing my washing, but I have found my way around Cape Town and the university.”

“In my personal life, I have really enjoyed the experience of living by myself which included learning to cook for myself, cleaning my room, doing all my washing all on top of my academic load.”

Four students mentioned that they improved their self-discipline in different areas of their lives such as their work and well-being:

“I’ve had to rely on myself for emotional support to keep me going even when academics were becoming really challenging. I’ve had to become more accountable to myself when it comes to making sure I meet all my deadlines, that I study sufficiently before tests and exams and just making sure I stay physically healthy.”

There are many things that I learned about myself such as how self-disciplined I really am. Attending lectures, going to hotseats takes so much self-discipline because there is nobody to tell you that you must go or nobody to tell you what time to wake up.”

Three students reported that they gained confidence in their social interactions with others, particularly when meeting new people:

“Having to go to tutorial sessions for all my courses and being made to do ‘ice-breakers’ has also taught me to be less shy and more confident within myself when meeting new people.”

“All these aspects have taught me a great deal about myself and I grew as a person. Before university I was a quiet and very introverted person. When I first came to university, I forced myself to venture from my

comfort zone and talk to as many people as I could. This allowed me to become a great deal more sociable and less introverted.”

Three students reflected on how their perspectives on religious faith changed during their first year of university:

“My problem was that I was searching for a church with a familiar setting and “vibe” to the one back home. Then a friend invited me to Hillsong, and my life changed, it was not like the one back home and I was reluctant to join but I realized that I was forcing being comfortable again and I Knew Hillsong was the church I needed to bring me out of my comfort zone.”

These findings suggest that students reflected on their personal growth and accomplishments. The DC Programme has considered the need for students to reflect on their personal development through the reflective assignment.

Theme 5: Exposure to disciplines and courses.

This theme refers to students’ positive experiences of being exposed to different disciplines and courses [*groundedness score = 14*]. Seven students noted that the exposure to different Commerce first-year courses made them more informed about whether they had made the correct decision with their degree of choice:

“I could say I liked accounting and I truly felt that it was the best career path for me. Studying it as part of my major course in my degree has made me realise how much I truly love the career. Coming to university only affirmed that I am choosing a career path that is meant for me.”

“One of the things that I do wish I had done differently is that I would have liked not to force myself into the Commerce Faculty. I am so glad that I registered for an economics degree, because I discovered a love for economics that I do not think will ever disappear, but I could have done that under a BA.”

The need for exposure to different disciplines and courses has been addressed by the DC Programme. The DC Programme exposes students to different academic disciplines through the various business case study challenge topics in the Commerce Case Study.

To conclude, the needs and challenges of first-year students straddle many aspects of their lives, including personal, academic and social. This implies that a holistic FYE programme is most relevant to first-year students in a South African context. The findings of the needs assessment

indicate that the needs identified by first-year students are broadly in alignment with the needs addressed in the DC Programme by the stakeholders. However, the DC Programme does, however, need to better address the social and mental health support needs of first-year university students.

The M&E framework results

Evaluation question 5: What needs to be incorporated into the M&E framework for the DC Programme?

This section reports on a theory-driven M&E framework for the DC Programme. The evaluator involved the DC Programme convenor during various stages of the development of this M&E framework. The aim of involving this stakeholder was to increase the use of the findings and to build M&E capacity. It also allowed the evaluator to gain the perspective of a key stakeholder who was involved in the overall development, coordination and management of the programme. The final recommended DC Programme theory (Figure 8, p. 48) and a programme logic (Figure 4, p. 31) was used as a guide to develop this framework in a modified five-stage process prescribed by Markiewicz and Patrick (2016). The first stage involved scoping the framework with the DC Programme convenor by clarifying the purpose of the M&E framework. The second stage involved developing the evaluation questions. The third stage involved developing a monitoring plan and an evaluation plan to answer the evaluation questions. During the third stage, the evaluator devised a list of potential indicators and targets and asked the programme convenor to clarify which indicators needed to be prioritised. The fourth stage involved devising a data collection, management and analysis plan. The evaluator also compiled this plan in collaboration with the DC Programme convenor. The fifth stage involved the compilation of the reporting and dissemination plan.

Stage 1: Clarification of the purpose of the framework.

During a meeting with the DC Programme convenor it was discussed that the DC Programme is funded by the University Capacity Development Grant for the period 2019 to 2021. Thus, one purpose of the framework would be to provide evidence of the results achieved by the DC Programme to the funders. Another purpose would be to generate knowledge about the implementation and outcomes of the programme as there is no systematic monitoring and reporting processes for the programme.

A stakeholder mapping process was used to decide on participant arrangements for the M&E framework. Stakeholder mapping involves the identification and selection of key stakeholders to determine their roles during the development and the implementation of the M&E framework (Markiewicz & Patrick, 2016).

The DC Programme convenor was involved in all the stages of the framework which include:

- Providing input into the scope of the M&E framework.
- Management of the implementation of the M&E framework.
- Provide input during the development of the monitoring and evaluation plans.
- Interest in the evaluation findings and recommendations
- Participation in the evaluation processes.

The roles and interests of the co-creator, case study facilitators, faculty staff and co-convenor include:

- Interest in the results of the evaluation and the recommendations.
- Participation in the monitoring and/or evaluation processes.

The funders and other HEIs would not be directly involved in the M&E framework but they may be interested in the findings generated in the evaluation reports and the evaluative conclusions. This information is summarised in the stakeholder mapping matrix - Table 4 - below.

Table 4

Stakeholder mapping matrix presenting the key stakeholders for M&E framework

Stakeholder Groups	Consultation focus and scope	Development of key constructs	Development of the overall framework	Endorsement of final framework	Implementation of the framework	Audience for M&E products
Programme convenor	x	x	x	x	x	x
Co-creator					x	x
Co-convenor					x	x
Facilitators					x	x
Faculty staff					x	x
First-year students					x	x
Funders						x

Stage 2: Developing key constructs and evaluation questions.

The final reconstructed DC Programme theory and programme logic was used as a guide to develop the evaluation questions for the M&E framework. During this stage it was decided that a formative evaluation approach would be most appropriate. Formative evaluation focuses on the progress of implementation and aims to determine how well a programme is working in practice (Markiewicz & Patrick, 2016). In addition, formative evaluations sometimes focus on emerging outcomes and intermediate outcomes, thus, several outcomes were prioritised for the framework.

The evaluator used the DC Programme theory and programme logic to inform evaluation questions against the DAC evaluation criteria. Thereafter, the DC Programme convenor was consulted to prioritise and endorse evaluation questions. The following questions were the final questions used for the M&E framework:

1. To what extent was the DC Programme reaching the students? (*Appropriateness*)
2. Was the Commerce Toolkit and Commerce Case Study implemented according to the intended plan? (*Efficiency*)
3. To what extent were students satisfied with the Discover Commerce Case Study, Toolkit programme and case study facilitators? (*Effectiveness*)
4. Are the case study facilitators adequately trained and supported to deliver the Commerce Case Study? (*Effectiveness*)
5. What are the short-term and intermediate outcomes for students participating in the DC Programme? (*Impact*)
6. To what extent has the DC Programme considered long-term sustainability? (*Sustainability*)

Stage 3: Developing monitoring and evaluation plans.

The third stage involved developing a monitoring and evaluation plan. To develop the monitoring plan the evaluator identified a set of possible outcomes to be monitored using the DC Programme theory as a reference point. The evaluator presented these outcomes to the DC Programme convenor. The DC Programme convenor chose three main outcomes which needed to be prioritised:

1. Students have increased academic confidence.
2. Students have increased student engagement.
3. Increased retention rates for participating students.

The next step involved developing implementation and outcome indicators. The term, *SMART* (specific, measurable, attainable, relevant and time-bound) serves as a reminder for the characteristics of a good indicator (Patton, 2008). The evaluator developed outcome indicators and targets based on the agreed outcomes to be monitored and used the programme logic as a reference point. These indicators were aligned to the principles of *SMART*. The implementation indicators and targets were based on the implementation evaluation questions and also used the programme logic as a reference point. The evaluator then consulted the DC Programme convenor to clarify whether these indicators and targets were accurate. The evaluator worked with the DC Programme convenor to decide on monitoring data sources. The key DC Programme staff (DC Programme convenor and case study facilitators) were identified as responsible for collecting the monitoring data. This outcome and implementation monitoring plan is presented in Table 5 on the next page.

Table 5

Monitoring plan for the DC Programme

Evaluation question	Indicators	Targets	Monitoring data sources	Who is responsible and when?
<p>Appropriateness</p> <p>To what extent was the DC Programme reaching the students?</p>	<ul style="list-style-type: none"> • Number of first-year Commerce students enrolled in the programme. • Number of students assigned to a Commerce Case Study group. • Number of times each student accessed each module of the Commerce Toolkit. 	<ul style="list-style-type: none"> • 100% of Commerce first-year students enrolled in the programme. • 100% of students assigned to a Commerce Case Study group. • Students access each Commerce Toolkit module at least once. 	<ul style="list-style-type: none"> • Vula site statistics 	<ul style="list-style-type: none"> • Programme convenor downloads data on enrolment and assignment to the Commerce Case Study before the programme. • Programme convenor downloads the number of times students accessed each module of the Commerce Toolkit after the programme.
<p>Efficiency</p> <p>Was the Commerce Toolkit and Commerce Case Study</p>	<ul style="list-style-type: none"> • Number of sessions conducted by the facilitators in groups. 	<ul style="list-style-type: none"> • At least three sessions conducted by the facilitators in groups. 	<ul style="list-style-type: none"> • Programme concept notes 	<ul style="list-style-type: none"> • Programme convenor compiles a concept note detailing the planned

Evaluation question	Indicators	Targets	Monitoring data sources	Who is responsible and when?
implemented according to the intended plan?	<ul style="list-style-type: none"> • Number of business challenge topics discussed. • Number of students who attend the Commerce Case Study sessions. • Number of reflective assignments submitted. 	<ul style="list-style-type: none"> • One main topic discussed in each of the business case study sessions. • Each student attends at least one Commerce Case study group session. • 100% of students enrolled submit a reflective assignment. 	<ul style="list-style-type: none"> • Commerce Case study feedback report 	<ul style="list-style-type: none"> • schedule of the programme before roll-out. • Case study facilitator completes the Commerce Case Study feedback report after each group session.
Effectiveness To what extent were students satisfied with the Discover Commerce Case Study, Toolkit programme and case study facilitators?	<ul style="list-style-type: none"> • Self-reported satisfaction ratings on course evaluation. 	<ul style="list-style-type: none"> • 75% report satisfaction with the overall programme. • 75% report satisfaction with blended learning. • 75% report satisfaction with 	<ul style="list-style-type: none"> • Course evaluation (questions using a Likert scale) 	<ul style="list-style-type: none"> • Programme convenor administers course evaluation after the programme.

Evaluation question	Indicators	Targets	Monitoring data sources	Who is responsible and when?
<p>Effectiveness</p> <p>Are the programme staff adequately trained and supported to deliver the Commerce Case Study?</p>	<ul style="list-style-type: none"> No indicator 	<ul style="list-style-type: none"> No target 	<ul style="list-style-type: none"> Minutes of meetings 	<ul style="list-style-type: none"> DC Programme convenor compiles minutes during each meeting.
<p>Impact</p> <p>Has the programme increased students' engagement?</p>	<ul style="list-style-type: none"> Performance on survey 	<ul style="list-style-type: none"> 75% of participants enrolled in the programme report increased student engagement. 	<ul style="list-style-type: none"> Survey 	<ul style="list-style-type: none"> Case study facilitators administers survey before (pre), during and after (post) the programme to a sample of students enrolled in the programme and to a sample of first-year students not enrolled in the programme (control group).

Evaluation question	Indicators	Targets	Monitoring data sources	Who is responsible and when?
Impact Has the programme increased students' academic confidence?	<ul style="list-style-type: none"> Performance on survey. 	<ul style="list-style-type: none"> 75% of participants enrolled in the programme report increased self-confidence. 	<ul style="list-style-type: none"> Survey 	<ul style="list-style-type: none"> Case study facilitators administers survey before (pre), during and after (post) the programme to a sample of students enrolled in the programme and to a sample of first-year students not enrolled in the programme (control group).
Impact Did students who participated have a higher retention rate?	<ul style="list-style-type: none"> Changes in retention compared with a sample of non-participating students. 	<ul style="list-style-type: none"> No target 	<ul style="list-style-type: none"> Administrative data from university 	<ul style="list-style-type: none"> Programme convenor obtains data annually.
Sustainability	<ul style="list-style-type: none"> No indicator 	<ul style="list-style-type: none"> No target 	<ul style="list-style-type: none"> Minutes of meetings 	<ul style="list-style-type: none"> Programme convenor compiles

Evaluation question	Indicators	Targets	Monitoring data sources	Who is responsible and when?
To what extent has the DC Programme considered long-term sustainability?				minutes during each meeting.

The next step involved developing the evaluation plan for the M&E framework. This evaluation plan used the same questions as in the monitoring plan. This evaluation plan is presented in Table 6 on the next page. The first column specified the evaluation question. The summary of the monitoring related to each evaluation question is listed in the second column. In the third column the evaluation method was described. In the next column the method of implementation was explained. The last column describes who is responsible for the evaluation and when evaluation activities should be conducted. An external evaluation team would be responsible for the evaluation processes. The evaluator compiled the evaluation plan independently, however the evaluation plan was endorsed by the DC Programme convenor.

Table 6

Evaluation plan for the DC Programme

Evaluation question	Summary of monitoring	Evaluation method	Method of implementation	Who is responsible and when?
Appropriateness To what extent was the DC Programme reaching the students?	<ul style="list-style-type: none"> • Number of first-year Commerce students enrolled in the programme. • Number of students assigned to a Commerce Case Study group. • Number of times each student accessed each module of the Commerce Toolkit. 	<ul style="list-style-type: none"> • Secondary data analysis 	<ul style="list-style-type: none"> • Analysis of the Vula site statistics 	<ul style="list-style-type: none"> • Evaluation team completes the secondary data analysis after the programme has completed.
Efficiency Was the Commerce Toolkit and Commerce Case Study implemented according to the intended plan?	<ul style="list-style-type: none"> • Number of sessions conducted by the facilitators in groups. 	<ul style="list-style-type: none"> • Document review • Interview with the DC Programme convenor 	<ul style="list-style-type: none"> • Document review conducted by analysing the intended programme plan against the 	<ul style="list-style-type: none"> • Evaluation team completes the document review and conducts the interview after the

Evaluation question	Summary of monitoring	Evaluation method	Method of implementation	Who is responsible and when?
	<ul style="list-style-type: none"> • Number of business challenge topics discussed. • Number of students who attend the Commerce Case Study sessions. • Number of reflective assignments submitted. 		<ul style="list-style-type: none"> actual programme schedule. • An interview conducted with the programme convenor to clarify details of the programme schedule. 	<ul style="list-style-type: none"> programme has completed.
<p>Effectiveness</p> <p>To what extent were students satisfied with the Discover Commerce Case Study, Toolkit programme and case study facilitators?</p>	<ul style="list-style-type: none"> • Self-reported rating on course evaluation 	<ul style="list-style-type: none"> • Quantitative analysis of items related to student satisfaction (Likert-rating scale) • Three to five focus groups administered with a sample of students and case study facilitators. 	<ul style="list-style-type: none"> • Summarise quantitative data by presenting minimum, maximum and standard deviation statistics (descriptive statistics). • Analyse the qualitative data by using a computer-assisted software to 	<ul style="list-style-type: none"> • Evaluation team conducts the quantitative analysis and the focus groups after the programme has completed.

Evaluation question	Summary of monitoring	Evaluation method	Method of implementation	Who is responsible and when?
<p>Effectiveness</p> <p>Are the programme staff trained and supported to deliver the Commerce Case Study?</p>	<ul style="list-style-type: none"> Minutes of meetings 	<ul style="list-style-type: none"> Document review of minutes of meetings. Focus groups with a sample of programme staff. 	<p>code themes in the data.</p> <ul style="list-style-type: none"> Analyse the qualitative data by using a computer-assisted software to code themes in the data. 	<ul style="list-style-type: none"> Evaluation team completes the document review and conducts the focus groups after the programme has completed.
<p>Impact</p> <p>Has the programme increased students' engagement?</p>	<ul style="list-style-type: none"> Performance on survey 	<ul style="list-style-type: none"> Quantitative analysis on pre- and post- survey related to student engagement. 	<ul style="list-style-type: none"> Analyse the quantitative data on Statistical Package for the Social Sciences (SPSS). Use a quasi-experimental design with a non-equivalent control group 	<ul style="list-style-type: none"> Evaluation team analyses the quantitative data after the programme has completed.

Evaluation question	Summary of monitoring	Evaluation method	Method of implementation	Who is responsible and when?
<p>Impact</p> <p>Has the programme increased students' academic confidence?</p>	<ul style="list-style-type: none"> Performance on survey 	<ul style="list-style-type: none"> Quantitative analysis on pre- and post-survey related to self-confidence. 	<p>repeated measures design to analyse data.</p> <ul style="list-style-type: none"> Analyse the quantitative data on SPSS. Use a quasi-experimental design with a non-equivalent control group repeated measures design to analyse data. 	<ul style="list-style-type: none"> Evaluation team analyses the quantitative data after the programme has completed.
<p>Impact</p> <p>Did students who participated have a higher retention rate?</p>	<ul style="list-style-type: none"> Changes in retention compared with non-participating students. 	<ul style="list-style-type: none"> Quantitative analysis 	<ul style="list-style-type: none"> Analyse the quantitative data from administrative records on SPSS. Use a logistic regression design to model the 	<ul style="list-style-type: none"> Evaluation team analyses the quantitative data after the programme has completed.

Evaluation question	Summary of monitoring	Evaluation method	Method of implementation	Who is responsible and when?
<p>Sustainability</p> <p>To what extent has the DC Programme considered long-term sustainability?</p>	<ul style="list-style-type: none"> Minutes of meetings 	<ul style="list-style-type: none"> Document review of minutes of meetings. Focus groups with a sample of participating students and staff. 	<p>probability of the non-participating students having a higher retention compared to non-participating students.</p> <ul style="list-style-type: none"> Analyse the qualitative data by using a computer-assisted software to code themes in the data. 	<ul style="list-style-type: none"> Evaluation team conducts the document review and conducts the focus groups after the programme has completed.

Stage 4: Data collection, data management and analysis plans.

The purpose of this section is to ensure that high quality data is appropriately obtained, stored and analysed (Markiewicz & Patrick, 2016). DC Programme staff have to carefully select accurate and adequate measurement instruments for student engagement and academic confidence to ensure the quality and validity of results. The selection of these measurement instruments should be driven by psychometric properties (e.g. reliability), ease of administration and previous use of these measures in a South African context. One of the main criteria to assess reliability is internal consistency which indicates if all sub-parts of a measurement instrument measures the same characteristic (Streiner, 2003). The most common assessment of internal consistency is through the Cronbach's alpha coefficient (Streiner & Kottner, 2014). Several studies have indicated that a Cronbach's alpha value between 0.70 to 0.95 is acceptable (Bland & Altman, 1997; Terwee et al., 2007).

A proposed measure for student engagement is a 41-item student engagement scale developed by Gunuc and Kuzu (2015). This scale has high internal reliability with the Cronbach Alpha calculated as $\alpha=.93$ (Gunuc & Kuzu, 2015). This scale has six factors namely, cognitive engagement, valuing sense of belonging relationships with faculty members, peer relationships as well as behavioural engagement within the context of engagement in class and at campus. Respondents are required to rate their level of agreement on 5-point Likert scale. An example of an item on the scale is, "*I feel myself as a part/member of a student group*" (Appendix K).

A proposed measure for academic confidence is a 24-item scale developed by Sander and Sanders (2003). The scale has a 5-point Likert scale where the response option ranges from not at all confident to very confident. This scale also has a high internal reliability. The Cronbach Alpha is $\alpha=.88$ (Sander & Sanders, 2003). An example of an item includes, "*Ask lecturers questions about the material they are teaching, during a lecture*" (Appendix K).

The evaluator also compiled the data collection, data management and analysis plan. It was agreed that the M&E framework would involve a mixed method approach which including both quantitative and qualitative data to ensure robust findings. The qualitative data collection methods included a semi-structured interview, focus groups and document reviews. The quantitative data collection methods include quasi-experimental research, calculating descriptive statistics and a logistic regression. Table 7 (p. 97) on the next page presents the different data collection tools with the corresponding ethical and sampling considerations.

Table 7

Data collection plan for DC Programme M&E framework

Data collection tools	Ethical considerations	Sampling
Participant enrolment records, Commerce Case Study feedback reports	<ul style="list-style-type: none"> • Maintain confidentiality and anonymity when reporting on findings from these sources. • Ensure that all data is password protected or encrypted. 	<ul style="list-style-type: none"> • All case study facilitators complete a feedback report after each of the Commerce Case Study sessions.
Surveys and course evaluation	<ul style="list-style-type: none"> • Attain informed consent. • Maintain confidentiality and anonymity when reporting on findings from these sources. • Ensure that all data is password protected or encrypted. 	<ul style="list-style-type: none"> • Inclusion of as many participants as possible for the course evaluation and survey.
Student and programme staff focus groups	<ul style="list-style-type: none"> • Attain informed consent. • Explain the voluntary nature of participation. • Ensure that all transcripts and informed consents are password protected or encrypted. 	<ul style="list-style-type: none"> • Purposive sampling for focus groups. • Three to five focus groups for each group. • Ensure that the sample is representative.
Semi-structured interview with programme convenor	<ul style="list-style-type: none"> • Attain informed consent. • Explain the voluntary nature of participation. 	<ul style="list-style-type: none"> • The programme convenor is interviewed.

Data collection tools	Ethical considerations	Sampling
	<ul style="list-style-type: none"> Ensure that transcript and informed consent are stored in a secure location. 	
Document review	<ul style="list-style-type: none"> Ensure that all data is password protected or encrypted. 	<ul style="list-style-type: none"> The minutes of the meeting are analysed.

The data analysis and management plan for the M&E framework is presented on the next page in Table 8. This data and analysis plan provides information on the different types of monitoring data collected, data entry methods and how this data should be analysed. The staff training or orientation for each type of data collected is also mentioned.

Table 8

Data management and analysis plan for DC Programme M&E framework

Type of data collected	Data entry	Data analysis	Database reports	Staff training/quality check
<ul style="list-style-type: none"> • Number of first-year Commerce students enrolled in the programme. • Number of students assigned to a Commerce Case Study group. • Number of times each student accessed each module of the Commerce Toolkit. 	<ul style="list-style-type: none"> • Before the programme commences programme convenors compile an excel spreadsheet of the data collected. • Download student Vula site statistics and extract information on the DC Commerce student participants. 	<ul style="list-style-type: none"> • Sum the number of first-year Commerce students enrolled in the programme. • Sum of the number of students enrolled in the Commerce Case Study groups. • Create cross tabulations of the Commerce Case Toolkit module x number of times each module was accessed. 	<ul style="list-style-type: none"> • Create a document on Excel with the data analysed. 	<ul style="list-style-type: none"> • Quality check the data
<ul style="list-style-type: none"> • Number of reflective assignments submitted. 	<ul style="list-style-type: none"> • Programme convenor downloads the reflective 	<ul style="list-style-type: none"> • Sum the number of reflective 	<ul style="list-style-type: none"> • Programme convenor creates a concept note 	<ul style="list-style-type: none"> • Conduct a training session with case

Type of data collected	Data entry	Data analysis	Database reports	Staff training/quality check
<ul style="list-style-type: none"> Number of business challenge topics discussed. Number of students who attend the Commerce Case Study sessions. Number of sessions conducted by facilitators in groups. 	<p>assignment submissions from Vula.</p> <ul style="list-style-type: none"> One of the case study facilitators uses all the Commerce Case Study feedback reports to compile an excel spreadsheet indicating: <ul style="list-style-type: none"> The number of students who attended each Commerce Case Study session. The number of sessions conducted by each case study facilitator. The number of business challenge 	<p>assignments submitted.</p> <ul style="list-style-type: none"> Sum the number of students who attended each Commerce Case Study session. Sum the number of sessions conducted by each case study facilitator. Sum the number of business challenge topics discussed for each group session. 	<p>document of the reflective assignment submission information.</p> <ul style="list-style-type: none"> A case study facilitator uses an Excel spreadsheet template to present the relevant information of the Commerce Case Study feedback reports. 	<p>study facilitators in data entry.</p> <ul style="list-style-type: none"> Ensure that case study facilitators understand the factors which influence the validity and reliability of the data in the Commerce Case Study feedback reports. Quality check the data.

Type of data collected	Data entry	Data analysis	Database reports	Staff training/quality check
	topics discussed for each group session.			
<ul style="list-style-type: none"> Items related to satisfaction on the course evaluation. 	<ul style="list-style-type: none"> Programme convenor enters the Likert-scale item responses into excel. 	<ul style="list-style-type: none"> Create a graph indicating the proportion of students who were satisfied with the different aspects of the programme. 	<ul style="list-style-type: none"> Create a document on excel with the data analysed. 	<ul style="list-style-type: none"> Quality check the accuracy of data.
<ul style="list-style-type: none"> Items related to student engagement on the survey. 	<ul style="list-style-type: none"> Case study facilitators Enter the pre-, during and post- results for each of the items. 	<ul style="list-style-type: none"> Survey data to be analysed by the evaluation team. 	<ul style="list-style-type: none"> Report of the analysed data conducted by the evaluation team. 	<ul style="list-style-type: none"> Training in the administration of the survey.
<ul style="list-style-type: none"> Items related to students' academic confidence 	<ul style="list-style-type: none"> Case study facilitators enter the pre-, during and post- results for each of the items. 	<ul style="list-style-type: none"> Survey data to be analysed by the evaluation team. 	<ul style="list-style-type: none"> Report of this analysed data conducted by the evaluation team. 	<ul style="list-style-type: none"> Training in the administration of the survey.

Type of data collected	Data entry	Data analysis	Database reports	Staff training/quality check
<ul style="list-style-type: none"> Data on retention 	<ul style="list-style-type: none"> Programme convenor obtains student records of first-year Commerce students who have participated in the programme and those who have not. 	<ul style="list-style-type: none"> Students record data to be analysed by the evaluation team 	<ul style="list-style-type: none"> Report of this analysed data conducted by the evaluation team. 	<ul style="list-style-type: none"> Evaluation team should inform the programme convenor of the type of administrative data required.

Stage 5: Reporting and dissemination plan.

The reporting and dissemination plan in Table 9 on the next page outlines the types of reports which would be produced and the audience for each report. Potential considerations for the write up of these reports are also mentioned. In addition, a summary of the contents of each report is provided. Finally, the dissemination strategy identifies information on how these audiences would receive the information.

Table 9

Reporting and dissemination plan

Type of report	Due date	Audience	Type of interest	Considerations	Contents	Dissemination
Routine monitoring report	During the Programme roll-out	<ul style="list-style-type: none"> • Programme convenor • Case study facilitators 	<ul style="list-style-type: none"> • Accountability of monitoring reports and data. • Documenting the progress of the Discover Commerce Programme. 	<ul style="list-style-type: none"> • Simple and clear language used. • Glossary of terms included. • Provision of adequate training for compiling reports. 	<ul style="list-style-type: none"> • Deliverables and outputs presented. • Programme plan • Commerce Case Study feedback report 	<ul style="list-style-type: none"> • Monitoring framework completed
Final evaluation report	After programme completion	<ul style="list-style-type: none"> • Programme convenor • Co-convenor • Commerce Faculty Staff • Funder • Case Study facilitators 	<ul style="list-style-type: none"> • Guide decision-making to inform improvement of the DC Programme. 	<ul style="list-style-type: none"> • Simple and clear language used. • Clearly state recommendations. 	<ul style="list-style-type: none"> • Introduction • Executive summary • Programme description • Methodology • Analysis • Discussion and recommendations 	<ul style="list-style-type: none"> • Print and bind hard copies of the report. • Create PDF version. • Distribute to aforementioned stakeholders. • A summary report of the

Type of report	Due date	Audience	Type of interest	Considerations	Contents	Dissemination
						evaluation could be compiled and be made publicly.
PowerPoint Presentation	After programme completion	<ul style="list-style-type: none"> • Programme convenor • Co-convenor • Commerce Faculty staff 	<ul style="list-style-type: none"> • Presentation on key findings and recommendations. 	<ul style="list-style-type: none"> • Acronyms and abbreviations stated at the beginning of the presentation. • Simple and clear language used. 	<ul style="list-style-type: none"> • Frequency distributions of key quantitative findings • Excerpts of key qualitative findings. 	<ul style="list-style-type: none"> • Created in Microsoft PowerPoint. • Send an online copy to the stakeholders.

This chapter presented the results and discussion of the theory evaluation, the findings that emerged from the needs assessment and concluded with a presentation of the Monitoring and Evaluation M&E framework developed for the DC Programme. The following chapter discusses the recommendations and the limitations of the evaluation.

Chapter Six: Recommendations and Limitations

This chapter presents the recommendations informed by the evaluation findings. Recommendations on how to implement the M&E framework are also presented followed by a discussion of the limitations/challenges encountered during this evaluation.

Recommendations

Based on the evaluation findings the key recommendations are as follows:

- The DC Programme needs to appoint faculty staff to facilitate the Commerce Case Study group discussions (if resources permit). Peer mentors could still be involved in a support capacity (i.e. to assist faculty staff during the sessions and with grading of assignments).
- The DC Programme should consider providing structured professional development opportunities to case study facilitators. This is an essential component of successful FYE programmes. These structured development opportunities could take the form of check-in meetings before and after each of the Commerce Case Study group sessions. These meetings could serve as a platform to share insights, strategise on how to tackle common or unique challenges encountered and develop new facilitation skills.
- The DC Programme should use a letter-grading system for the tasks that have to be completed as part of the programme and award a final grade on completion of the course. Grading rubrics could be designed for major assignments (e.g. the reflective assignment) to help students understand what the expectations are for each assignment and so that they can clearly identify learning objectives. These grading rubrics may also guide the instructor or the marker on how to give constructive written feedback.
- The DC Programme should incorporate activities that aim to reinforce inter-cultural competence. Students could do a short presentation where they are able to reveal more about themselves. Students could be given an opportunity to share/showcase what they deem to be an important aspect of their cultural identity through a creative medium of their choosing.
- Research has shown that the quality of the interaction and relationship between students and peer mentors is influenced by personal attributes of the mentors (e.g. approachability, friendliness and responsiveness). DC Programme staff should recruit peer mentors on the basis of these attributes.

- Although there is a reflective assignment at the end of the course, research has shown that frequent opportunities for reflection have been associated with enhanced student engagement and connection to the content of the programme in blended learning environments. Thus, the DC Programme should introduce informal reflection activities in the Commerce Toolkit (e.g. online discussions in the chatroom) and in the Commerce Case Study sessions (e.g. journaling)
- To increase the opportunities for social interaction and foster a sense of community amongst the Commerce Case Study groups, students should be given an opportunity to engage and connect meaningfully with peers on a social level. Small-group social gatherings could be arranged at different points during the academic year.
- The DC Programme should strengthen its linkages with the UCT Wellness Service, and provide structured in-person guidance on how to access this service. Peer mentors could be involved in the referral and information dissemination process.
- The DC Programme should capture the emerging needs of first-years in any programme re-design and reassess the strategic focus of the programme in response to changes in the external environment. Given the COVID-19 pandemic and the significant and far-reaching impact it is continuing to have on society, the evaluator recommends another needs assessment before the next programme cycle to reassess the personal, academic and social needs of the new cohort of first-year Commerce students. A focus group approach would be useful to generate both the common and unique needs experienced by different groups of students. A focus group schedule and a focus group protocol for the proposed needs assessment is presented in Appendix L.
- To facilitate the operationalisation of the M&E framework the evaluator recommends the following 1) confirming programme management arrangements, 2) developing a work plan for implementation and 3) completing a systematic review of the framework and implementation capacity (Markiewicz & Patrick, 2016).

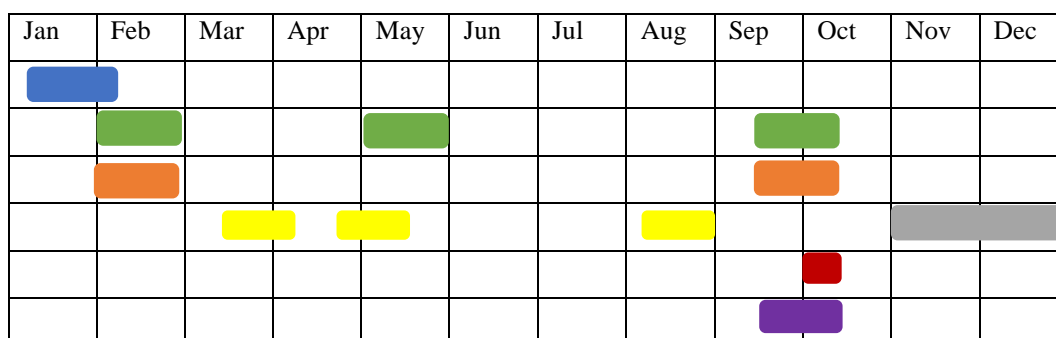
Confirming programme management arrangements:

- It is recommended that the DC Programme convenor serves as the M&E “champion” and coordinates meetings and training sessions with the staff to foster commitment to the implementation plan.
- A training manual for data entry, quality checks and ethics around data collection and management should be developed.

- A data management system needs to be developed to capture the monitoring data in a systematic manner for easy retrieval, analysis and reporting.

Developing a work plan:

- It is recommended that the DC Programme convenor schedules a working session with the case study facilitators to clarify their roles and responsibilities in terms of data collection and how their efforts feed into the M&E framework. This will enhance ownership of and commitment to the process (Markiewicz & Patrick, 2016). Case study facilitators also need to receive training on data collection, management, and capturing, as well as the ethics surrounding these different processes.
- A work plan consisting of a breakdown of the different M&E activities and the timing of each activity needs to be developed to guide the implementation of the M&E framework (Markiewicz & Patrick, 2016). A proposed work plan for the first year of implementation is presented in Figure 10 (p. 110).



Work plan description key	
Preparing for implementation and training of staff (DC Programme team)	●
Develop and administer quantitative survey (DC Programme convenor and case study facilitators)	●
Downloading of Vula site statistics (DC Programme convenor)	●
Complete Commerce Case Study feedback reports (Case study facilitators)	●
Administer course evaluation (DC Programme convenor)	●
Focus groups and interview with DC Programme convenor (External evaluation team)	●
Data analysis and evaluation report write up	●

Figure 10. Work plan for the first year of implementation of the M&E framework

Systematic review of M&E framework and implementation capacity:

- It is recommended that the DC Programme team reviews the proposed M&E framework annually to ensure that it is sensitive to emerging capacity issues or changes in the external environment. This is particularly important given that the programme is relatively new and its strategic focus and expectations may change over time.
- The following implementation parameters need to be systematically reviewed:
 - Whether the staffing arrangements and responsibilities to successfully implement the M&E framework are clearly defined and understood.
 - Whether additional training is required for data collection, capturing, management and reporting.

Limitations

The theory evaluation draws extensively on best practice literature derived from evaluations of FYE programmes implemented in other countries. Published evaluations of similar programmes implemented in South Africa are scarce. While the university environment is bound to be different in South Africa, some of the challenges experienced by first-year students are universal. The theory evaluation showed that the DC Programme followed the same general practices and approaches used by FYE programmes implemented in other countries.

Another potential limitation of the theory evaluation is that the programme theory might not adequately capture the perspectives of case study facilitators as they were not able to participate in the theory elicitation process.

A limitation of the needs assessment is that the data was collected retrospectively from reflective assignments that were submitted for a different purpose. As a result, not all of the information captured in the reflective assignments was relevant to the needs assessment. Conducting focus groups with students would have allowed for deeper and more targeted understanding of the personal, academic and social needs of first-year students. This was, however, not feasible at the time of the evaluation. The approach used for the needs assessment nonetheless revealed important themes for consideration.

Only the DC Programme convenor was involved in the development of the M&E framework. Stakeholders who need to take on important roles in the data collection, capturing, management, and reporting processes (e.g. case study facilitators) were not consulted in the process. Involving them at an early stage might have secured buy-in and support for the implementation of the M&E framework.

Conclusion

This dissertation presents a refined and empirically supported programme theory for the DC Programme. The theory evaluation revealed that the activities, outcomes and causal linkages embedded in the programme theory were broadly aligned with those of similar programmes that are shown to be effective. The theory evaluation also identified various design considerations from the best practice literature that culminated in a set of pragmatic recommendations. The theory evaluation adds to the limited published literature on the assumptions that underlie the design of FYE programmes in South Africa. Furthermore, it serves as stepping stone for subsequent implementation and outcome evaluations of the DC Programme.

The needs assessment confirmed that programme stakeholders have a good overall understanding of the personal, academic and social needs of first-year university students. It also revealed that first-year UCT students experienced other challenges and successes (not necessarily targeted by the DC Programme) during the academic year.

Another output of this dissertation is an M&E framework for the DC Programme. If properly implemented, the M&E framework would facilitate decision-making with regards to allocation of resources, programme design and future direction of the programme. Furthermore, an M&E framework that is properly implemented could also ultimately convince university executives that FYE programmes in all faculties is needed, is worthwhile, and will contribute positively to the overall experience and transition of first-year students.

References

- Adam, A., Hartigan, C., & Brown, N. (2010). The value of an open, early academic development program to students' transition and first year experience: The UTAS UniStart program. *The International Journal of the First Year in Higher Education*, 1(1), 43-54.
- Al-sheeb, B.A., Abdulwahed, M.S., & Hamouda, A.M. (2017). Impact of first-year seminar on student engagement, awareness, and general attitudes toward higher education. *Journal of Applied Research in Higher Education*, 10(1), 15-30. doi:10.1108/JARHE-01-2017-0006
- Anderson, D., Wason, H., & Southall, J. (2016). Supporting business student's transition into higher education: The case of marketing downloads. *Teaching in Higher Education*, 21(8), 978–989. doi:10.1080/13562517.2016.1207625
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297-308.
- Bantjies, J., Lochner, C., Saal, W., Roos, J., Taljaard, L., Page, D., Auerbach, R.P., Mortier, P., Bruffaerts, R., . . .Stein, D.J. (2019). Prevalence and sociodemographic correlates of common mental disorders among first-year university students in post-apartheid South Africa: implications for a public mental health approach to student wellness. *BMC Public Health*, 19(1), 1-12. doi:10.1186/s12889-019-7218-y
- Barefoot, B. O. (1992). *Helping first-year college students climb the academic ladder: Report of a national survey of freshman seminar programming in American higher education* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 9226630)
- Bartell, D., & Boswell, C. (2019). Developing the whole teacher: Collaborative engagement as faculty development within a first-year experience program. *The Journal of Faculty Development*, 33(3), 25-32.

- Bean, J. P., & Metzner, B. S. (1985). A conceptual model of non-traditional undergraduate student attrition. *Review of Educational Research*, 55, 485-540.
- Bell, B. (2012). Assessing the effectiveness of an adventure-based first-year experience class. *Journal of College Student Development*, 53(2), 347-355.
- Ben-Avie, M., Kennedy, M., Unson, C., Li, J., Riccardi, R. L., & Mugno, R. (2012). First-Year Experience: A Comparison Study. *Journal of Assessment and Institutional Effectiveness*, 2(2), 143-170.
- Bland, J., & Altman D. (1997). Statistics notes: Cronbach's alpha. *BMJ*, 314, 572.
doi: 10.1136/bmj.314.7080.572
- Bordelon, D. E., Sexton, C. M., & Vendrely, A. M. (2019). Designing for Students: Creating a Robust Interdisciplinary First Year Course. *Journal of the Scholarship of Teaching and Learning*, 19(1), 66-79. doi:10.14434/josotl.v19i1.26781
- Briggs, A. R. J., Clark, J., & Hall, I. (2012). Building bridges: understanding student transition to university. *Quality in Higher Education*, 18(1), 3-21.
doi:10.1080/13538322.2011.614468
- Brooks, M., Jones, C., & Burt, I. (2013). Are African American male undergraduate programs successful? An evaluation of an undergraduate African-American male retention program. *J Afr Am St*, 17(2), 206-221.
doi:10.1007/s12111-012-9233-2
- Brousselle, A., & Champagne, F. (2011). Program theory evaluation: Logic analysis. *Evaluation and Program Planning*, 34(1), 69-78.
- Campbell, R., & Hublitz, K. (2017). Northern Arizona University. In T.L. Skipper, *What makes the first-year seminar high impact? An exploration of effective educational practices (Research Reports No. 7)* (pp. 1-163.). Retrieved from <https://files.eric.ed.gov/fulltext/ED573737.pdf>
- Cantwell, K.F., & McCutchen, G. (2017). Durham Technical Community College. In T.L. Skipper, *What makes the first-year seminar high impact? An exploration of effective*

- educational practices (Research Reports No. 7) (pp. 1-163.)*. Retrieved from <https://files.eric.ed.gov/fulltext/ED573737.pdf>
- Cape Peninsula University of Technology. (2019). *Help for first years (First Year Experience)*. Retrieved from <https://www.cput.ac.za/students/about/first-years>
- Carrol, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation Science*, 2 (40), 1-9. doi:10.1186/1748-5908-2-40
- Carragher, J., & McGaughey, J. (2016). The effectiveness of peer mentoring in promoting a positive transition to higher education for first-year undergraduate students: a mixed methods systematic review protocol. *Systematic Reviews*, 5(68), 1-9. doi:10.1186/s13643-016-0245-1
- Case, J., Marshall, D., Mckenna, S., & Mogashana, D. (2018). *Going to University: The influence of higher education on the lives of young South Africans*. Retrieved from https://www.africanminds.co.za/wp-content/uploads/2017/06/9781928331698_web.pdf
- Chen, H. T. (2005). *Practical program evaluation: Assessing and improving planning, implementation, and effectiveness*. Thousand Oaks: Sage.
- CHE (Council on Higher Education). (2013). *A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure*. Retrieved from https://www.ru.ac.za/media/rhodesuniversity/content/equityampinstitutionalculture/documents/A_proposal_for_undergraduate.pdf
- CHE (Council on Higher Education). (2016). *South African higher education reviewed: Two decades of democracy*. Pretoria: Council on Higher Education. Retrieved from file:///C:/Users/55577202/AppData/Local/Packages/Microsoft.MicrosofEdge_8wekyb3d8bbwe/TempState/Downloads/CHE_2016_SAHereviewed-twodecades-e-book.pdf
- CHE (Council on Higher Education). (2017). *Vital Stats Public Higher Education 2015*. Pretoria: Council on Higher Education.

- Chester, A., Burton, L.J., Xenos, S., & Elgar, K. (2013). Peer mentoring: Supporting successful transition for first year undergraduate psychology students. *Australian Journal of Psychology*, *65*(1), 30-37. doi:10.1111/ajpy.12006
- Chetty, R., & Pather, S. (2015). Challenges in Higher Education in South Africa. In: J. Condy (Ed.), *Telling Stories Differently: Engaging 21st century students through digital storytelling*. Stellenbosch: African Sun Media.
- Collings, R., Swanson, V., & Watkins, R. (2014). The impact of peer mentoring on levels of student wellbeing, integration and retention: A controlled comparative evaluation of residential students in UK higher education. *Higher Education*, *68*, 927-942. doi:10.1007/s10734-014-9752-y
- Conley, C.S., Travers, L., & Bryant, F.B. (2013). Promoting psycho-social adjustment and stress management in first-year college students: The benefits of engagement in a psychosocial wellness seminar. *Journal of American College Health*, *61*(2), 75-86. doi:10.1080/07448481.2012.754757
- Cox, P. L., Schmitt, E. D., Bobrowski, P.E. & Graham, G. (2005). Enhancing the first-year experience of business student: Student retention and academic success. *Journal of Behavioral and Applied Management*, *7*, 40–68.
- Clark, M., & Cundiff, N. (2011). Assessing the Effectiveness of a College Freshman Seminar Using Propensity Score Adjustments. *Research in Higher Education*, *52*(6), 616-639. doi:10.1007/s11162-010-9208-x
- DeLuca E., Clark, K., Walter, M., & Tawil, M. (2017). Florida SouthWestern State College. In T.L. Skipper, *What makes the first-year seminar high impact? An exploration of effective educational practices (Research Reports No. 7)* (pp. 1-163.). Retrieved from <https://files.eric.ed.gov/fulltext/ED573737.pdf>
- Development Assessment Committee AC Network on Development Evaluation. (2010). Evaluating development co-operation: Summary of key norms and standards (2nd ed.) Paris, France: Author. Retrieved from <http://www.oecd.org/development/evaluation/dcdnpep/41612905.pdf>

- DHET (Department of Higher Education and Training). (2017). *2000 to 2014 first time entering undergraduate cohort studies for public higher education institutions*. Pretoria: Department of Higher Education and Training.
- Donaldson, S. I. (2007). *Program theory-driven evaluation science: Strategies and applications*. Mahwah, NJ: Erlbaum.
- Durban University of Technology. (2019). *First year experience one stop shop*. Retrieved from <https://www.dut.ac.za/first-year-experience-one-stop-shop/>
- Everett, M.C. Coastal Carolina University. In T.L. Skipper, *What makes the first-year seminar high impact? An exploration of effective educational practices (Research Reports No. 7)* (pp. 1-163.). Retrieved from <https://files.eric.ed.gov/fulltext/ED573737.pdf>
- Ferguson, M. (2006). *Creating common ground: Common reading and the first year of college*. Retrieved from <https://www.aacu.org/sites/default/files/files/peerreview/PRSU06.pdf>
- Fisher, G., & Scott, I. (2011). *Background Paper 3: The role of higher education in closing the skills gap in South Africa*. Retrieved from http://www.ched.uct.ac.za/usr/ched/docs/Fisher_Higher%20Education%20role.pdf
- Foote, S.M. (2010). Using student narratives to understand the perceived impact of first-year seminar participation. *Journal of College & Transition*, 18(1), 5-15.
- Foote, S.M., & Mixson-Brookshire, D. (2013). Finding balance: Creating hybrid first-year seminars. *E-Source for College Transitions*, 10(2), 8-12.
- Flores, G., & Estudillo, A. (2018). Effects of a peer-to-peer mentoring program: Supporting first-year college students' academic and social integration on campus. *Journal of Human Services: Training, Research, and Practice*, 3(2), 1-25.
- Franco, M., Hill, J., & Wesanen-Neil, T. (2017). The University of Arizona. In T.L. Skipper, *What makes the first-year seminar high impact? An exploration of effective educational practices (Research Reports No. 7)* (pp. 1-163.). Retrieved from <https://files.eric.ed.gov/fulltext/ED573737.pdf>

- García-Ros, R., Pérez-González, F., Cavas-Martínez, F., & Tomás, J. M. (2018). Social interaction learning strategies, motivation, first-year students' experiences and permanence in university studies. *Educational Psychology, 38*(4), 451-469. doi:10.1080/01443410.2017.1394448
- Glazer, F. S. (2012). *Blended learning: Across the disciplines, across the academy*. Sterling, VA: Stylus.
- Gunuc, S., & Kuzu, A. (2015). Student engagement scale: development, reliability and validity. *Assessment & Evaluation in Higher Education, 40*(4), 587–610. doi:10.1080/02602938.2014.938019
- Greenfield, G.M, Keup, J.R., & Gardner, J.N. (2013). *Developing and sustaining successful first-year programmes: A guide for practitioners*. San Francisco: Jossey Bass.
- Hope, J. (2016) First year experience enhances student success. *Successful Registrar, 20*(8), 5-7. doi:10.1002/tsr.30226
- Holt, L. J., & Berwise, C. A. (2012). Illuminating the process of peer mentoring: An examination and comparison of peer mentors' and first-year students' experiences. *Journal of the First-Year Experience and Students in Transition, 24*(1), 19–43.
- Holt, L.J., & Fifer, J.E. (2018). Peer mentor characteristics that predict supportive relationships with first-year students: Implications for peer mentor programming and first-year student retention. *Journal of College Student Retention: Research, Theory & Practice, 20*(1), 67-91.
- Hotchkiss, J. L., Moore, R. E., & Pitts, M. M. (2006). Freshman learning communities, college performance, and retention. *Education Economics, 14*(2), 197-210. doi:10.1080/09645290600622947
- Howard, H. E., & Jones, W. P. (2000). Effectiveness of a freshmen seminar in an urban university: Measurement of selected indicators. *College Student Journal, 34*, 509–515.
- Huff, M. T., & Burek, M. W. (2016). Enhancing Student Persistence and Freshmen-to-Sophomore Retention Through a College-Level First-Year Seminar. *Department Chair, 27*(1), 18-20. doi:1002/dch.30094

- Hunter, M. A., & Linder, C. W. (2005). First-year seminars. In M. L. Upcraft, J. N. Gardner, B.O. Barefoot, & Associates, *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 275-291). San Francisco: Jossey-Bass.
- Jacobs, M., & Pretorius, E. (2016), First-year seminar intervention: Enhancing first-year mathematics performance at the University of Johannesburg. *Journal of Student Affairs in Africa*, 4(1), 77-86. doi:10.14426/jsaa.v4i1.146
- Jaffer, F., & Garraway, J. (2016). Understanding gaps between student and staff perceptions of university study in South Africa: A case study. *Journal of Student Affairs in Africa*, 4(1), 65–76. doi:10.14426/jsaa.v4i1.145
- Jamelske, E. (2009). Measuring the impact of a university first-year experience program on student GPA and retention. *Higher Education*, 57(3), 373-391. doi:10.1007/s10734-008-9161-1
- Jenkins-Guarnieri, M.A., Horne, M.M., Wallis, A.L., Rings, J.A., & Vaughn, A.L. (2015). Quantitative evaluation of the first year seminar program: Relationships to persistence and academic success. *Journal of College Student Retention*, 16(4), 593-606.
- Jessup-Anger, J.E. (2011). What’s the point? An exploration of students’ motivation to learn in a first-year seminar. *The Journal of General Education*, 60(2), 101-116. doi:10.2190/CS.16.4.f
- Kable, A.K., Pich, J., & Maslin-Prothero, S.E. (2012). A structured approach to documenting a search strategy for publication: A 12 step guideline for authors. *Nurse Education Today*, 32, 878-886. doi:10.1016/j.nedt.2012.02.022
- Klatt, J., & Ray, R. (2014). Student academic outcomes after completing a first-year seminar. *NACTA Journal*, 58(4), 288-292.
- Kim, S. U., & Shumaker, D. (2015). Student, Librarian, and Instructor Perceptions of Information Literacy Instruction and Skills in a First Year Experience Program: A Case Study. *The Journal of Academic Librarianship*, 41(4), 449-456. doi:10.1016/j.acalib.2015.04.005

- Komarraju, M., Musulkin, S., & Bhattacharya, G. (2010). Role of student-faculty interactions in developing college students' academic self-concept, motivation, and achievement. *Journal of College Student Development*, 51(3): 332-342.
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities (AAC&U).
- Kuh, G. D., & O'Donnell, K. (2013). *Ensuring quality and taking high-impact practices to scale*. Washington, DC: Association of American Colleges and Universities.
- Keup, J.R., & Young, D.G. (2017). Investigating the first-year seminar as a high-impact practice. In R.S. Feldman, *The First Year of College: Research, Theory, and Practice on Improving the Student Experience and Increasing Retention* (pp.122-162). United Kingdom: Cambridge University Press.
- Larmar, S., & Ingamells, A. (2010). Enhancing the First-Year University Experience: Linking University Orientation and Engagement Strategies to Student Connectivity and Capability. *Research in Comparative and International Education*, 5(2), 210-223.
- Mamrick, M. (2005). *The first-year seminar: An historical perspective*. Retrieved from <https://files.eric.ed.gov/fulltext/ED503171.pdf>
- Markiewicz, A. & Patrick, I. (2016). *Developing monitoring and evaluation frameworks*. Thousand Oaks, CA: Sage Publications.
- Mayo, T. (2013). First-Year Course Requirements and Retention for Community Colleges. *Community College Journal of Research and Practice*, 37(10), 764-768.
doi:10.1080/10668921003723292
- Maxwell, J.A. (2010). Using numbers in qualitative research. *Qualitative Enquiry*, 16(6), 475-482. doi:10.1177/1077800410364740
- Moja, T., Schreiber, B., & Luescher-Mamashela, T. (2014). Contextualising student affairs in Africa: The past, present and future. *Journal of Student Affairs in Africa*, 2(1), 1-8.
doi: 10.14426/jsaa.v2i1.46

- Motsabi, S., & van Zyl, A. (2017). The University of Johannesburg (UJ) First Year Experience (FYE) Initiative. Retrieved from <https://heltasa.org.za/wp-content/uploads/2016/04/TDG-FYE-Good-Practices-Guide-24-5-5-17-final-2.pdf>
- McCubbin, I. (2003). *An examination of criticisms made of Tinto's 1975 student integration model of attrition*. Retrieved from <http://www.psy.gla.ac.uk/~steve/localed/icubb.pdf>
- McKay, T.J.M., Naidoo, A., & Simpson, Z. (2018). Exploring the challenges of first-year student funding: An Intra-Institutional Case Study. *Journal of Student Affairs in Africa*, 6(1), 19–32. doi:10.24085/jsaa.v6i1.3063
- McMillan, W. (2014). 'They have different information about what is going on': Emotion in the transition to university. *Higher Education Research & Development*, 33(6), 1123–1135. doi:10.1080/07294360.2014.911250
- Miller, J.W., & Lesik, S.S. (2014). College persistence over time and participation in a first-year seminar. *Journal of College Student retention*, 16(3), 373-390. doi:10.2190/CS.16.3.d
- Mouton, N., Louw, G.P. & Strydom, G.L. (2013). Restructuring and mergers of the South African postapartheid tertiary system (1994–2011): A critical analysis. *Journal of International Education Research*, 9(2), 127–144.
- Mukwevho, M.W. (2018). Time management challenges on students' academic performance: A case study of a rural university in Limpopo Province, South Africa. *Journal of Gender, Information and Development in Africa (JGIDA)*, 1(1), 225-241. doi:10.31920/2050-4284/2018/S1n1a12
- Murray, J., & Wolf, P. (2016). Faculty Experience Teaching in an Interdisciplinary First-Year Seminar Program: The Case of the University of Guelph. *Canadian Journal for the Scholarship of Teaching and Learning*, 7(1), 1-21. doi:10.5206/cjsotl-rcacea.2016.1.4
- Nelson Mandela University (2019). Nelson Mandela University First-Year Success Programme. Retrieved from <https://orientation.mandela.ac.za/Welcome>
- Nel., K., Govender, S., & Tom, R. (2016). The social and academic adjustment experiences of first-year students at a historically disadvantaged peri-urban university in South

- Africa. *Journal of Psychology in Africa*, 26(4), 384-389.
doi:10.1080/14330237.2016.1208960
- Noble, K., Flynn, N.T., Lee, J.D., & Hilton, D. (2007). Predicting successful college experiences: Evidence from a first year retention program. *Journal of College Student Retention*, 9(1), 39-60. doi:10.2190/6841-42JX-X170-8177
- North West University. (2019). *First-year experience - student academic development and support*. Retrieved from <http://services.nwu.ac.za/ctl/first-year-experience>
- Nyar, A. (2018). The First-Year Experience (FYE): Moving toward a well-defined field of study in South Africa. *Journal of Student Affairs in Africa*, 6(1), ix–xi.
doi:10.24085/jsaa.v6i1.3061
- Padgett, R.D., Keup, J., & Pascarella, E.T. (2013). The impact of first-year seminars on college students' life-long learning orientations. *Journal of Student Affairs Research and Practice*, 50(2), 133-151. doi:10.1515/jsarp-2013-0011
- Pascarella (1980). Student-faculty informal contact and college outcomes. *Review of Educational Research*, 50(4), 545-595. doi:10.3102/00346543050004545
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (volume 2). San Francisco: Jossey-Bass.
- Pather, S. & Dorasamy, N. (2018). The mismatch between first-year students' expectations and experience alongside university access and success: A South African University Case Study. *Journal of Student Affairs in Africa*, 6(1), 49–64.
doi: 10.24085/jsaa.v6i1.3065
- Pather, S., Norodien-Fataar, N., Cupido, X., & Mkonto (2017). First year students' experience of access and engagement at a University of Technology. *Journal of Education*, 1(69), 162-184.
- Patton, M. Q. (2008). *Utilization-focused evaluation*. Chapter 7. Los Angeles, California: Sage.

- Philips, S.G., & Case, E. (2013). Contextualizing information literacy enrichment through a common reader in a first-year experience seminar. *College & Undergraduate Libraries*, 20(1), 1-24. doi:10.1080/10691316.2013.761046
- Pike, G.R., Hansen, M.J., & Li, C. (2011). Using instrumental variables to account for selection effects in research on first-year programs. *Res High Educ*, 52, 194-124. doi:10.1007/s11162-010-9188-x
- Permzadian, V., & Credé, M. (2016). Do First-Year Seminars Improve College Grades and Retention? A Quantitative Review of Their Overall Effectiveness and an Examination of Moderators of Effectiveness. *Review of Educational Research*, 86(1), 277-316. doi:10.3102/0034654315584955
- Pittendrigh, A., Borkowski, J., Swinford, S., & Plumb, C. (2016). Knowledge and Community: The Effect of a First-Year Seminar on Student Persistence. *The Journal of General Education*, 65(1), 48-65. doi:10.5325/jgeneeduc.65.1.0048
- Porter, S., & Swing, R. (2006). Understanding how first-year seminars affect persistence. *Research in Higher Education*, 47(1), 89-109. doi:10.1007/s11162-005-8153-6
- Potts, G., & Schultz, B. (2008). The freshman seminar and academic success of at-risk students. *College Student Journal*, 42(2), 647-658.
- Rossi, P., Lipsey, M.W., & Henry, G.T. (2019). *Evaluation. A Systematic Approach* (8th ed.). Thousand Oaks, CA: Sage Publications.
- Sander, P., & Sanders, L. (2003). Measuring confidence in academic study: A summary report. *Electronic Journal of Research in Educational Psychology and Psychopedagogy*, 1(1), 1-17.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., . . . Jinks, C. (2018). Saturation in qualitative research: Exploring its conceptualization and operationalization. *Qual Quant*, 52(4), 1893-1907. doi:10.1007/s11135-017-0574-8
- Schrader, P. G., & Brown, S. W. (2008). Evaluating the First Year Experience: Students' Knowledge, Attitudes, and Behaviors. *Journal of Advanced Academics*, 19(2), 310-343. doi:10.4219/jaa-2008-775

- Scott, I. (2018). Designing the South African Higher Education System for Student Success. *Journal of Student Affairs in Africa*, 6(1), 1–17. doi: 10.24085/jsaa.v6i1.3062
- Shircore, M., Galloway, K., Corbett-Jarvis, N., Ryan, D., & Cook, J. (2013). From the first year to the final year experience: Embedding reflection for work integrated learning in a holistic curriculum framework. A Practice Report. *The International Journal of the First Year in Higher Education*, 4(1), 125-133.
doi: 10.5204/intjfyhe.v4i1.158
- Skipper, T. L. (2017). What makes the first-year seminar high impact? An exploration of effective educational practices. (Research Reports No. 7). Retrieved from <https://files.eric.ed.gov/fulltext/ED573737.pdf>
- Sobel, K. (2018). First-year seminar faculty: Recruitment, supports, motivators, and challenges. *Teaching & Learning Inquiry*, 6(1), 67-78.
doi:10.20343/techlearning.6.1.7
- South Africa Census Bureau. (2019). *Quarterly labour force survey: 2019*. (Report No. P0211). Retrieved from <http://www.statssa.gov.za/publications/P0211/P02111stQuarter2019.pdf>
- Smith, T., & Barrett, C. (2019). Supporting first-year seminar faculty through assets-based communities of practice. *The Journal of Faculty Development*, 33(3), 19-23.
- Stebleton, M., Jenson, M., & Peter, G. (2010). Enhancing student engagement in a multidisciplinary, first-year experience course. *College teaching Methods and Styles Journal*, 6(1), 1-6.
- Streiner, D.L. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. *J Pers Assess*, 80(1), 99-103.
- Streiner, D.L., & Kottner, J. (2014). Recommendations for reporting the results of studies of instrument and scale development and testing. *J Adv Nurs*, 70(9), 1970-1979.
- Summerlee, A., & Murray, J. (2010). The impact of enquiry-based learning on academic performance and student engagement. *The Canadian Journal of Higher Education*, 40(2), 78-94.

- Terwee, C.B., Bot, S.D., Boer, M.R., van der Windt, D.L., Dekker, J., Bouter, L.M., & de Wet, H.C.W. (2007). Quality criteria were proposed for measurement properties of health status questionnaires. *J Clin Epidemiol*, *60*(1), 34-42.
doi: 10.1016/j.jclinepi.2006.03.012
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational research*, *45*, 39-125.
doi:10.3102/00346543045001089
- Tooker, P., Richardson, N., Preskill, S., & Esser, J. (2015). Integrating learning in the first-year program. *Peer Review*, *16*(4), 12-13.
- Tremblay, M-C., Brouselle, A., Richard, L., & Beaudet, N. (2013). Defining, illustrating and reflecting on logic analysis with an example from a professional development program. *Evaluation and Program Planning*, *40*, 64-73.
doi:10.1016/j.evalprogplan.2013.05.004
- Trotter, R.T. (2012). Qualitative research sample design and sample size: Resolving and unresolved issues and inferential imperatives. *Preventive Medicine*, *55*, 398–400.
doi:10.1016/j.ypmed.2012.07.003
- Tukibayeva, M., & Gonyea, R.M. (2014). High-impact practices and the first-year student. *New Directions for Institutional Research*, *2013*(160), 19-36. doi:10.1002/ir.20059
- Turner, R., Morrison, D., Cotton, D., Child, S., Stevens, S., ...Kneale, P. (2017). Easing the transition of first year undergraduates through an immersive induction module. *Teaching in Higher Education*, *22*(7), 805-821.
doi:10.1080/13562517.2017.1301906
- University of Cape Town. (2021). First-year experience (FYE) project. Retrieved from <http://www.ched.uct.ac.za/first-year-experience-project>
- University of Fort Hare. (2019). “Isidima” enhanced first year experience. Retrieved from <http://www.ufh.ac.za/news/%E2%80%9CISIDIMA%E2%80%9DEnhancedFirstYearExperience>

- University of the Free State. (2019). *P3 Mentorship Programme*. Retrieved from https://www.ufs.ac.za/docs/librariesprovider32/default-document-library/p3-mentor-programme---duties-responsibilities.pdf?sfvrsn=9d48021_2
- University of Johannesburg. (2019). *About the first year experience*. Retrieved from <https://www.uj.ac.za/corporateservices/ads/Pages/First-Year-Experience.aspx>
- University of Pretoria. (2019). *Welcome back to UP*. Retrieved from https://www.up.ac.za/news/post_2869981-welcome-back-to-up
- University of the Western Cape. (2019). *Fixing the first-year experience: Studying student success at UWC*. Retrieved from <https://www.uwc.ac.za/News/Pages/Fixing-The-First-Year-Experience-Studying-Student-Success-At-UWC.aspx>
- University of the Witwatersrand. (2019). *First year experience (FYE)*. Retrieved from <https://www.wits.ac.za/students/first-year-experience/>
- Urson, R., & Chapman, S. (2019, January 25). *Internal formative evaluation report: Actuarial Science Mathematics Programme (AMP)* (Unpublished internal report). University of Cape Town: Cape Town
- van Der Zanden, P., Denessen, E., Cillessen, & Meijer, P.C. (2018). Domains and predictors of first-year student success: A systematic review. *Educational Research Review*, 23, 57-77. doi:10.1016/j.edurev.2018.01.001
- Wakefield, J.S., Knezek, G.A., & Gutiérrez de Piñeres, S.A. (2016). Designing a blended academic transition seminar for first-year university students. *International Journal on E-Learning*, 15(4), 483-508.
- Watkins, R., Meiers, M.W., & Visser, Y.L. (2012). *A guide to assessing needs: Essential tools for collecting information, making decisions, and achieving development results*. Washington: The World Bank.
- Weisler, S., & Trosset, C. (2006). Evaluating quality of engagement in Hampshire's College's first-year plan. *Peer Review*, 8(3), 11-13.
- Weiss, C.H. (1997). Theory-based evaluation: Past, present, and future. *New Directions for Evaluation*, 1997(76), 41-55. doi:19.1002/ev.1086

- Willis, J.B., & Allegretti, C.L. (2013). Collaborative teaching in a general curriculum seminar: an assessment of faculty outcomes. *International Journal of the Scholarship of Teaching and Learning*, 8(1): 1-16.
- Winfield, J., & Luyt, J. (2012). An evaluation of an exploratory intervention to improve progression in a first-year Accounting course. *South African Journal of Accounting Research*, 27(1), 1-36. doi:10.1080/10291954.2013.11435169
- Winstead, J. (2017). Improving first-year transitions and success at the Nelson Mandela University. Retrieved from <https://heltasa.org.za/wp-content/uploads/2016/04/TDG-FYE-Good-Practices-Guide-24-5-5-17-final-2.pdf>
- Wismath, S., & Newberry, J. (2019). Mapping assets: High-impact practices and the first-year experience. *Teaching & Learning Inquiry*, 7(1), 34-54.
- Yomtov, D., Plunkett, S.W., Efrat, R., & Marin, A.G. (2017). Can peer mentors improve first-year experiences of university students? *Journal of College Student Retention: Research, Theory & Practice*, 19(1), 25-44.
doi:10.1177/1521025115611398
- Young, D. G., & Hopp, J. M. (2014). *2012–2013 national survey of first-year seminars: Exploring high-impact practices in the first college year*. National Resource Center, Columbia: University of South Carolina

Appendix A: First-year Experience Programmes in the Top 200 Google Search Results

Result number	Institution	Country	Name of programme	CB/NCB ³	FYS/CR/E/SL/LC/O ⁴	Length	O/C ⁵	M/NM ⁶
2	Whittier College	USA	First Year Experience Program	CB	FYS/E/CR	1 year	C	M
3	Centenary University	USA	First Year Experience Program	CB	FYS/E	1 year	C	M
8	Indiana University	USA	Hoosier Experience Program	NCB	E/SL	1 year	O	NM
9	University of Witwatersrand	South Africa	First Year Experience Program	CB	FYS/E/SL	1 year	C	M
10	University of Washington	USA	First Year Interest Group	CB	FYS/SL/O	1 year	O	M
12	Swathmore College	USA	Honors Program	NCB	FYS	1 year	O	NM
13	Los Angeles City College	USA	First Year Experience Program	NCB	FYS/E	1 year	O	M
14	University of Tampa	USA	First Year Experience Program	CB	FYS/O	1 year	C	M
15	Palomar College	USA	First Year Experience- Palomar Promise Program	NCB	FYS/E/O	1 year	O	M
16	Johns Hopkins University	USA	B'More Program	NCB	E/SL	1 week	O	NM
17	Hawaii Pacific University	USA	Be My Guest, HoloHolo and Live	NCB	FYS/E	1 year	O	M

³ Credit-bearing (CB) / Non-credit bearing (NCB)

⁴ First-year seminar (FYS) / Common reader (CR) / Service Learning (SL) / Events (E) / Learning Community (LC) / Other (O)

⁵ Optional (O) / Compulsory (C)

⁶ Mentoring (M) / Non-mentoring (NM)

			Hawaii Program					
18	Ohio State University	USA	Convocation, Buckeyes and Summer Program	NC B	FYS/E/SL/O	1 year	O	M
19	Anderson University	USA	First Year Experience Program	NC B	FYS	1 year	O	M
20	Montgomery College	USA	First Year Experience Program	CB	FYS/E/SL	1 year	C	M
21	Community College of Baltimore	USA	First Year Experience Program	CB	FYS/E	1 year	C	M
22	Cape Peninsula of Technology	South Africa	First Year Experience	NC B	FYS	1 year	O	M
23	Jackson State University	USA	First Year Assessment Program	NC B	FYS/O	1 year	O	NM
24	California State University	USA	First Year Experience Program	CB	FYS/E/CR/SL	1 year	C	M
26	Middlesex Community College	USA	First Year Experience Program	CB	FYS/E	1 year	C	NM
27	Otterbein University	USA	First Year Experience Program	NC B	FYS/E	1 year	O	M
28	University of Toronto	USA	First Year Experience Program	NC B	FYS/E	6 weeks -1 year	O	M
29	Catholic University of America	USA	First Year Experience Program	NC B	FYS/SL/E	1 year	C	M
30	Boston Community College	USA	First Year Experience Program	NC B	FYS /E/CR	3 months	O	M

31	University of Michigan	USA	First Year Experience Program	CB	E/O/SL	1 year	C & O	NM
33	Calpoly Pomona College	USA	First Year Experience Program	CB	E/CR/FYS	1 year	C	M
34	California Baptist University	USA	First Year Experience Program	CB	FYS/CR/E	1 year	C	NM
35	University of Connecticut	USA	First Year Experience Program	CB	FYS/SL	1 year	C	M
36	University of California Riverside	USA	CHASS FIRST Program	NC B	FYS/E	1 year	O	M
37	University of Texas	USA	First Year Experience Program	NC B	FYS/E/O	1 year	O	M
38	American University in Cairo	Egypt	First Year Experience Program	NC B	FYS/E	1 year	C & O	M
39	University of California, Los Angeles	USA	First Year Experience Program	NC B	FYS/E	1 year	O	NM
41	Smith College	USA	First Year Experience Program	NC B	FYS/E/CR/	6 weeks – 1 year	O	NM
43	Owego State University of New York	USA	First Year Experience Program	NC B	FYS/SL	1 year	O	M
44	University of California, Davis	USA	First Year Experience Program	CB	FYS/E	1 year	C	M
46	Earlham College	USA	First Year Experience Program	NC B	FYS/SL/O/E	6 weeks – 1 year	O	NM
47	Maryland Institute College of	USA	First Year Experience Program	CB	FYS	1 year	C	NM

	Art University							
48	Cockrell School of Engineering	USA	First Year Experience Program	NC B	FYS	1 year	O	M
49	Georgia Southern University	USA	First Year Experience Program	NC B	FYS/O	One semester	O	NM
50	University of Central Florida	USA	First Year Experience Program	CB	FYS/E/O	1 year	O	M
51	Southern Connecticut University	USA	First Year Experience Program	NC B	FYS/SL/CR/O	1 year	O	M
52	Sam Houston State University	USA	First Year Experience Program	CB	FYS/CR/O	1 year	O	NM
54	North Hennepin Community College	USA	First Year Experience Program	NC B	FYS	1 year	O	NM
55	The University of Alabama	USA	First Year and Retention Initiative	NC B	FYS/SL/E	1 year	O	M
56	Compton College	USA	First Year Experience Program	NC B	FYS/O	1 year	O	M
58	Humber College	USA	First Year Experience Program	NC B	FYS	1 year	O	M
61	Marietta College	USA	First Year Experience Program	NC B	FYS/SL/E	1 year	O	M
62	University of Nebraska-Lincoln	USA	First Year Experience Program	NC B	FYS	1 year	O	M
64	Mt. San Jacinto College	USA	First Year Experience Program	NC B	FYS/E	1 year	C & O	M
66	University of Hawaii Hilo	USA	First Year Experience Program	NC B	E	1 year	O	M

67	El Camino College	USA	First Year Experience Program	NC B	FYS/E	1 year	O	NM
69	University of California, San Diego	USA	First Year Experience Program	NC B	FYE/E	1 year	O	M
70	Cabrillo College	USA	Stars First Year Experience Program	NC B	FYS	1 year	O	M
71	Washburn University	USA	First Year Experience Program	NC B	FYS/O	15 weeks – 1 year	O	M
72	Nassau Community College	USA	First Year Experience Program	NC B	FYS/CR/SL	1 year	O	NM
73	University of Alabama	USA	First Year Experience Program	NC B	FYS	1 year	O	M
74	Principia College	USA	First Year Experience Program	NC B	FYS	1 year	C	NM
75	Jackson State University	USA	First Year Experience Program	NC B	FYS/E	1 year	C	M
76	Craven Community College	USA	First Year Experience Program	CB	FYS	1 year	C	M
77	Monroe College	USA	First Year Experience Program	NC B	E	?	O	M
78	Gonzaga University	USA	First Year Experience Program	NC B	SL/FYS	15 weeks	C	M
79	Texas Honors College	USA	First Year Experience Program	NC B	FYS	-	C	M
80	University of Kansas	USA	First Year Experience Program	CB	FYS/CR	1 year	C	M
81	SUNY Cobleskill College	USA	First Year Experience Program	CB	FYS	15 weeks	C	M
82	Rend Lake College	USA	First Year Experience Program	CB	SL/FYS	?	C	NM

84	Curry College	USA	First Year Experience Program	CB	E/FYS	?	O	M
85	Oklahoma City University	USA	First Year Experience Program	NCB	CR/E	15 weeks	C & O	NM
86	Rensselaer college	USA	First Year Experience	NCB	E/O	1 year	O	M
89	University of Connecticut	USA	First Year Experience Program	CB	FYS/E	1 year	C	M
90	Raritan Valley Community College	USA	First Year Experience	CB	E	1 year	C	M
91	Campbell University	USA	First Year Experience	CB	FYS/O	1 year	C	M
92	College of the Desert	USA	First Year EDGE Experience Program	CB	FYS	1 year	C	M
93	Diablo Valley College	USA	First Year Experience Program	CB	FYS/E	1 year	C & O	M
94	Anne Arundel Community College	USA	First Year Experience Program	NCB	FYS/O	1 year	O	M
95	University of Tennessee Chattanooga	USA	First Year Experience Program	CB	E/CR/FYS	1 year	C & O	M
97	Florida Gulf University	USA	First Year Experience Program	NCB	E/FYS	1 year	O	NM
98	Meredith College	USA	First Year Experience Program	CB	CR/FYS/E	1 year	C & O	M
100	De Anza College	USA	First Year Experience Program	CB	CR/FYS/SL/O	1 year	C	M
101	Loyola Marymount College	USA	First Year Experience Program	CB	E/FYS/SL	5 weeks	C & O	NM

102	College of Charleston	USA	First Year Experience Courses	C	FY/CS/CR	1 year	C & O	NM
103	Morehouse College	USA	First Year Experience Course	NC B	FYS	1 year	C	NM
104	Fordham University	USA	First Year Experience Program	-	CR/ FYS/E	1 year	-	M
105	Chabot College	USA	First Year Experience Program	NC B	FYS	1 year	O	NM
106	Borough of Manhattan Community College	USA	First Year Experience Program	NC B	FYS	15 weeks	O	NM
108	Howard University	USA	First Year Experience Program	CB	FYS	1 year	C	M
109	Alfred University	USA	First Year Experience Program	CB	FYS/SL	?	C	NM
111	Boston University	USA	First Year Experience Program	CB	FYS//E	1 year	C & O	NM
112	University of Colorado Boulder	USA	First Year Experience Program	CB	FYS	1 year	O	M
114	Webster University	USA	First Year Experience and Undergraduate Persistence Program	NC B	E/ LC/FYS	1 year	O	NM
115	Susquehanna University	USA	First Year Experience Program	NC B	FYS/SL	30 weeks	C & O	NM
117	University of Maryland, Baltimore County	USA	First Year Experience Program	CB	E/FYS	1 year	C	M
121	University of South Alabama	USA	First Year Experience Program	NC B	LC	?	C	M

122	University of California, Fresno	USA	First Year Experience Program	NC B	LC	1 year	O	NM
123	South Eastern University	USA	First Year Experience Program	CB	FYS/E	1 year	C	NM
125	The Georgia Institute for Technology Tech	USA	First Year Experience Program	NC B	LC/SL/E/O	1 year	O	NM
126	Virginia Wesleyan University	USA	First Year Experience Program	CB	LC/E	1 year	C & O	NM
127	Case Western Reserve University	USA	First Year Experience Program	NC B	CR/E	1 year	O	M
129	University of Southern California	USA	First year Experience Program	NC B	FYS/E/SL	1 year	O	M
133	Saint Augustine University	USA	First Year Experience Program	NC B	LC/E	1 year	?	M
135	Florida Atlantic University	USA	First Year Experience Program	NC B	FYS/SL/E/LC	1 year	O	NM
136	Youngstown State University	USA	First Year Experience Program	CB	LC/FYS/E	1 year	C	NM
137	University of New York at Old Westbury	USA	First Year Experience Program	CB	FYS/LC	1 year	C	M
139	University of Texas at San Antonio	USA	First Experience Program	NC B	FYS/O	15 weeks	O	M
141	Mississippi State University	USA	First Year Experience	CB	FYS	1 year	O	M
142	Indiana University	USA	First Experience Program	CB	FYS/LC	15 weeks	C	NM

144	Pacific Lutheran University	USA	First Year Experience Program	CB	CR/FYS	15 weeks	C	NM
145	Binghamton State University, New York	USA	First Year Experience Program	CB	FYS	15 weeks	O	NM
147	Cerritos College	USA	First Year Experience Program	NCB	LC/E	15 weeks	O	NM
148	California State University, Fullerton	USA	First Year Experience Program	NCB	E/FYS/O	1 year	O	M
150	Butler Community College	USA	First Year Experience Program	NCB	E	1 year	O	M
151	Guttman Community College	USA	First Year Experience Program	CB	FYS	1 year	C	NM
158	Westchester Community College	USA	First Year Experience Program	CB	FYS/CR	1 year	C	M
160	Elon University	USA	First Year Experience Program	NCB	SL/E	15 weeks	O	NM
161	Stonehill College	USA	First Year Academic Program	NCB	FYS	?	O	NM
163	Lane Community College	USA	First Year Experience Program	NCB	E	1 year	O	M
166	Kent State University	USA	First Year Experience Program	CB	FYS/E/LC	1 year	C	NM
167	Illinois Wesleyan University	USA	First Year Experience Program	NCB	FYS/E	1 year	O	NM
169	Concordia University Irvine	USA	First Year Experience Program	CB	FYS/SL	1 year	C & O	NM
171	University of Southern California, Aiken	USA	First Year Experience Program	CB	FYS	1 year	C	M

177	Mount Saint Mary College	USA	First Year Experience Program	NC B	LC/E	1 year	O	NM
180	The State University of New York, Oneonta	USA	First Year Experience Program	NC B	E	1 year	O	NM
182	Saint Xavier	USA	First Year Experience Program	NC B	FYS/E	1 year	C	NM
184	Louisiana State University of Alexandria	USA	First Year Experience Program	CB	FYS/SL	1 year	O	M
186	Columbus State University	USA	First Year Experience Program	CB	FYS/LC	15 weeks	C	NM
188	Fort Hays State University	USA	First Year Experience Program	CB	E/FYS/LC	1 year	C & O	M
189	University of New Orleans	USA	First Year Experience Program	CB	FYS/E	1 year	C & O	M
190	Gwynedd Mercy University	USA	First Year Experience Program	CB	FYS/CR/SL	1 year	C	NM
191	Fairfield University, Connecticut	USA	First Year Experience Program	NC B	SL/FYS	1 year	C	NM
192	University of Louisville	USA	First Year Experience Summer Program	CB	LC/O/FYS	15 weeks	O	M
196	University of Texas, El Paso	USA	First Year Experience Program	CB	FYS/E	1 year	C	M
197	University of New Hampshire	UK	First Year Experience Discovery Program	CB	FYS	1 year	O	NM
198	Auburn University	USA	First Year Experience Program	CB	E/FYS/LC	1 year	O	NM

199	North Eastern Illinois University	USA	First Year Experienc e Program	CB	FYS	1 year	C	M
200	Penn State Smeal College of Business	USA	First Year Experienc e Program	CB	FYS/E/LC	1 year	O	M

Appendix B: Informed consent for theory of change discussion



Dear Stakeholder,

My name is Zayaan Noordien and I am a Master's student enrolled in the MPhil in Programme Evaluation at the University of Cape Town. I would like to invite you to a structured discussion session around the outcomes and underlying assumptions of the Discover Commerce Programme, given your involvement in the design of the programme.

This discussion is critical as it will culminate into the development of a theory of change (needed for a theory evaluation) as well as a Monitoring and Evaluation plan for the Discover Commerce Programme. This evaluation has been approved by the Commerce Faculty Ethics in Research Committee.

Your participation in this discussion is voluntary and you may choose to opt out at any point, without any penalty. I anticipate the discussion to last approximately 90 minutes.

The session will be audio-recorded, with your consent. The audio-recordings will be deleted once transcripts have been generated. Any personal identifiers will be removed during the transcription process. Transcripts will be deleted once a first draft of the programme theory has been developed for your review.

If you have any questions regarding the nature of this evaluation, you may contact Dr Adiilah Boodhoo (dissertation supervisor) on 0620391499.

Please indicate your consent to participate in this session below:

By signing this consent form, I confirm that I am a willing participant and consent to the session being audio-recorded. I also confirm that I was provided the opportunity to ask any questions.

Participant Full name

Date

Signature

Sincerely,
Zayaan Noordien
(nrdzay001@myuct.ac.za)

If for any reason you are not satisfied with how the study is conducted and have any concerns, you may report this to the course convenor, Associate Professor Sarah Chapman (Sarah.Chapman@uct.ac.za)

Appendix C: Glossary of terms and guiding definitions for theory of change

Inputs: The financial, human, and other resources available to deliver program activities and produce program outputs

Activities: Specific actions taken by the program (tasks and processes) that contribute to the identified outputs.

Outputs: The products or services delivered by the program that reach people who participate or who are targeted by the program.

Outcomes: Changes for individuals, groups, communities, organizations, or systems over time; they involve changes in knowledge, values, motivation, and skills (usually in the shorter term); changes in behaviour and the way that organizations operate (usually medium term); and changes in the conditions that people experience (usually in the longer term).

Assumptions: Statements or hypotheses that are believed to be true and from which a conclusion can be drawn; these statements concern how and why we think the program will work in its context. Assumptions are often unstated or implicit and made explicit through the program theory and the program logic. External Factors: The environment in which a program exists includes a variety of external factors that interact with and influence the program, either positively in supporting or advancing it or negatively in potentially detracting from its success.

Adapted from Markiewicz, A., & Patrick, I. (2016). *Developing Monitoring and Evaluation Frameworks*, Thousand Oaks, CA: Sage

Appendix D: Questions guiding the theory of change discussion

- 1.) What are the key needs/problems of first-year students which you are attempting to address with the Discover Commerce Programme?
- 2.) What are the external factors that could influence the success of the programme?
- 3.) What factors need be in place to ensure that the programme is effectively implemented?
- 4.) What are the longterm/overall goals of the Discover Commerce Programme?
These are the ultimate goals the programme desires to achieve and are often changes in conditions and or/status.
- 5.) What are the medium-term/intermediate outcomes of the Discover Commerce Programme? What pre-conditions are necessary to bring about these long-term goals?
These are often changes in behaviour that result from participants' new knowledge, attitudes and skills.
- 6.) What are the key short-term outcomes of the Discover Commerce Programme?
The initial/short-term outcomes refer to changes in participants' skills, knowledge and attitudes.
- 7.) What is being done to achieve these outcomes? What are the activities of the Discover Commerce Programme?
- 8.) What are the outputs of these activities?
Outputs are products of a programme's activities i.e. number of sessions taught and number of participants served.
- 9.) What are the underlying causal assumptions/linkages of the Discover Commerce Programme?
 - What activities would lead to what outputs?
 - Which outputs lead to what short-term outcomes?
 - What short-term outcomes lead to which intermediate outcomes logically?
 - Do the short-term and intermediate term outcomes lead to the long-term outcomes?

Appendix E: Informed consent for M&E framework



Dear Stakeholder,

I would like to invite you to a structured discussion session to assist in the development of the M&E framework. This evaluation has been approved by the Commerce Faculty Ethics in Research Committee.

Your participation in this discussion is voluntary and you may choose to opt out at any point, without any penalty. I anticipate the discussion to last approximately 90 minutes.

The session will be audi-recorded, with your consent. The audio- recordings will be deleted once transcripts have been generated. Any personal identifiers will be removed during the transcription process. Transcripts will be deleted once a first draft of the programme theory has been developed for your review.

If you have any questions regarding the nature of this evaluation, you may contact Dr Adiilah Boodhoo (dissertation supervisor) on 0620391499.

Please indicate your consent to participate in this session below:

By signing this consent form, I confirm that I am a willing participant and consent to the session being audio-recorded. I also confirm that I was provided the opportunity to ask any questions.

Participant Full name

Date

Signature

Sincerely,
Zayaan Noordien
(nrdzay001@myuct.ac.za)

If for any reason you are not satisfied with how the study is conducted and have any concerns, you may report this to the course convenor, Associate Professor Sarah Chapman (Sarah.Chapman@uct.ac.za)

Appendix F: Permission letter of agreement



School of Management Studies
University of Cape Town, Private Bag
Rondebosch 7701
Telephone +27 21 650-5218
Sarah.Chapman@uct.ac.za

TO WHOM IT MAY CONCERN

Thank you very much for your willingness to enable one of our students to work on the evaluation of a programme from your organisation as part of their 50% Master of Philosophy specializing in Programme Evaluation dissertation. We appreciate your contribution to the education of our students. At the end of the dissertation examination process, you will receive a copy of the dissertation in the form of a useful evaluation report which will enable you to make informed decisions about your programme. We also undertake to assure you that the student will display professional behaviour at all times while working in your organisation or on your programme.

The student will need programme information from you and we request that you or a designated person meet with the regularity to provide access to this information. Your cooperation in this regard will ensure that the student provides you with a high quality evaluation, and will help to ensure the student meets deadlines. In order for us to keep track of the quality of the student's work we request that you copy the student's supervisor(s) in all correspondence, and that you reach out to the student's supervisor(s) directly should you have any concerns regarding the student's work.

Please note that our students are required to work within the ethical framework of the Faculty of Commerce when collecting information from programme documents, programme stakeholders and programme beneficiaries. This framework deals with the anonymity of data sources, sensitivity when requesting information from people and responsibilities when reporting results. Please also be aware that the student's work will fall within the intellectual property specifications of the University of Cape Town. You can familiarize yourself with the terms of UCT's IP Policy here https://www.uct.ac.za/downloads/uct.ac.za/about/policies/intellect_property.pdf. This policy explains that copyright to any publications stemming directly from the student's research dissertation is automatically assigned by UCT to the author (in this case, the student). A student also owns the copyright in their thesis or dissertation.

In order to comply with the rules of the Faculty of Commerce, we request you sign below to indicate that you are aware of the research / evaluation been undertaken by one of our students in your organisation, and that you will support the student to access programme data, records and recipients if applicable.

Yours sincerely,



Associate Professor Sarah Chapman

COURSE CONVENOR: MPhil Programme Evaluation and PhD In Programme Evaluation

AGREEMENT FOR STUDENT TO UNDERTAKE RESEARCH AND/OR AN EVALUATION IN YOUR ORGANISATION:

Aimeadon School of Management Studies, UCT 23/09/19
Signature of Authorised Person Organisation Date

Discover Commerce

Name of the programme student will evaluate (if applicable)

Appendix G: Ethics approval letter from the UCT Faculty of Commerce Ethics in Research Committee



Faculty of Commerce

Private Bag X3, Rondebosch, 7701
2.26 Leslie Commerce Building, Upper Campus
Tel: +27 (0) 21 650 4375/ 5748 Fax: +27 (0) 21 650 4369
E-mail: com-faculty@uct.ac.za
Internet: www.uct.ac.za



@Commerce UCT



UCT Commerce Faculty Office

11th November 2019

Ms Zayaan Noordien
School of Management
Studies
University of Cape Town

Dear Ms Noordien

REF: REC 2019/10/062

EVALUATING THE UNIVERSITY OF CAPE TOWN'S PILOT DISCOVER COMMERCE PROGRAMME

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid for 1 year and may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants.


The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

Shandre Swain
Administrative Assistant
University of Cape Town
Commerce Faculty Office
Room 2.26 | Leslie Commerce Building

Office Telephone: +27 (0)21 650 2695 / 4375
Office Fax: +27 (0)21 650 4369
E-mail: sl.swain@uct.ac.za
Website: www.commerce.uct.ac.za<<http://www.commerce.uct.ac.za/>

Appendix H: Clearance letter from UCT Human Resources Director

HR194	ACCESS TO UCT STAFF FOR RESEARCH PURPOSES	 UNIVERSITY OF CAPE TOWN <small>(UNIVERSITHI YASEKAPA - UNIVERSITEIT VAN KAAPSTAD)</small>
-------	--	---

NOTES

- Forms must be downloaded from the UCT website: <http://www.uct.ac.za/depts/sapweb/forms/forms.htm>
- This form must be completed by applicants who are requesting to access UCT staff for the purpose of research.
- A copy of the research proposal as well as the Ethics Committee approval must be attached.
- It is the responsibility of the researcher/s to apply for ethical clearance from the relevant Faculty's Research in Ethics Committee (RIEC).
- If you are requesting staff information, you are required to complete the [HR Information Request Form](#) (HR190) and submit it together with all the required documentation.
- The turnaround time for a reply is approximately 10 working days unless specified as urgent.
- Return the completed application form and all the above documentation to Joy Henry via email: joy.henry@uct.ac.za; or deliver to: For the Attention: Executive Director, Human Resources Department, Bremner Building, Room 214, Lower Campus, UCT.

SECTION A: APPLICANT DETAILS

Title	Miss	Name	Zayaan
Telephone number	0760188394	Email address	nrdzay001@myuct.ac.za
Student number	NRDZAY001	Staff number	
Visiting researcher ID / passport number			
Faculty Officer contact details	Musa Gcilitshana (Faculty manager)		
	021 650 4340		
University or institution at which employed or a registered student	University of Cape Town		
Faculty or department in which you are registered or work	Commerce Faculty		
Address (if not UCT)			

SECTION B: SUPERVISOR DETAILS

	Title and name	Telephone number	Email address
Supervisor	Dr Adilah Boodhoo	0620391499	Adilah.Boodhoo@uct.ac.za
Co-Supervisor			

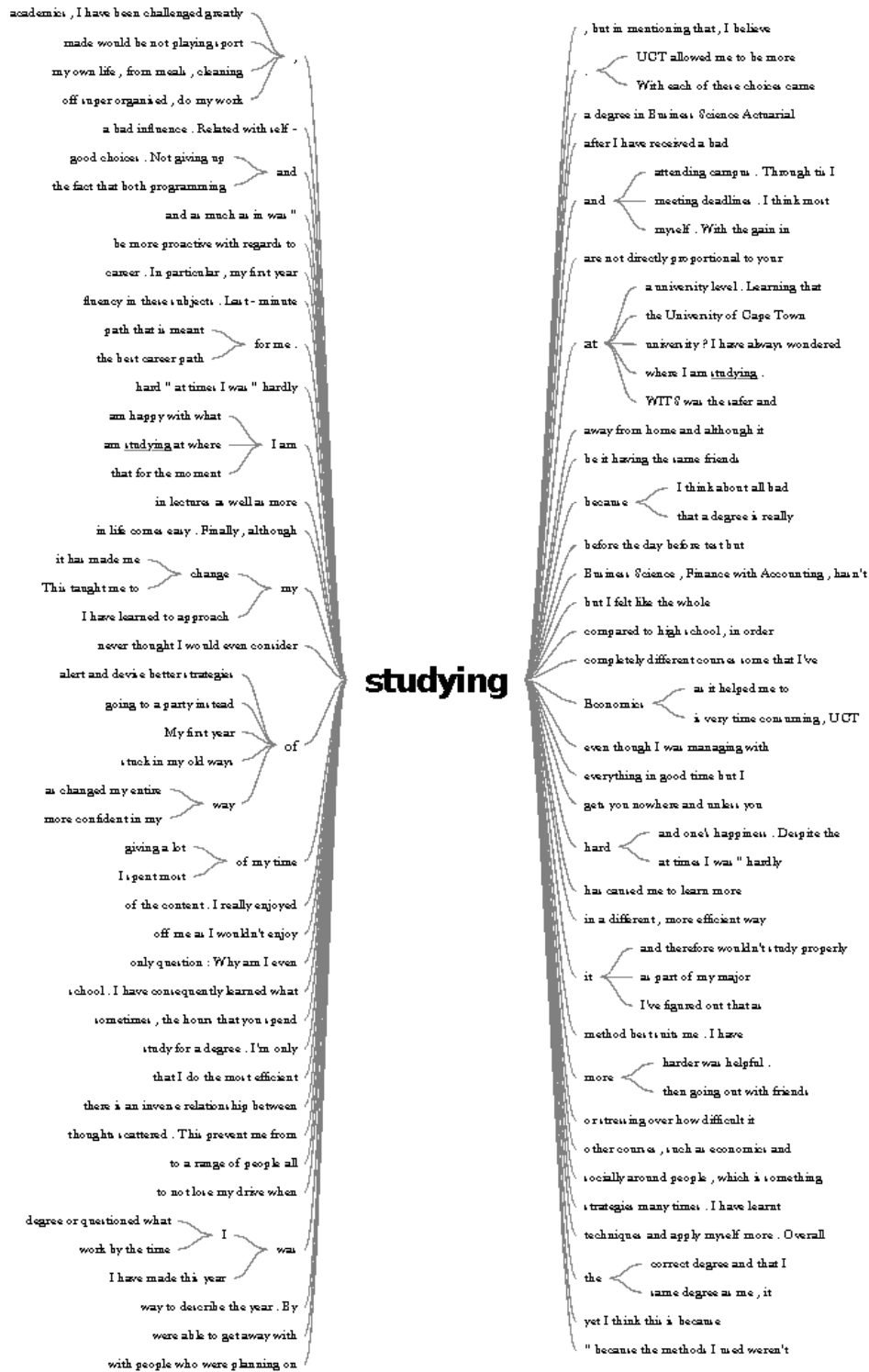
SECTION C: APPLICANT'S FIELD OF STUDY (if applicable) / TITLE OF RESEARCH PROJECT / STUDY

Degree	Master's Degree in Programme Evaluation		
Research project or title	Evaluating the University of Cape Town's pilot Discover Commerce Programme		
Research proposal attached	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Target population (number of UCT staff)	3		
Amount of time required for an interview and/or questionnaire	90 minutes		
Lead Researcher details	Zayaan Noordien		
Proof of ethical clearance status attached	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	

SECTION D: FOR OFFICE USE (Approval status to be completed by the Executive Director, Human Resources or Nominee)

Support or approval	Role		Signature	Date
Supported?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Joy Henry (Office Co-Ordinator)	12/11/2019
Approved?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Miriam Hoosain (Executive Director: HR)	13/11/19

Appendix I: Example of word tree on NVivo



Appendix J: Final code book for the needs assessment

Code book

Nodes

Name	Description	Files	References
Experience of academic work at university	These mentions report on the challenges and successes regarding academic work at university	59	220
Learning techniques and methods	These mentions related to challenges and successes regarding learning techniques and study methods	22	31
Social work balance	These mentions relate to the varying perspectives around maintaining a healthy balance between social and academic activities	20	23
Getting involved in extra curricula	These mentions related to getting involved in extra curricula activities	12	13
Exposure to courses	These mentions relate to the exposure to university courses and degrees	10	14
Mental health challenges	These mentions related to students' mental health challenges and coping mechanisms.	28	47
Self-growth	These mentions relate to student expressing how they have grown in various areas of their lives during the first-year of university	23	33
The importance of student engagement	These mentions relate to students' perceptions of social engagement at university	43	74
Diversity	These mentions relate to students' exposure to diversity	12	14
Group work skills	These mentions relate to the exposure to group work during the first-year of university	6	10

Appendix K: Students' engagement and academic confidence scales

Student Engagement Scale (41 items)
(Gunuc & Kuzu, 2015)

Campus engagement Items (12)

	<i>Item</i>	Totally Disagree	Disagree	Neutral	Agree	Totally agree
		1	2	3	4	5
Valuing (psychological engagement -1)						
1	I believe university is beneficial for me					
2	University is of great importance in my life					
3	I think the rules at university are fair for everybody					
4	I give importance to university education and take it seriously					
Sense of belonging (psychological engagement II)						
5	I feel myself as part of the campus					
6	I enjoy the activities carried out in campus					
7	I feel happy in campus					
8	I like spending time in campus					
9	I feel secure in campus.					
Participation						
10	I take part in campus activities (sports activities, cultural activities, club activities, and so on)					
11	I go to campus willingly					
12	I look forward to going to campus					

Class engagement Items (28)

	<i>Item</i>	Totally Disagree	Disagree	Neutral	Agree	Totally agree
		1	2	3	4	5
	Cognitive engagement					
13	I motivate myself to learn					
14	I determine my own learning goals					
15	I try to do my best during classes					
16	Besides doing my lessons, I further study for my lessons					
17	What I learn in class is important to me					
18	I discuss what I have learned in class with my friends out of class					
19	I attend classes by getting prepared in advance					
20	I try to do my homework in the best way					
21	I spend enough time and enough effort to learn					
	Emotional engagement					
22	I have close friend(s) in class					
23	My teachers are always near me when I need them					
24	I give importance studying together with my classmates in a group					
25	My teachers respect me as an individual					
26	I like my teachers					
27	I think my teachers are competent in their fields					

28	I have teachers that I can share my problems with					
29	My classes are entertaining					
30	My teachers show regard to my interests and needs					
31	I like doing something for my classmates					
32	I feel myself as a part or member of a student group					
33	I like communicating with my teachers					
34	I like seeing my friends in class					
	Behavioural engagement					
35	My teachers behave fairly to all my friends					
36	I carefully listen to my teacher in class					
37	My teachers interact/communicate with me					
38	I follow the rules in class					
39	I do my homework/tasks in time					
40	I carefully listen to other students in class					
41	I try my best regarding my responsibilities in group work					

Academic Confidence Scale (24 items)
Sander and Sanders (2006)

	<i>Item</i>	Not at all confident	Slightly confident	Neutral	Moderately confident	Very confident
		1	2	3	4	5
42	Study effectively on your own independently/private study					
43	Produce your best work under examination conditions					
44	Respond to questions asked by a lecturer in front of a full lecture class					
45	Manage your workload to meet course deadlines					
46	Give a presentation to a small group of fellow students					
47	Attend most taught sessions					
48	Attain good grades in your work					
49	Engage in profitable academic debate with your peers					
50	Ask lecturers questions about the material they are teaching in a one-on-one setting					
51	Ask lecturers questions about the material they are teaching during a lecture					
52	Understand the material outlined and discussed with you by the lecturer					
53	Follow the themes and the debates in lectures					

54	Prepare thoroughly for tutorials					
55	Read the recommended background material					
56	Produce coursework for the required standard					
57	Write in an appropriate academic style					
58	Ask for help if you don't understand					
59	Be on time for lectures					
60	Make the most of an opportunity of studying for a degree at university					
61	Pass assessments at the first attempt					
62	Plan appropriate revision schedules					
63	Remain adequately motivated throughout					
64	Produce your best work in course assignments					
65	Attend tutorials					

Appendix L: Questions for needs assessment and focus group protocol

Introductory question

- 1.) Can you each tell us your name and what first-year Commerce course you have decided to register for?
- 2.) Could you describe how you are feeling about starting your first-year at university?

Key theme: Identification of met and unmet needs

- 3.) Can you tell me about any particular concerns you have about starting university?
(Probe: These concerns can be academic or social).
- 4.) Can you describe whether you have access to resources or support to address these concerns or challenges?

Key theme: Gain perspectives of the DC Programme content

- 5.) Discover Commerce covers several areas to equip you with skills and information for your first-year at university. Could we quickly go through the list and share your thoughts on the importance of each of these areas to your first-year experience and your reasons?
 - Learning about assessment methods at UCT
 - Learning about library resources and computer labs
 - Study methods
 - Time management
 - Managing social media
 - Wellness and coping with stress
 - Problem solving tasks in a group
 - Preparing for exams
 - Career development information and resources
 - Mentor support by a senior student

Key theme: Identification of solutions for needs

- 6.) Imagine that you are part of a committee of people designing a first-year experience programme what type of topics and issues will you ensure your committee considers in designing these programmes? What would be important to be in place to attract first-year students to these programmes?
Probe: Remember this can cover many aspects of the programme: the length of the course, whether it offered online or face-to-face and content of the course).
- 7.) How frequent should the support services be made available?
- 8.) What other type of issues and topics should a first-year programme address?
- 9.) Do you have any further ideas you would like to share about how to develop and promote a first-year programme?

The aim of the focus groups is to get a sense of student perspectives on underlying needs, relating to their first year at university. This information will be used to revise the programme theory for the Discover Commerce Programme.

Sampling framework

The same principles will be applied for all the focus groups:

- Variation within the selection criteria to gain a wide range of perspectives.
- It will be important to ensure that participants are enrolled in a range of Commerce degree specialisations, that there is a gender balance and a mix of EDU and mainstream students in the groups.

General facilitator goals and guidelines

The facilitator will need to adhere to the following guidelines:

- Focus on participant's personal experiences instead of general comments of what they think should be happening.
- Ensure that there is a balance between building rapport and maintaining an appropriate level of professionalism.
- Engage in active listening and probe at appropriate points during the focus group.
- Remain impartial to the responses given by participants.
- Ask clarifying questions by asking details and examples when the response is unclear.
- Ensure that a full range of experiences of participants are accessed. Quiet participants will be drawn in to the discussion so as not to allow outspoken speakers to dominate the discussion.
- Reflect back during the process of the focus groups to encourage further discussion and to validate points raised.
- Ensure that time is managed to cover all the questions in the agreed time.

Total time: 90 minutes

Introduction (max 15 minutes)

- Introduction of participants to the facilitators and each other.
- Allocate a number to each participant to use as an identifier for note-taking.
- Go through the informed consent and emphasise how confidentiality will be maintained, and that participation is voluntary.
- Ask if anyone has questions before the focus groups begins.
- Ask that participants identify their allocated number before making a comment.

For the first few questions, a Round Robin reporting technique will be used where each participant will be asked to think about a response (max 15 mins).

- How are you feeling about starting your first-year at university?
- Can you tell me about any particular concerns you have about starting university?
Probe: Academic or Social).
- Can you describe whether you have access to resources or support to address these concerns or challenges?

The straw poll technique will be used for the question below. Participants will be asked to informally vote on the importance of the following topic areas listed below by giving a “yes” or “no” response. This will be done to initiate further conversation around these topic areas. (30 mins)

- Discover Commerce covers several areas to equip you with skills and information for your first-year at university. Could we quickly go through the list and share your thoughts on the importance of each of these areas to your first-year experience and your reasons?
 - Learning about assessment methods at UCT
 - Learning about library resources and computer labs
 - Study methods
 - Time management
 - Managing social media
 - Wellness and coping with stress
 - Problem solving tasks in a group
 - Preparing for exams
 - Career development information and resources
 - Mentor support by a senior student

The next few questions will be introduced, and participants will be asked to brainstorm for a few minutes. The facilitator will encourage spontaneous thoughts and ideas. The contributions from groups members will be recorded on a poster (30 mins).

- Imagine that you are part of a committee of people designing a first-year experience programme what type of topics and issues will you ensure your committee considers in designing these programmes? What would be important to be in place to attract first-year students to these programmes?
Probe: Remember this can cover many aspects of the programme: the content, the length of the course, whether it is offered online or face-to-face).
- How frequent should the support services be made available?
- What other type of issues and topics should a first-year programme address?
- Do you have any further ideas you would like to share about how to develop and promote a first-year programme?

Closing, thank all participants for their participation

