University of Cape Town

School of Management Studies

A FORMATIVE EVALUATION OF THE SAEP NON-ACADEMIC BRIDGING YEAR PROGRAMME

SHARIEFAH MAHOMED

(MHMSHA030)

A dissertation submitted in partial fulfilment of the requirements for the award of the Degree of Master of Philosophy in Programme Evaluation.

Faculty of Commerce

University of Cape Town

2014

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.

Signed by candidate

Signature: Date: 18.05.2015

Acknowledgements

With deepest affection and appreciation I dedicate this dissertation to my mother Yasmain. If it were not for her I would not have the courage to achieve my dreams. Shukraan [Thank you] for allowing me to be the best version of me.

To my beloved husband, Yusri words can never convey my gratitude for your support and love through this year.

My sincere gratitude goes out to my family for their unwavering faith, support and encouragement.

My sincere appreciation is offered to Adiilah Boodhoo, my supervisor, and Joha Louw-Potgieter, my co-supervisor, for their unending patience and support. The completion of this dissertation would not have been possible without your guidance.

I am also grateful to Sean Wilson and the staff of the SAEP Bridging Year Programme for their willing and enthusiastic participation in this evaluation.

Executive Summary

Aim of the Evaluation

This dissertation reports on a formative theory-based evaluation of the non-academic component of the Bridging Year Programme (BYP) implemented by the South African Education and Environment Project (SAEP), a Non-Governmental Organisation (NGO) working mainly in the impoverished community of Phillipi near Cape Town, South Africa. The focus of the evaluation was: (1) to extract the underlying assumptions of the non-academic component of the BYP, (2) to assess the plausibility of the underlying programme assumptions and (3) to develop an outcome monitoring framework for the non-academic component of the BYP.

The Bridging Year Programme Description

This programme recruits learners from poor socio-economic backgrounds who have gained a National Senior Certificate (NSC) at bachelors pass level but have not gained access to their tertiary level programmes of choice. Its aim is two-fold, (1) to assist learners to improve their NSC standard in order to gain access to their tertiary education programme of choice and (2) to provide them with personal development skills to cope with the academic and social demands of tertiary education. The assumption is that if the learners' personal development skills are enhanced their prospects of success in tertiary education and the employment market will be improved. Thus, the programme comprises an academic component and a non-academic (personal development) component. The scope of this evaluation focused specifically on the non-academic component of the BYP.

Background

A review of local and international bridging courses found that most students from poor socio-economic backgrounds are underprepared to cope with the social and academic workload of tertiary education, leading to high tertiary-dropout rates. A number of programme evaluations found that if students are provided with a set of non-academic (personal development) skills including planning and organising, prioritising their workload

and English literacy skills, they will be better prepared to cope with the academic demands, thus improving their prospects of success at tertiary institutions.

Research Method and Findings

A convenience sampling technique was used to involve all the programme staff of the non-academic component in the programme theory evaluation process. The programme theory of the non-academic component of the BYP was elicited using Donaldson's (2007) six-step process. The plausibility of the programme theory was then assessed by means of an extensive literature review.

The plausibility assessment revealed some gaps in the programme theory of the non-academic component of the BYP in particular that some of the short-term outcomes did not logically link to the medium term outcomes. Furthermore, the non-academic component of the BYP incorporated most of the programme activities found in other successful programmes. However, the non-academic component of the BYP did not monitor programme implementation. If programme implementation is not monitored consistently then the prospects of achieving the desired programme outcomes may be limited as the programme may not be delivered with the desired level of strength and fidelity.

Opportunities for Improvement of the programme

A revised logic model for the non-academic component of the BYP was developed and incorporated all the components which the literature review showed were associated with programme success. If the programme manager implements the revised logic model and ensures that each step of the logic model is monitored consistently, the level of success in achieving programme goals will be increased.

Table of Contents

List of Figures

List of Tables

Chapter One: Introduction

"The proportion of African students in universities increased from 49% in 1995 to 63% in 2007 and is estimated to be around two-thirds at present. This trend still has some way to go to reach the 79% of Africans in the population, but it does show steady and considerable progress since 1994."(Nzimande, 2010, p.2).

In 2014 South Africa celebrated a two decade milestone of democracy. However the South African government is still confronted by numerous challenges in the struggle to reduce inequality (National Planning Commission [NPC], 2011). Poverty alleviation and creating equal opportunities for all were identified as key strategic objectives in the 2011 NPC diagnostic report (NPC, 2011). The NPC report proposed that poverty and inequality are perpetuated by high rates of unemployment and poor educational outcomes. Although the government has managed to increase access to education, which is nearing universal levels, nevertheless, the quality of education for the majority poor black South Africans remains substandard (NPC, 2011).

According to Modisaotsile (2012), the South African education system has a shortage of qualified educators. This therefore affects the learning standards set for learners (Dass-Brailsford, 2005; Prew, 2009; Richards, 2012). These challenges are aggravated by insufficient resources and inadequate infrastructure, evident in township schools and more so in rural schools (Dass-Brailsford, 2005; Milner & Khoza, 2008). Many schools serving poor black rural communities in South Africa are considered dysfunctional (Van der Berg, 2008). The learners who attend these under-resourced schools typically reside in under-resourced communities, characterised by poverty and higher levels of crime and violence compared to the more affluent communities (Institute for Security Studies, 2015). Consequently, disadvantaged learners underperform at school. This increases their risk of being ill-prepared for their final examinations which results in an even greater challenge to cope with the academic and social demands of tertiary education (Wood & Olivier, 2004; Essack & Quayle, 2007; Milner & Khoza, 2008; Richards, 2012).

Higher levels of education have been correlated with increased income, improved living standards, access to better employment opportunities and improved health outcomes; and are therefore seen as essential for economic development (Letseka, 2009). However, many students do not complete their studies at higher education institutions. Letseka (2009) notes that about 44% of enrolled students graduate from higher education institutions (Letseka, 2009). Hence, both accessing and completing tertiary education remain great challenges in South Africa (Letseka, 2009).

There are also significant disparities between pass rates of black and white students (Soudien, 2010). For contact universities in almost all areas, the black student completion rate is less than half that of white students (NPC, 2011). The figures are particularly low for first generation tertiary students (black students attending university for the first time who come from families who have never attended university) of whom only one in five graduate in the required time (NPC 2011). Soudien (2010) states that only 5% of black students who enrol at tertiary institutions graduate. According to the Higher Education South Africa (HESA) report to the Parliamentary Portfolio Committee on Higher Education and Training in 2014, "internationally, the graduation rate norm for a three-year degree programme is 25%. However, in 2010, the graduation rate of African [black South African] students was 16%, and that of white students was 22%" (University World News, 2014). These figures do not meet the needs of a country requiring an educated and skilled workforce. Thus, completion of tertiary education is crucial.

The reasons for poor academic performance and high drop-out rates at tertiary education institutions are diverse. Jones, Coetzee, Bailey and Wickham (2008) note that tertiary education challenges include inadequate funding and inadequate academic preparation for university studies. Moreso, Wood and Olivier (2004) and Richards (2012) explain that academic pressure is usually most intense in the first year of study and learners from disadvantaged communities are often unprepared to cope with the associated social and academic demands.

Studies conducted both locally and internationally found that factors contributing to student preparedness for and success at tertiary education are not limited to academic results

achieved at secondary education, particularly for students from disadvantaged communities (Richards, 2012; Dabula & Makura, 2013). Non-academic factors, also referred to as soft-skills or meta-cognitive skills, are just as critical (Jones, et al., 2008; Conley, 2012; Dabula & Makura, 2013). In a study conducted on the Targeting Talent Programme at the University of the Witwatersrand, an integrated academic and social support programme to help students adjust and cope with life as a university student, Richards (2012) found that certain emotional factors also compromised the academic performance of learners from disadvantaged communities. Factors included a lack of motivation and confidence, institutional alienation and anxiety about finances.

Research found that if learners from lower socio-economic backgrounds received personal development skills programmes which included counselling and mentoring, from the tenth grade, they were more likely to gain access to higher education institutions and retention rates beyond first year increased (Gulatt & Jan, 2003).

Thus, learners from poor socio-economic backgrounds, who receive academic and non-academic assistance, through personal development programmes, can increase their access and success at tertiary educational institutions. The South African Education and Environment Project (SAEP) is one initiative that responds to these needs. SAEP is a registered, non-profit organisation (NPO) that provides various educational programmes at pre-school, high school, post-high school and tertiary level (http://www.saep.org).

This research focuses on SAEP's Bridging Year Programme (BYP). The programme prepares young people for tertiary education. The Bridging Year Programme consists of two parts, - academic and non-academic (personal development). The BYP was evaluated in 2009 and 2011. The 2009 evaluation focused on the academic part of the programme. Whilst the 2011 evaluation considered the full programme, it could not provide sufficient theory or process evidence concerning the non-academic part. Upon request of the programme staff, the aim of this research is to evaluate the non-academic part of the BYP. A full description of the programme follows

BYP Programme Description

The programme description was compiled from several sources including the SAEP website (http://www.saep.org), the SAEP Annual Report 2012, the Corporate Social Investment (CSI) Funding Proposal to ADT (a security solutions company), and semi-structured interviews with the SAEP Impact Centre Founder and Director as well as with the programme manager of the BYP. The following sub-sections provide an overview of the objectives of the BYP, the target beneficiaries and the key role-players responsible for its implementation.

Objectives of the BYP

The BYP is a non-profit organisation (NPO) that has been in existence since 2004. It operates from the Western Cape. The objectives of the BYP, as outlined in a CSI funding proposal to ADT (2013) are:

> To help youth prepare for, gain entrance to and succeed in tertiary education and productive employment. The aim of the BYP is to instil values of community service and civic responsibility, shaping leaders who contribute to the development of their communities and their country. The BYP also wishes to develop well-rounded, resilient young people who can respond to life's challenges and to share lessons of experience and contribute to broader dialogue on youth development, education and entrepreneurship in South Africa. (p. 5)

Target beneficiaries.

The SAEP CSI Funding Proposal to ADT (2013, p.4) and the SAEP BYP website (http://www.saep.org) describe the target beneficiaries as "motivated matriculants from under-resourced high schools". As the concept "motivated matriculants" is difficult to define operationally, the target beneficiaries were operationally defined in consultation with the programme manager and the BYP coordinator as: (a) post grade 12 learners, (b) from disadvantaged communities, (c) with a minimum of a bachelor's pass, and (d) who do not have the minimum points for admission to their preferred institution or programme of choice. The bachelor's pass is the highest level of National Senior Certificate and qualifies the holder for admission to any tertiary institution in South Africa

Recruitment and selection of target beneficiaries.

The BYP offers a yearlong programme to students predominantly from Phillipi community in the Western Cape. Learners from under-resourced schools/communities are able to apply via an open application process. The learners are required to submit an application form together with their grade 12 final report, references and a written motivation. Applicants are then shortlisted based on academic achievement (minimum of a bachelor's pass) and evidence of leadership skills (for e.g., involvement in community service initiatives).

According to an interview with the programme manager conducted in March 2014, shortlisted candidates are invited for panel interviews with the programme director, the programme manager, the in-house SAEP social worker and the programme co-ordinator. After the interview, candidates are asked to take five minutes to complete the "grit assessment". Duckworth, et al. (2007), explain that "Grit is the tendency to sustain interest in, and effort toward very long-term goals".

However the use of grit scales for admissions purposes are discouraged, as participants are able to misrepresent themselves. When this concern was discussed with the programme social worker, it was stated that admission to the BYP is not dependant on the grit assessment; but was only used to gain a deeper understanding of the student. The selection process aims at a holistic decision based on all the admissions tools including the grade 12 final results, the application form, motivational letter and the interviews.

After final decisions have been made, bulk cell phone messages are sent out to unsuccessful candidates with a link to other possibilities. Successful candidates are informed telephonically and invited to attend a three-day orientation session. Learners and their parents sign acceptance letters. Parents are also required to sign a commitment contract allowing the full involvement and participation of their child as well as committing them to support the progress of their child throughout the year (interview with the programme director, February 2014). Figure 1 below illustrates the recruitment and selection process of the BYP.

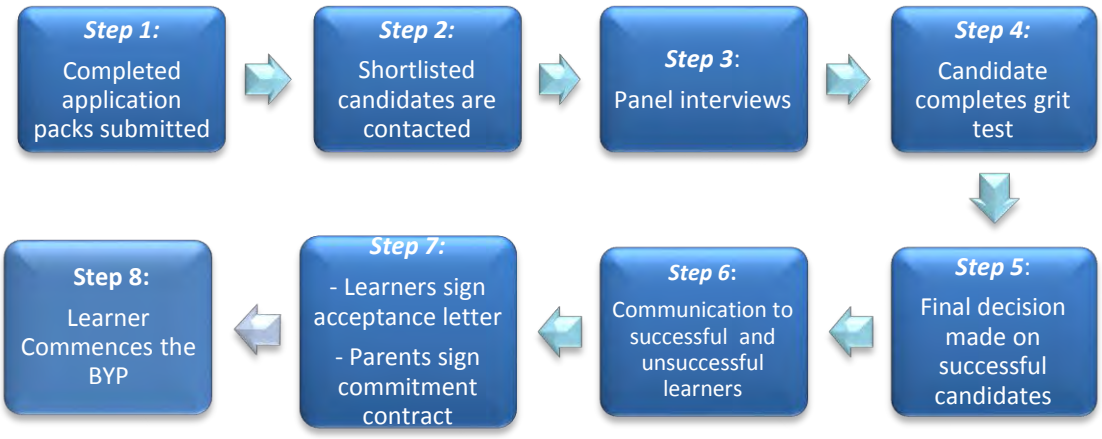

Figure 1. The Recruitment and Selection Process of the BYP

The 2014 BYP structure.

The BYP structure is presented diagrammatically in Figure 2. The programme activities are grouped under two main components namely: the academic component and the non-academic component which aims to prepare students for access to and success at tertiary education. Both components are compulsory for all BYP students.

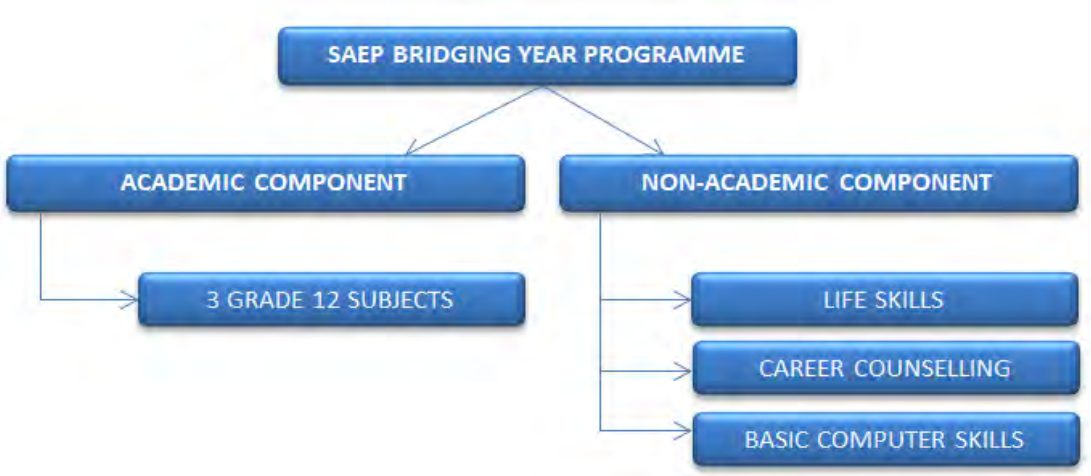

Figure 2. The 2014 BYP Structure

The BYP is a ten-month programme commencing in February and ending in November. The BYP follows a school-like routine where the students attend classes from Monday to Friday between 09h00 and 16h00. Attendance at all classes is compulsory and to enforce this, students are required to sign an attendance register daily upon arrival at the SAEP premises.

Figure 3 provides a breakdown of the BYP timetable for 2014, semester one. The BYP school week consists of 30 lesson slots and of these, 11 slots are dedicated to the non-academic classes. There are six non-academic classes which are (a) Touchstones, (b) social work, (c) careers, (d) community service, (e) computer skills and (f) English – functional.

Lesson	Time	Monday	Tuesday	Wednesday	Thursday	Friday
1	09:00	LINE 1 (PHYS & ACC)	LINE 1 (PHYS & ACC)	LINE 5 (ENGLISH - FUNCTIONAL)	LINE 5 (ENGLISH - FUNCTIONAL)	LINE 5 (ENGLISH - FUNCTIONAL)
2	10:00	LINE 2 (MATH Gp A & BUS STUD)	LINE 2 (MATH Gp A & BUS STUD)	LINE 2 (MATH Gp A & BUS STUD)	LINE 2 (MATH Gp A & BUS STUD)	LINE 2 (MATH Gp A & BUS STUD)
BREAK	10:50					
3	11:10	LINE 4 (MATH Gp B & LIFE SCI)	LINE 4 (MATH Gp B & LIFE SCI)	LINE 4 (MATH Gp B & LIFE SCI)	LINE 4 (MATH Gp B & LIFE SCI)	LINE 4 (MATH Gp B & LIFE SCI)
4	12:10	LINE 3 (ENG-ACADEMIC & GEOG)	LINE 3 (ENG-ACADEMIC & GEOG)	LINE 3 (ENG-ACADEMIC & GEOG)	LINE 3 (ENG-ACADEMIC & GEOG)	LINE 1 (PHYS & ACC)
LUNCH	13:10					LINE 1 (PHYS & ACC)
5	14:00	TOUCHSTONES Gp A / SOCIAL WORK Gp B	COMMUNITY SERVICE A /COMPUTER SKILLS B	LINE 1 (PHYS)	COMMUNITY SERVICE B /COMPUTER SKILLS A ACCOUNTING *	
6	15:00	CAREERS	COMMUNITY SERVICE A /COMPUTER SKILLS B	LINE 5 (ENGLISH - FUNCTIONAL)	COMMUNITY SERVICE B /COMPUTER SKILLS A	TOUCHSTONES Gp B /SOCIAL WORK Gp A

Figure 3. BYP 2014, Semester One, Timetable

During the initial consultation with the SAEP Director, it was highlighted that the stakeholders of the BYP were particularly interested in an evaluation of the non-academic component of the programme. This component is described below.

The non-academic programme activities of the BYP.

Figure 4 highlights, by means of a red box, the component of the BYP that was the focus of the evaluation presented in this research. The non-academic component consisted of three core courses, namely: (a) life skills, (b) career counselling and (c) basic computer skills.

Figure 4. The Non-Academic Component of the BYP that is the Focus of the 2014 Evaluation

The life skills component.

According to UNICEF (2012), the term 'life skill' is very broad as it can encompass any skill needed to live. In a global evaluation of life skills programmes, conducted by UNICEF (2012), it was found that the definitions of life skills are context- or country-specific as they address the life skills needs of people within their particular context. As previously noted, the BYP aimed to assist students from poor socio-economic backgrounds to gain entrance to and succeed at tertiary education. Thus the focus of the life skills component of the BYP was on imparting the knowledge and skills that would lead to this outcome.

The life skills course consists of seven modules. These modules are: (a) study skills, (b) critical thinking, (c) functional English, (d) communication, (e) psycho-social support, (f) mentoring and (g) service learning. The life skills modules are presented in each of the non-academic classes. Table 1 displays each of the life skills modules presented during the corresponding non-academic class. The following subsection provides a brief description of the non-academic modules of the BYP, which were derived from BYP course planning documents as well as through discussions with the programme manager.

Table 1

BYP Life Skills Modules Corresponding with the Non-Academic Class

Life Skills modules	Non-academic classes
Study Skills	Social Work
Critical Thinking	Touchstones
Functional English	English – Functional
Communication	Touchstones
Psycho-Social Support	Social Work
Mentoring	Offered outside of scheduled classroom slots.
Service Learning	Community Service

Study skills.

During the social work period, on an ad hoc basis, the social worker shared articles about study methods. The information shared was collated by an SAEP programme coordinators. It was compiled from a list of information found during a Google search. The module covered the following: (a) making the most of lectures – preparing for lectures and what to do during and after lectures, (b) taking notes during lectures – being selective, the use of mind mapping, recording lectures, making notes whilst listening, (c) assignments – where and when to start studying and common reasons why students fail assignments, (d) strategies for building vocabulary, (e) methods on how to memorise information, (f) time management – long-term planning, short-term planning, creating daily and weekly planners, strategies on how to manage time.

Psychosocial support.

The objective of the social work class was on psychosocial support for the BYP students and was presented by the SAEP social worker. Psychosocial support was offered weekly to the BYP students for one hour and was conducted in a group session. Issues that might affect the students both personally and academically were discussed. If the need arose, one-on-one counselling sessions were offered to students.

Critical thinking and communication.

The critical thinking and communication modules were covered in the Touchstones class. The Touchstones class aimed to improve the critical thinking and communication skills of the BYP students. The material was a standardised programme that was purchased online.

BYP students attended a weekly one-hour session facilitated by the BYP coordinator. This class was presented in the form of a debating session where the instructor presented a topic to the class and the students were required to present their opinions on it. During this session the students were taught how to present an argument and to substantiate their view points.

Functional English.

The objective of this module was to develop: (a) listening and speaking skills, (b) reading skills, (c) writing and presenting skills, and, (d) language skills. The module was facilitated by the BYP English teacher. Students attended four functional English sessions per week (refer Figure 3).

Mentoring.

The mentoring component was facilitated by the social worker. According to the social worker, the mentor should have knowledge of the goals set by each student, through the SMART (Specific, Measurable, Attainable, Realistic and Time bound) action plans that students had developed in the careers period at the start of the year. The expectation was that mentors would assist individual students to work towards achieving their SMART goals. Due to lack of interest from volunteers, the BYP instructors had taken on the role of mentors. Each mentor was assigned a group of students that they were responsible for mentoring for the calendar year. Mentors were expected to meet at least twice per month with their mentees.

Service learning.

It was compulsory for all BYP students to participate in community service mainly to develop a culture of "giving-back". Each BYP student was required to complete 100 hours of community service before they were able to graduate from the programme. Community service was conducted weekly. The students were allowed to volunteer at an organisation of their choice. The organisation the student volunteered at was required to have a supervisor who signed the student's attendance register. The student attendance was electronically captured by the BYP community service co-ordinator who also facilitated this module.

The career counselling component.

The career counselling component was facilitated weekly by the SAEP social worker and was presented in the careers class. Career counselling commenced by assisting students to develop a SMART action plan for the year and beyond. According to the social worker, the first six months of career counselling assisted students to prepare for and attend university open days. The career counselling course also assisted students with applying to various tertiary institutions and with bursary and financial aid applications. An amount of R500 was allocated to each student to spend on tertiary application fees and National Benchmark Tests (NBT).

The basic computer skills component.

The basic computer skills component was facilitated weekly in a two-hour session by the BYP coordinator at the SAEP computer lab. The material covered in the basic computer skills course was a standardised programme known as "Computers4Kids". This programme aimed to equip students with the knowledge and skills to complete the International Computer Driver's License (ICDL) qualification. Students were required to attend weekly lessons. Students had access to a computer for the purpose of the lesson which was facilitated by the computer skills facilitator who is also the BYP coordinator. According to the BYP manager, the 2014 BYP cohort of students were expected to complete the ICDL exam and receive a certificate of competence. The BYP pay for the ICDL examination fee.

Aim of the 2014 Evaluation

Analysis of the programme records and discussions with the programme staff revealed that the non-academic component of the BYP did not have a documented logic model and programme theory. Nor did it have a monitoring framework to track the programme performance. A monitoring framework can be a powerful management tool that organisations use to improve how they achieve their results (Kusek & Rist, 2004).

Before an evaluator would be able to assess whether a programme was achieving its desired outcomes or was implemented as planned, it would be imperative to test the plausibility of

the programme logic and theory (Donaldson, 2007). A programme might be implemented with the highest degree of fidelity and strength but if the programme theory is flawed, it is highly unlikely that the programme will achieve its intended outcomes (Rossi, et al., 2004; Donaldson, 2007).

The initial meeting with the SAEP director revealed that the stakeholders were interested in understanding whether the non-academic component of the BYP could realistically expect to achieve the intended outcomes. One way to evaluate this would be by assessing whether the programme logic was plausible, and incorporated best practice principles underlying other similar programmes. Thus a formative evaluation was considered appropriate in this case. The purpose of a formative evaluation is to produce information needed to either improve a programme or to validate the programme design and implementation (Rossi, et al., 2004). It prepares a programme for summative evaluations (Rossi et al., 2004). Rossi et al. (2004, p.435), defines a summative evaluation as, "evaluation activities undertaken to render a summary judgement on certain critical aspects of the program[me]'s performance, for instance, to determine if specific goals and objectives were met".

A formative evaluation of the non-academic component of the BYP programme aimed to provide stakeholders with critical information on how best to achieve the intended outcomes of the programme. It would thus provide information on best practice principles underlying successful equivalent programmes are and enable the BYP staff to make improvements to their programme design and implementation.

Through consultation with the SEAP director and the BYP manager, the aim of this formative evaluation was formulated as (1) to develop the programme theory of the non-academic component of the BYP, (2) to assess the plausibility of the programme theory supporting the non-academic component of the BYP, and (3) to develop an outcome monitoring framework for the non-academic component of the BYP.

The following section presents the specific evaluation questions to be answered in the evaluation.

Evaluation Questions

Programme theory evaluation questions.

Programme theory is defined as the conceptual framework of how a programme intends to bring about the desired social benefits for its programme beneficiaries (Chen, 2005; Rossi et al., 2004). Ideally the programme theory elucidates what must be done to attain the desired results (Rossi et al., 2004; Donaldson, 2007; Oosthuizen & Louw, 2013) and therefore "is the foundation on which every programme rests" (Rossi et al., 2004, p.134). According to Bickman (1987, p.5), "program[me] theory is the construction of a plausible and sensible model of how a program[me] is supposed to work". The non-academic component of the BYP programme theory was not explicitly documented. The first step in this evaluation therefore was to explicate the programme theory (Rossi, et. al., 2004; Chen, 2005; Donaldson, 2007). The following questions enabled assessment of the BYP's non-academic programme theory and its plausibility.

1. **What are the underlying or implicit assumptions of the non-academic component of the BYP?**
2. **Does evidence exist to support the non-academic programme assumptions?**

According to Rossi, et al. (2004) one method of assessing the plausibility of a programme theory is the use of a literature review. Due to the focus of evaluation question two and the assessment of the plausibility of non-academic programme theory, the findings and discussion of the literature review will be presented in the Results and Discussion chapter (refer Chapter 3).

Monitoring framework for the non-academic component.

There are growing pressures on organisations, globally, to be more responsive to the demands of internal and external stakeholders for good governance, accountability and transparency, greater development effectiveness, and delivery of tangible results (Kusek & Rist, 2004). Monitoring is defined as a process of consistently tracking and reporting on programme information regarding the inputs, activities, outputs, outcomes and impacts (Hatry, van Houten, Plantz & Greenways, 1996; Rossi, et al., 2004; UNAIDS, 2010). Hatry, et

al. (1996, p.1) defines inputs as “resources a program[me] uses to achieve program[me] objectives.” Activities are what a programme does with its inputs –the services it provides – to fulfil its mission (Hatry, et al., 1996, p.1).Outputs are defined as products of programme activities, such as the number of classes taught. A programme’s outputs should produce the desired outcomes for the programme’s participants (Hatry, et al., 1996, p.1). Outcomes are defined as the benefits experienced by participants during or after their involvement with a programme. Outcomes may relate to knowledge, skills, attitudes, values, behaviour, condition or status. For any given programme, there can be various levels of outcomes, with initial outcomes leading to longer-term outcomes (Hatry, et al., 1996, p.1). Longer-term outcomes are also referred to as impacts (Hatry, et al., 1996, p.1). Outcome monitoring is thus the routine tracking and reporting of the prioritised programme outcomes (United Nations Development Programme [UNDP], 2002; Rossi, et al., 2004).

Routine monitoring provides information to programme staff and donors as to whether there is a change, or an improvement, in the prioritised outcomes. In order to understand whether changes in monitored outcomes were actually due to the programme and no other event, an evaluation is be conducted (Rossi, et al., 2004). The BYP programme staff therefore requested the development of an outcome monitoring framework to assist with their tracking and reporting process to their funders as well as for their own purposes. In this regard, a third evaluation question was used that facilitated the development of a monitoring framework for the non-academic component of the BYP.

3. **What indicators, measures and standards must be incorporated in the outcome monitoring framework of the programme?**

Chapter two provides a description of the method that was used to answer the three evaluation questions.

Chapter Two: Method

This chapter discusses how the evaluation questions were answered and begins with a discussion of the design.

Design

This evaluation used both an exploratory and descriptive research approach. An exploratory approach was used to answer the first evaluation question: *What are the underlying or implicit assumptions of the non-academic component of the Bridging Year Programme?* Babbie & Mouton (1998, p.105) define exploratory research as "the attempt to develop an initial, rough understanding of some phenomena." Thus the aim of evaluation question one was to explore how the non-academic component of the BYP led to the desired outcomes. In other words, it was to elicit the logic model underlying the non-academic component of the programme or to increase understanding - an important criterion of exploratory research (Babbie & Mouton, 1998).

The two other evaluation questions were answered using a descriptive approach. These questions were: *Does evidence exist to support the non-academic programme assumptions? What indicators, measures and standards must be incorporated in the outcome monitoring framework of the programme?* According to Babbie and Mouton (1998, p.105), descriptive research is "the precise measurement and reporting of the characteristics of some population or phenomenon under study."

Data Providers

Table 2 presents a summary of the number of potential data providers, the target sample, and the actual sample. Two of these data providers performed dual functions in the BYP - the programme coordinator and the community service coordinator were also non-academic instructors.

Table 2

Data Providers and Sample Size

Data Providers	Number of Possible Data Providers	Target Sample	Sample Achieved
Programme Director	1	1	0
Programme Manager	1	1	1
Programme Coordinator	1	1	1
Community Service Coordinator	1	1	1
Non-Academic Facilitators	4	4	4

Sampling strategy.

Convenience sampling was used. A convenience sample, also known as a non-probability sample, is a sample drawn without any underlying probability-based selection method (Price, 2013). According to Anderson (2001), convenience sampling is a strategy where a sample is selected because it is convenient to use. The limitation of convenience sampling is findings cannot be generalised to a larger population (Anderson, 2001). This however did not affect the validity of this evaluation. Given the nature of the evaluation questions, the evaluator was only interested in drawing inferences about the non-academic component of the BYP and not to generalise the findings to similar programmes. Table 3 presents the key informants as data providers for each of the evaluation questions.

Table 3

Data Providers for Each Evaluation Question

Evaluation Questions	Data Providers
Programme Theory Evaluation	
1. What are the underlying or implicit assumptions of the BYP's non-academic component?	• SAEP Director • BYP Manager • BYP Co-ordinator • Community Service Co-ordinator • Non-academic Teachers/ Facilitators
2. Does evidence exist to support the non-academic programme assumptions?	*No data providers*
Monitoring framework	
3. What indicators, measures and standards need to be incorporated in the outcome monitoring framework?	• BYP Manager

Rationale for selected data providers.

The rationale for selecting data providers for each evaluation question is presented below.

Evaluation question 1: what are the underlying or implicit assumptions of the non-academic component of the BYP?

The SAEP director and BYP manager were included in the sample to answer this question as they are accountable for the success of the programme; and have the most sophisticated understanding of the non-academic programme component and its underlying assumptions. Both data providers also had a basic knowledge of evaluation terminology.

The non-academic teachers/facilitators, BYP coordinator and community service coordinator were sampled because it was considered important to gauge these implementers' understanding of what the goals were of the non-academic component of the BYP and how these were to be achieved. It is important for all stakeholders to have a common understanding of the programme objectives (Morgeson, De Rue & Karam, 2010).

Evaluation question 2: does evidence exist to support the non-academic programme assumptions?

Due to the nature of this evaluation question, there were no key informants needed to provide data. Academic literature was used to answer it.

Evaluation question 3: what indicators, measures and standards need to be incorporated in the outcome monitoring framework?

The BYP manager was the only data provider for this evaluation question. As previously mentioned, the programme manager is accountable for the overall programme success. Unfortunately he was unable to participate in the data collection process.

Materials

Table 4 presents the programme records that were consulted and the data collection tools that were used to gather data for each evaluation question.

Table 4

Programme Records and Data Collection Tools for Each Evaluation Question

Evaluation Questions	Programme Records	Data Collection Tools
Programme Theory Evaluation		
1. What are the underlying or implicit assumptions of the BYP's non-academic component?	• Funding Proposal • Curriculum • Timetable	• Glossary of Terms *(Appendix A)* • Guiding Questions *(Appendix B)*
2. Does evidence exist to support the non-academic programme assumptions?	Not Applicable	• Academic Literature
Monitoring framework		
3. What indicators, measures and standards need to be incorporated in the programme's outcome monitoring framework?	• Annual reports	• Logic Model Structured Questions*(in text, under the procedure for developing the monitoring framework)*

Programme records.

The selection of programme records was guided by the evaluation questions and from information gathered during the initial information gathering meetings with the director, programme coordinator and the programme manager. Table 5 presents a list of the programme records that were consulted for this evaluation, with descriptions of the programme records and the relevant information that were extracted from the programme records.

Table 5

Programme Records, Content and Relevant Items for the Evaluation

Programme Record	Content	Relevant Information
Funding Proposal	Basic information of the BYP on who were the target beneficiaries are, what the need was, the objectives and activities. An outline of the 2014 budget	• Intended target beneficiaries • Programme objectives • Programme activities • Budget overview for 2014
Curriculum	A detailed outline of the learning outcomes to be covered throughout the year in each course of non-academic programme	• Non-academic programme activities to be covered for the year
Timetable	Outlines all the non-academic classes to be attended by the 2014 student cohort and the number of each class the student was required to attend weekly.	• Number of non-academic classes to be attended weekly
Annual Reports	A detailed description of the various SAEP programmes and their achievements.	• The BYP's achievements in the previous years as a baseline indicator

Data Collection Procedure and Analysis

Written permission to evaluate the non-academic component of the BYP was obtained from the SAEP director (refer to Appendix C). Ethical clearance was obtained from the University of Cape Town Ethics in Research Committee.

Evaluation question one: what are the underlying or implicit assumptions of the non-academic component of the BYP?

The evaluator worked with stakeholders to make the implicit programme theory explicit using an adaptation of Donaldson's (2007) six-step process as described below.

Step one: engage relevant stakeholders.

According to Donaldson (2007) the first step in identifying the implicit assumptions of a programme is to engage as many stakeholders as possible about the nature of the programme. Engaging relevant stakeholders throughout the evaluation process is key to ensuring the relevance, usefulness and credibility of the evaluation. (Preskill & Jones, 2009)

As there was no documented programme theory of the non-academic component of the BYP the evaluator elicited this from the relevant stakeholders, who first needed to be identified.

The evaluator considered four factors when identifying the relevant stakeholders for this process (Preskill & Jones, 2009). These factors were: (a) engaging those stakeholders who had extensive expertise regarding the BYP, (b) stakeholders who were able to represent diverse perspectives and experiences of the programme, (c) stakeholders who were responsible for the programme evaluation findings, and (d) the stakeholders who were in a position to ensure that the results of the evaluation would be utilised.

Based on these four factors, the evaluator selected the following stakeholders: (a) the SAEP director, (b) the BYP manager, and (c) the programme implementers (non-academic facilitators). The director and manager were selected as they held expert knowledge of the

BYP and were also responsible and accountable for the evaluation findings. Additionally the director held a position of power to ensure the results of this evaluation were utilised. Since the programme director and manager were mostly removed from the daily operations of the programme, the programme implementers who were responsible for delivering the programme activities on a daily basis were also considered as relevant stakeholders. A diverse set of perspectives was thus assembled (Preskill & Jones, 2009).

Once the relevant stakeholders had been identified, the process of eliciting the non-academic programme theory could begin. Initial meetings were held with the programme manager and thereafter with the programme staff/implementers.

The initial meeting of 90 minutes was held at the SAEP premises with the programme manager. The meeting aimed to elicit the programme theory for the non-academic component. Thereafter, an invitation was sent to non-academic programme staff (the facilitators, community service coordinator and the programme coordinator). The purpose of this meeting, that lasted two hours, was to elicit the programme theory as understood by the non-academic programme staff. Possible confidentiality concerns and the assurance of voluntary participation were addressed at the start of the meeting.

Step two: develop a first draft.

First meeting – the programme manager.

The first meeting with the programme manager yielded a first draft of the logic model of the non-academic component of the BYP. Since the programme manager was familiar with evaluation terminology and logic models, an explanation on programme theory and logic modelling concepts was not needed. This meeting took a slightly different approach than what had been initially proposed: the programme manager had already developed a logic model for a funding proposal and brought it along to the meeting as a point of reference. Each component of the existing logic model was discussed in terms of its layout and whether a component on the existing logic model was an outcome or an output. The causal logic (also known as the theory of change), of the logic model was then discussed and changes were documented by the evaluator to incorporate into the first draft.

Second meeting – the programme teachers/facilitators.

The second meeting with the four non-academic teachers/facilitators followed a different path as the programme teachers/facilitators were not as knowledgeable as the programme manager was about programme evaluation and logic modelling. Six flip-chart sheets were placed on a wall and labelled with one of the following concepts: inputs, activities, outputs, short-term outcomes, medium-term outcomes and long-term outcomes. A process of backward mapping was used (Donaldson, 2007). The reason for working backwards was it was easier for the participants to articulate what the programme aims were and then work backwards to the inputs needed to implement a programme that would lead to the desired outcomes.

However, before the participants populated each component of the logic model the evaluator provided a definition and explanation, in layman's terms, for each of its components. Appendix A provides a glossary of terms (Hatry, et al., 1996) that were used for this purpose. In line with Donaldson's (2007) recommendation, this conversation was conducted in common everyday language as the programme staff were not necessarily familiar with evaluation terminology. The objective of this step was to create a first draft of a programme logic model based on the description of the participants, all of whom were the programme teachers/facilitators.

The participants were asked to add the non-academic programme detail under each concept. After all the sheets had been populated, the evaluator explained that the links needed to be made between the various components in order to depict which aspect within a component led to the next (for eg. which activity logically leads to which output and which output logically leads to which short-term outcome). Once the participants understood what was expected of them, they began drawing the links as they understood the non-academic component of the BYP to work.

These two first meetings with programme manager and then with non-academic programme facilitators generated a first draft logic model.

Step three: present the first draft to stakeholders.

After the initial meetings with the programme manager and the non-academic programme staff, the evaluator worked independently to analyse the logic models produced in each meeting. The evaluator highlighted the components of each of the models that were in agreement and where there were differences. The evaluator emailed the programme manager a copy of the model that showed the areas of agreement between the two models and the differences. The evaluator requested the programme manager to present the model to the programme staff who had participated in the modelling process. The purpose of this step was to gain consensus on which items to include in the model and which items to delete. Once consensus was found, the programme manager emailed the changes to the evaluator who was then able to illustrate a combined first draft logical model of the non-academic component of the BYP.

The evaluator reviewed the causal links of the model to ensure a logical flow of events (Donaldson, 2007). Once the combined first draft was developed, the evaluator emailed it to all those who participated in this process to ensure that all the participants had an opportunity to comment or change the draft logic model. The purpose of this process was to confirm the accuracy of the first draft (Donaldson, 2007).

Step four: probe arrows for model specificity.

During this step the evaluator worked independently and examined the nature of the programme theory in more detail. This was done by reviewing the conceptual linkages of the model (Donaldson, 2007).

The three steps recommended by Hatry, et al (1996) were followed to explore the logical flow of events. The first step was to check whether the activities, programme outputs, short-term outcomes, medium-term outcomes and long-term outcomes logically related to each other. To check this, the evaluator considered the implied “If-Then” relationships. The second step was to determine whether these relationships reflected the logic of the non-academic component. In other words, did it reflect the sequence of influences and changes that the programme inputs, activities and outputs were intended to bring about? The final

step was to determine whether the longer-term outcomes represented meaningful benefits and changes in status, condition or quality of life for the participants (Rossi, et al., 2003). The goal of this step was to finalise the logic model so that it could be used to develop the outcome monitoring framework.

Step five: finalise the programme theory.

The evaluator presented the final draft of the programme theory logic model to the participants for final approval (Donaldson, 2007). The final draft was emailed to all the stakeholders for their perusal and approval. Once consensus had been reached on the programme logic model of the non-academic component, the next phase assessed the plausibility of the model.

Evaluation question two: does evidence exist to support the non-academic programme assumptions?

Rossi et al. (2004) describes four approaches for assessing the plausibility of a programme theory. The first approach is to assess the programme theory in relation to identified social needs. The rationale for using this approach is that if a programme theory does not address the existing needs of the intended target beneficiaries in the most suitable manner the programme will be deemed ineffective regardless of programme fidelity.

The second approach is to assess the logic and plausibility of the critical assumptions and expectations of the programme theory. Rossi et al. (2004) identified six features for review:

1. Are the programme goals and objectives well defined?
2. Are the programme goals and objectives feasible?
3. Is the theory of change reasonable?
4. Are the service utilisation plan, service delivery plan, and the organisational support plan well defined and sufficient?
5. Are the activities and functions of the programme well defined and sufficient? and
6. Are the allocated resources adequate to implement the planned activities in order to achieve the desired outcomes?

The third approach is to assess the programme theory using direct observation of the actual programme. This enables the evaluator to assess the soundness of the programme theory description. This process differs from a process evaluation (Rossi et al., 2004).

The fourth approach identified by Rossi et al., (2004) for assessing the plausibility of a programme theory is through comparison with research and practice, or a literature review. The idea of this approach is that the results of research on similar programmes will indicate the probability that a programme will be successful and will also highlight critical problem areas (Rossi et al., 2004).

For the purposes of assessing the plausibility of the programme theory of the non-academic component of the BYP, the evaluator conducted a literature review presented in chapter three (results and discussion). The literature review aimed to establish what non-academic conditions should be in place for an effective tertiary preparation programme that could adequately prepare students, from poor socio-economic backgrounds, for success at tertiary level education.

The literature review assessed whether the short and medium term outcomes could realistically lead to the desired long-term outcomes as intended in the logic model. The literature was also reviewed to gain an understanding of what programme activities should be implemented to bring about the desired outcomes.

Search parameters for the literature review.

First, a general web search collected information from programme websites that were similar to the BYP in order to establish common search terms whilst conducting the next phase of literature search. The following commonly known educational and social science databases were searched:

- Education Resources Information Centre (ERIC)
- ProQuest Educational Journals
- Academic Search Premier
- SocINDEX and

- Google Scholar

The search focused specifically on full text, peer reviewed journals and for evaluations of similar programmes. The search terms highlighted in Table 6 were used. The conjunction "AND" was used to combine search words. The search was limited to the period 1990 – 2014. The reference lists used in relevant articles were also used as another source for further exploration.

Table 6

The Search Terms for the Plausibility Assessment

Topic	Intervention	Evaluation
Pre-tertiary	Program*	Evaluation
Pre-colleg*	Programme	Effect*
Precollege	Intervention	-
Tertiary AND transition	Intervention*	-
"Tertiary access"	Project	-
"Tertiary readiness"	-	-
"Tertiary preparation"	-	-
"College preparation"	-	-
"College readiness"	-	-
"Student engagement"	-	-
"Service learning AND tertiary success"	-	-
"Tertiary qualification AND employability"	-	-

Evaluation question three: what indicators, measures and standards need to be incorporated in the outcome monitoring framework?

Measuring of programme outcomes provides a learning loop that feeds information back into programmes on how they are doing (Hatry, et. al., 1996; Rossi, et. al., 2004; Kusek & Rist, 2004). Kusek and Rist's (2004) approach was followed to incorporate only those steps needed to develop the monitoring framework for the non-academic component of the BYP.

Once the logic model has been finalised the evaluator scheduled a meeting with the programme manager. The meeting was one hour in length and took place at the SAEP premises. The evaluator gave the programme manager a copy of the finalised logic model to guide the first step of the process. Figure 5 depicts the four step process that were followed to develop the outcome monitoring framework for the non-academic component of the BYP.

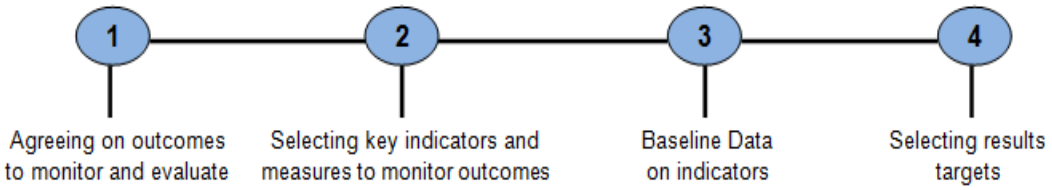

Figure 5. The 4-Step Model to Develop the Outcome Monitoring Framework

Step 1: agreeing on key outcomes to be monitored.

The purpose of this step was to agree on the key outcomes to be monitored. The evaluator used open-ended questions, shown in Table 7, to guide this process.

Table 7

Open-ended Questions to Agree on Key Outcomes to be Monitored

Open-ended Questions
• What is the purpose for wanting to monitor programme outcomes? - What are you hoping to use the results for?
• Based on the explanation given, which outcomes would be most relevant, at this point in time for you to measure?
• How certain are you that monitoring these specific outcomes will yield the information you are looking for?

When devising a monitoring framework it is important to understand what success looks like before establishing how to measure it (Kusek & Rist, 2004). Indicators cannot be set before agreeing on the outcomes as it is the outcomes that will ultimately produce the benefits for the programme beneficiaries (Kusek & Rist, 2004). Thus the first step was to agree on what BYP outcomes to consider a priority for inclusion in the monitoring framework (Rossi, et al., 2004; Hatry, et al., 1996).

According to Kusek and Rist (2004), when deciding on which outcomes to monitor it is important to identify the major concerns or problems of the target population. The next step is to translate those problems into positive outcome statements (Hatry, et al., 1996). In other words, the problems must be translated into solutions that in turn will be the intended outcomes for the target beneficiaries. From these identified outcomes, the prioritised outcomes can be monitored.

Different outcomes could be defined as a priority by different stakeholders for various reasons, so to ensure ownership and buy-in from the programme staff, the process was made as inclusive as possible (Kusek & Rist, 2004; Posavac & Carey, 2007; Preskill & Jones, 2009). A meeting was requested with the programme manager and programme director as they are ultimately responsible for the programme success. The evaluator also requested that the invitation be extended to any other stakeholders who might be interested.

At this point in the process the BYP logic model had been finalised and agreed upon. To support the programme manager to select the outcomes to be monitored, a copy of the finalised logic model was presented. Once the key outcomes for monitoring purposes were finalised, the measurable indicators for each of the outcomes had to be agreed. The evaluator also ensured that the measurable indicators reflected the literature findings of similar programme outcomes.

Step 2: selecting key indicators and measures to monitor outcomes.

Once the key outcomes had been selected the next challenge was to decide on one or more indicators that would signify how well the outcome was performing (Hatry, et al., 1996). According to Kusek & Rist, (2004, p. 66) programme stakeholders are able to assess the degree of programme success by monitoring outcome indicators.

Developing and agreeing on the key indicators is considered a fundamental activity in building a monitoring framework as it drives the data collection procedures, analysis and reporting of each outcome (Kusek & Rist, 2004). Indicators should be constructed to meet specific needs and must be a direct reflection of the outcome in question (Kusek & Rist, 2004; Hatry, et al., 1996; Patton, 2008).

The evaluator worked closely with the programme manager to operationalise and define how best to monitor the outcomes that had been selected. The purpose in working closely with the programme manager during this step was to ensure that the indicators chosen were relevant and cost-effective.

During this step of the process the evaluator consulted the programme manager to extract the measurable indicators for each selected outcome, using the open-ended questions in Table 8. Each answer was again interrogated using the questions presented in Table 9 to refine the indicators.

Table 8

Open-ended Questions to Elicit Indicators for Each Outcome

Open-ended Questions
• Which characteristics would indicate to you whether the participants have achieved the desired outcomes you have selected in step 1?
• How would you assess whether the BYP students have achieved the desired outcomes?
• What does the outcome look like when it is achieved?

Table 9

Table *Questions to Elicit Measures for Each Indicator*

Questions
• Can we observe and measure this?
• Does it tell us whether the outcome has been reached?

Step 3 and step 4: establish baseline indicators and targets.

The third step in the process of developing a monitoring framework was to establish baseline data for each of the indicators (Kusek & Rist, 2004; Hatry, et al., 1996). Baseline measures indicate the level of knowledge, skills or attitudes of the programme participants at the start of the programme before the intervention begins (Kusek & Rist, 2004).The baseline measures are the first critical measurements of an indicator, also known as a pre-test. Baseline information is important in order to gauge how much change has taken place or how effective the programme has been towards achieving its outcomes (Patton, 2008).

The general idea is that the actual level of outcome achievement is compared to the baseline data in order to assess how much change the programme participants have achieved (Patton, 2008). Thereafter the actual achieved level of the programme outcome can be assessed against the ideal level of change (the target). This comparison gives an understanding of how well the programme is doing in terms of meeting the desired level of the outcomes (Patton, 2008).

Kusek and Rist (2004), state that targets cannot be set without first establishing a baseline. Target setting is the final step in building the monitoring framework. Therefore once the baseline data is collected and analysed, realistic targets can be established for the programme (Kusek & Rist, 2004). Baseline data can be collected from various sources. The evaluator requested programme records in form of BYP Annual Reports.

Chapter Three: Results and Discussion

This chapter discusses the results of each of the three evaluation questions.

Evaluation Question One: What are the Underlying or Implicit Assumptions of the Non-Academic Component of the BYP?

The findings for question one are presented in line with six-step process that was followed (Donaldson, 2007) as outlined in the method chapter.

Step one: engage relevant stakeholders.

First meeting – eliciting the programme theory of the BYP manager.

During this meeting, it was found that the logic model that had been developed by the programme manager had more elements of a monitoring framework than a programme theory. The model did not clearly differentiate between outcomes and outputs. The evaluator worked in collaboration with the programme manager to disaggregate the outcomes from the outputs and the activities from the inputs to create a variable-oriented logic model. The programme activities, short-term, medium-term and long-term outcomes elicited during this process are presented below.

Long-term outcome.

The programme manager stated that the long-term outcome of the non-academic component of the BYP is expected to be achieved within 36 months to 48 months from the time the BYP learners begin their first year of tertiary education. The long-term outcome, which the programme manager agreed on, for the non-academic component of the BYP logic model, is as follows:

- "Students graduate from their programme of study within the minimum required time".

Medium-term outcomes.

The programme manager stated that the medium-term outcomes of the non-academic component of the BYP are anticipated to be achieved within 12 months to 24 months from the time the learners start the BYP. The medium-term outcomes, for the non-academic component of the BYP logic model, are presented below:

- "Students are more confident at speaking before groups of peers".
- "Students develop help-seeking behaviours to succeed at tertiary [institutions] instead of acting passively".
- "Students have a greater understanding of the importance of social upliftment".
- "Students are more resilient".
- "Students have greater self-esteem".
- "Students have greater self-confidence".
- "Students display greater empathy towards one another".
- "Students display greater understanding towards one another".
- "Students support one another".

Short-term outcomes.

The short-term outcomes of the non-academic component of the BYP are anticipated to be achieved within six to 12 months from the time the learners start the BYP. The short-term outcomes, for the non-academic component of the BYP logic model, are presented below:

- "Students improve their levels of academic literacy."
- "Students can express their viewpoints."
- "Students are better able to articulate their understanding of a topic."
- "Students have an increased understanding of the academic demands of universities."
- "Students have improved revision strategies/techniques for exams."
- "Students make informed and educated decisions about their career paths."

- “Students have an improved knowledge of the jobs they want after graduation.”
- “Students have improved knowledge of how to search for jobs after graduation.”
- “Students improve their levels of computer literacy.”
- “Students acquire tools for dealing with emotional issues.”
- “Students acquire tools for dealing with social issues.”
- “Students acquire coping skills to manage stress.”

Activities.

The programme manager listed eight activities that the non-academic component of the BYP presented to the learners over the course of the programme. The activities that were agreed on by the programme manager to be included in the logic model are presented below:

- “Academic literacy training”.
- “Critical thinking.”
- “Service learning.”
- “Educational excursions.”
- “Career advice and guidance.”
- “Mentoring.”
- “Computer literacy.”
- “Psychosocial support.”

The BYP manager arranged the programme activities, short-term, medium-term and long-term outcomes into a variable-oriented logic model which is presented in Figure 6. Then the programme manager drew the links between different components of the logic model to build the causal logic model. As the programme manager explained the programme theory the evaluator identified three emerging assumptions:

1. “If students are better equipped to rewrite their matric final exam then they would achieve better matric results and then be admitted to a tertiary institution.”
2. “If students draw on the non-academic skills which were taught to them in the non-academic component of the BYP, then learners will graduate within the minimum time period” (which is three years for a three-year degree programme and four years for an extended degree programme).
3. “If learners graduate from tertiary education, then learners will have access to better paid jobs and can then develop a career for themselves.”

The resulting programme logic was deemed satisfactory by the evaluator.

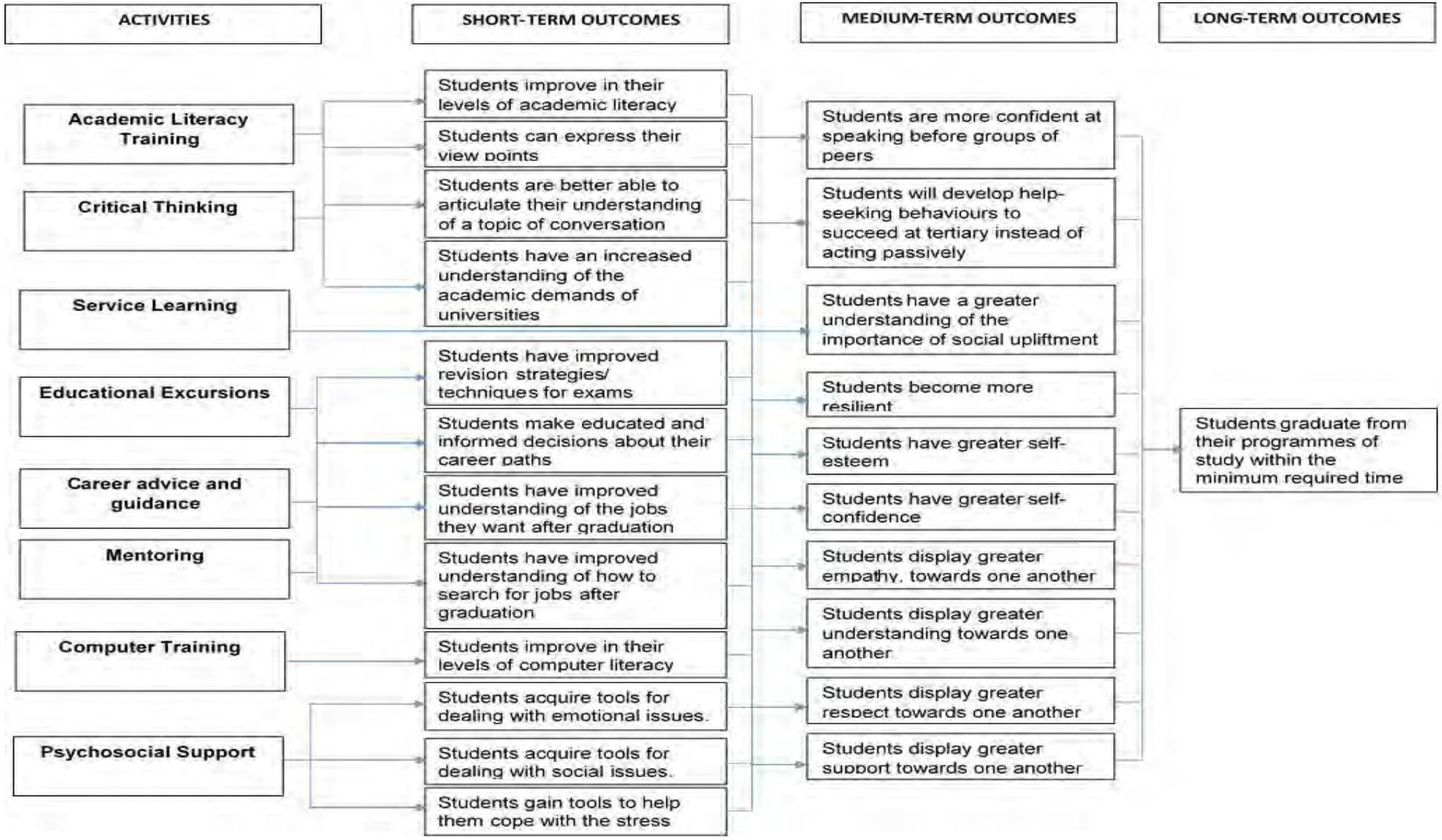

Figure 6. Variable-Oriented Logic Model of the Non-Academic Component of the BYP Extracted from the Programme Manager

Second meeting – eliciting the programme theory of the BYP implementers.

During this step of the evaluation process it was found that the programme staff were very familiar with the non-academic programme and what it aimed to achieve. All the participants had the same understanding and no discrepancies were found in the information they presented. All the participants agreed with the information that was presented.

Long-term outcomes/impact.

The evaluator found that the programme staff could readily articulate what the long-term outcomes of the non-academic component of the BYP were. The long-term outcomes that were elicited are as follows:

1. "The students can complete their university studies within the required time period."
2. "The BYP graduates to graduate into successful careers so that they can help to support their families out of the cycle of poverty."

The long-term outcomes that the programme staff identified were similar to the goals that appeared in the ADT funding proposal as well as on the SAEP website. This highlighted that the participants were clear on what the non-academic component of the BYP set out to achieve.

Short and medium term outcomes.

The programme implementers struggled to differentiate the short-term outcomes from the medium-term outcomes of their programme. This appeared to be the most difficult part of the exercise. The evaluator listed all the outcomes as the participants called them out. These were then disaggregated into either short-term or medium-term outcomes. The short- and medium-term outcomes, as articulated by the programme implementers, are presented below:

Short-term outcomes:

- “Improved coping strategies.”
- “Improved time management skills.”
- “Improved level of self-esteem.”
- “Improved critical thinking skills.”
- “Improved English language skills.”
- “Cultural awareness.”
- “Improved communication skills.”
- “Awareness of the importance of community service.”

Medium-term outcomes:

- “Accountability for actions.”
- “Improved level of student engagement.”
- “Improved self-confidence.”
- “Improved level of assertiveness.”
- “Technologically skilled.”
- “Culture of generosity.”

Activities.

The programme implementers collectively agreed on the activities that constituted the non-academic component. This was found to be the easiest step of the process perhaps because the programme implementers were directly responsible for implementing these activities daily. The list of programme activities of the non-academic component of the BYP for 2014 as given by the programme implementers is as follows:

- Psychosocial Support (Counselling)
- Mentoring
- Educational Excursions
- Career Counselling
- Service Learning

- Touchstones
- Computer Lab
- Functional English

Conceptualising the programme implementers' programme theory.

While the participants were discussing their understanding of the programme theory the evaluator identified the underlying assumptions and common themes. From this discussion the following three assumptions emerged:

1. "If the learners are better prepared to rewrite their final matric exams then they will achieve better final matric results and then gain access to university".
2. "If the learners are better prepared to cope with the academic demands of university then they will successfully complete their tertiary studies within the recommended period."
3. "If the students graduate from university then they will have opportunities to build careers and they can support their families".

Figure 7 presents the variable-oriented logic model of the non-academic component of the BYP as developed by the programme staff. It did not have a logical flow in that its links were not all logical and sequential.

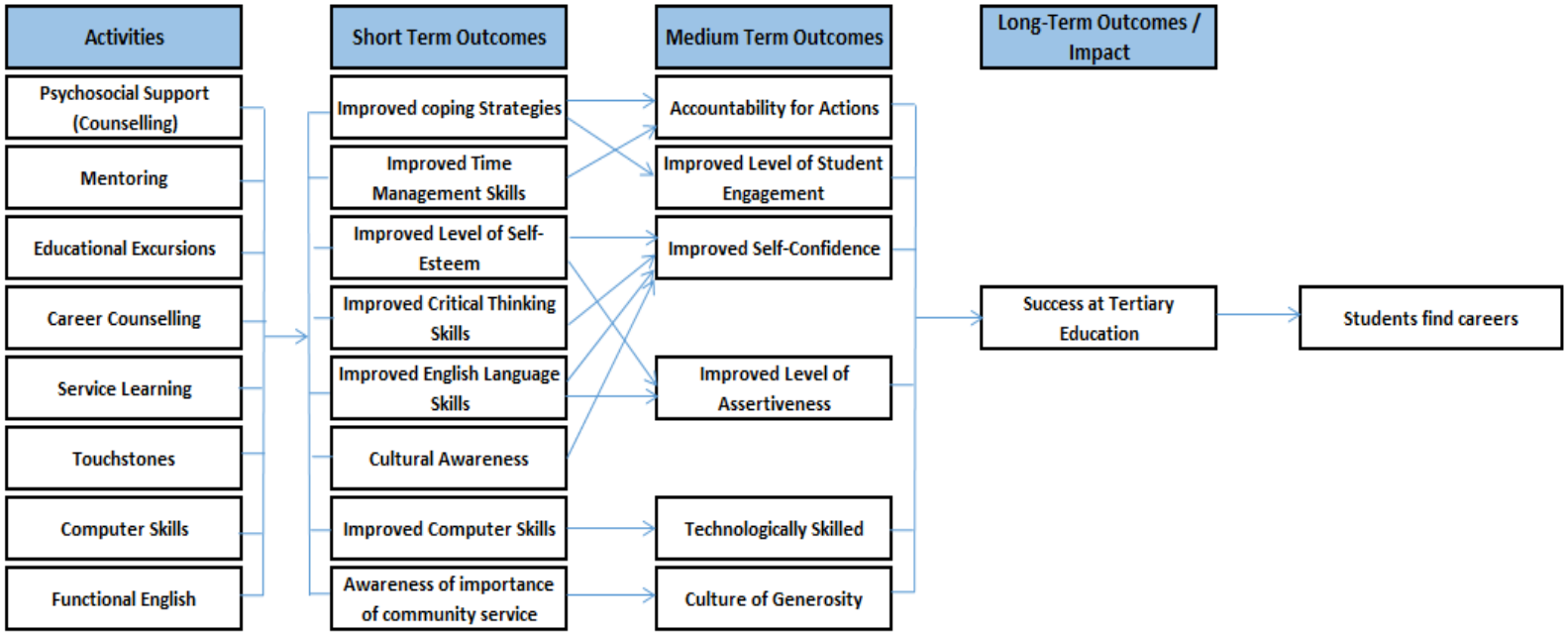

Figure 7. Variable-Oriented Logic Model of the Non-Academic Component of the BYP Extracted from the Programme Staff

.

Step two and three: develop and present a single first draft logic model.

The common logic model integrated the logic model of the programme manager with that of the programme implementers. As a starting point, the evaluator reviewed the logic models of both groups. For this analysis the programme manager was referred to as group A and the programme implementers as group B. The evaluator first identified the common outcomes between group A and group B and then those outcomes that were unique to group A and group B. The findings of this exercise are represented in Figure 8 overleaf.

Figure 8 was shared with the programme manager in order to identify whether all the outcomes that were identified in both meetings were to be included in the final draft or if there are any outcomes that should be removed. The conclusion was that all of the common outcomes must be included in the final logic model as well as the outcomes that were unique to the logic model developed by the programme manager. The outcomes that were unique to the programme implementers were edited as follows: (a) assertive behaviour was replaced with self-confidence at the request of the programme manager, (b) accountable for actions was removed, and (c) improved level of student engagement was also deleted, as the programme manager felt that outcomes (a) and (b) were beyond the scope of the non-academic component of the BYP.

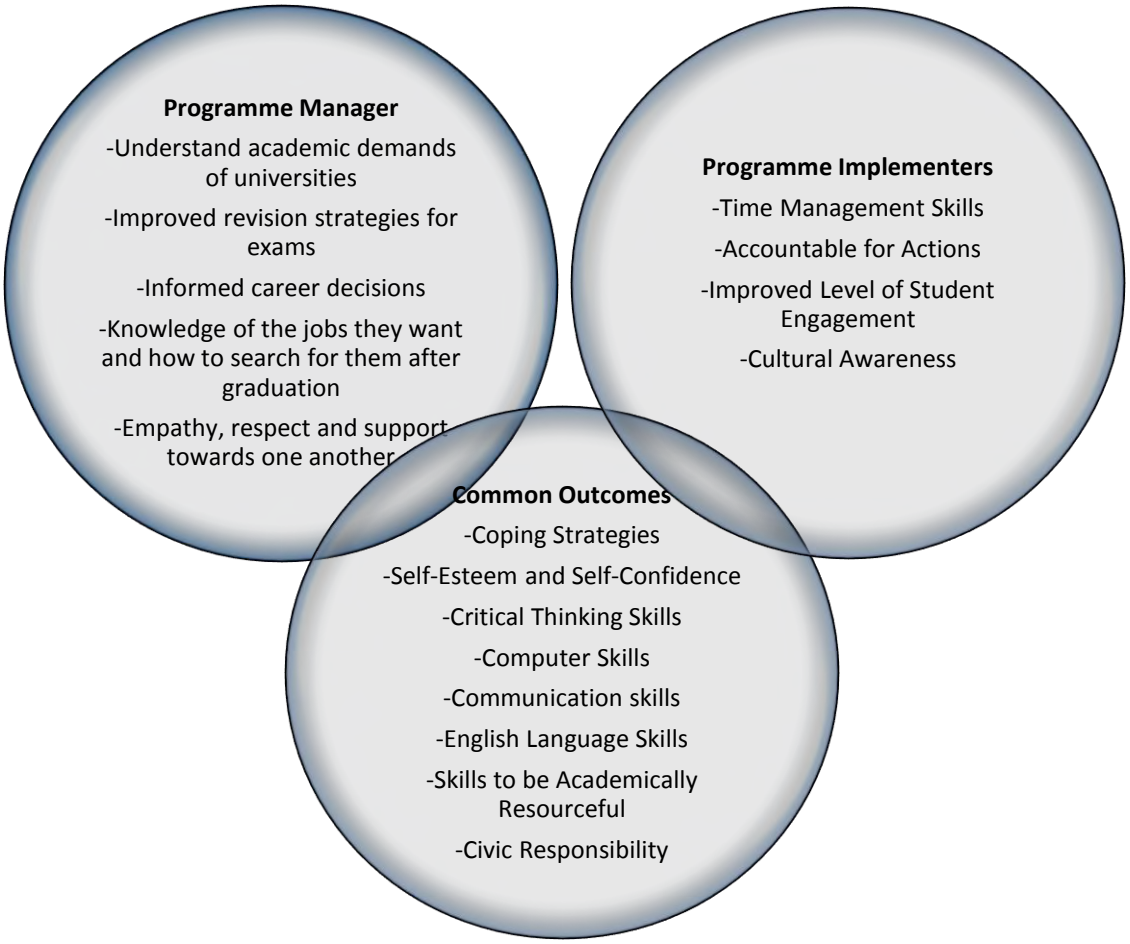

Figure 8. The Outcomes Identified by the Programme Implementers and Programme Manager Revealing Areas of Overlap

Step four: probe arrows for model specificity.

Hatry, et al's. (1996) three steps were used to unpack the logical flow of the model. The first step was to walk through the implied "If-Then" relationships. In some instances the evaluator noted that the short-term outcomes did not logically connect to the medium-term outcomes.

The second step of this process determined whether the relationships reflected the logic of the non-academic component. The evaluator concluded that there were other important short-term outcomes that should be added to the logic model to strengthen the transition from short- to medium-term outcomes.

The third step of this process was to determine whether the longer-term outcomes represented meaningful benefits and changes in status or conditions. This step revealed that the long-term outcomes identified were indeed meaningful benefits in that they could improve the quality of life of the BYP students (Letseka, 2009). This process constituted a preliminary assessment of the programme theory. It was supplemented by an in-depth analysis of plausibility as part of evaluation question two.

Step five: finalise logic model.

The programme manager informed the evaluator that the first draft was shared with the participants during their weekly meeting. All participants had agreed with the logic model presented and therefore the evaluator was able to use the first draft as the final programme theory which could then be assessed for plausibility. The finalised logic model is presented in Figure 9. A plausibility check was conducted on this logic model in answer to evaluation question two.

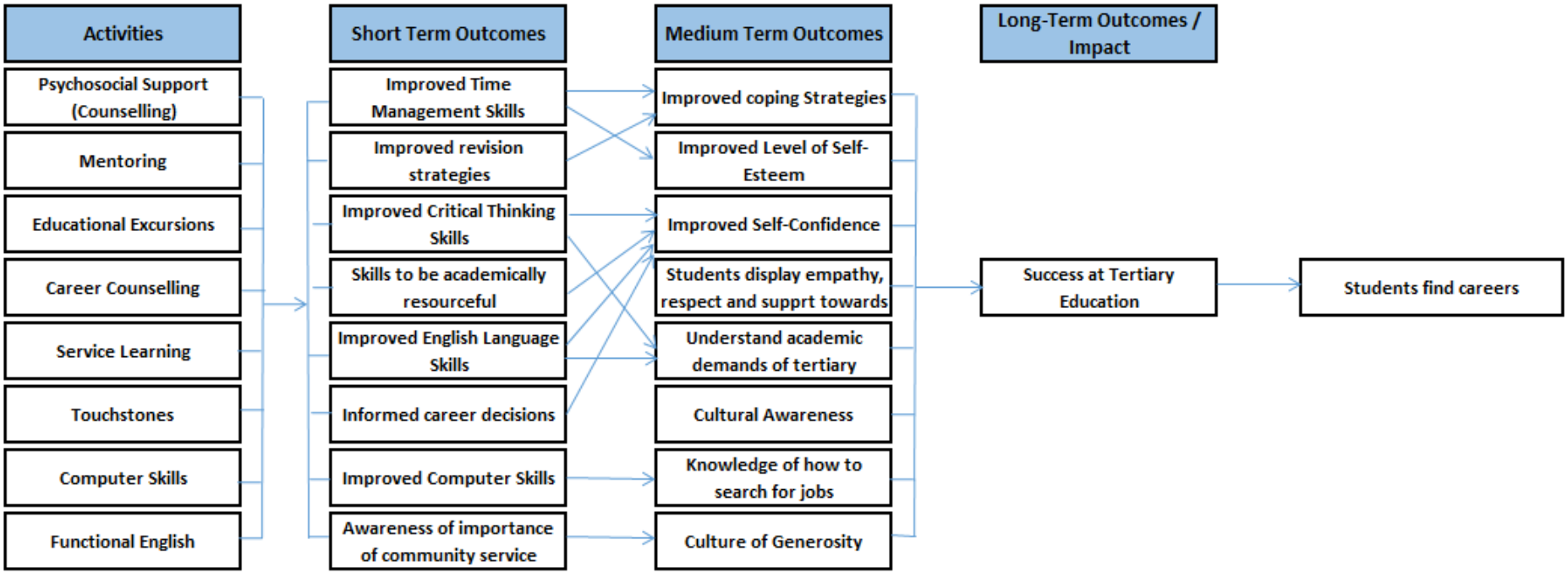

Figure 9. Final, Combined Variable-Oriented Logic Model Developed by the Programme Manager and Staff

Evaluation Question Two: Does Evidence Exist to Support the Non-Academic Programme Assumptions?

A literature review facilitated identification of the conditions necessary for an effective tertiary preparation programme to adequately prepare students from a poor socio-economic background for success at tertiary education level. The evaluation assessed whether these conditions were present in the non-academic component of the BYP.

Literature search findings.

The literature search initially focused on finding evaluations of similar programmes to the BYP within the South Africa context. A number of current tertiary preparation programmes or post-secondary programmes were identified that were similar to the BYP. Although these programmes reported positive outcomes, programme evaluations were not readily available. Those programmes apparently without programme evaluations were: (a) Go to University to Succeed (GUTS) presented by the University of the Witwatersrand in Johannesburg, (b) the Targeting Talent and the Talent Development Programme (TTP/TDP) implemented by the University of the Witwatersrand in Johannesburg, (c) the Science Foundation Programme at the University of Kwazulu Natal and (d) the University of Cape Town (UCT) Humanities Extended Degree Programme. The references to access more information about these individual programmes are presented in Appendix D.

The evaluator was only able to source two published evaluations within the South African context, which are presented here. These were (a) the evaluation of the IkamvaYouth programme (Spaull, Burger, Burger, van der Berg, van Wyk & Dzivakwi, 2011), and (b) the evaluation of Advancement Programme at the University of Port Elizabeth (Wood & Olivier, 2004). Due to the limited number of evaluations within the South African context, documented evaluations of similar programmes implemented in other countries were used. Foreign tertiary preparation programmes similar to the non-academic component of the BYP are commonly known as pre-college outreach programmes or pre-college preparation programmes.

Literature review.

The literature revealed that most tertiary preparation programmes focus on enhancing the competencies of students both academically and non-academically. Only findings relevant to the non-academic aspects of these evaluations are presented and discussed.

The programme evaluations presented advocates multi-programme approaches where the students are enriched holistically with academic and non-academic assistance. The full programme offered by the BYP was in line with this philosophy as it assisted students to improve their grade 12 results in order to gain access to tertiary education, while also teaching them life skills to prepare them for success with their tertiary education. This intention is captured by the Department of Education (1996, p. 17), where it was stated that "students with well-developed academic and life skills will be less likely to fail and have to repeat courses".

The literature review is divided into four parts. The first part describes the published evaluations of programmes that were similar to that of the non-academic component of the BYP.

The second part of the literature review presents those outcomes that were linked to successful programmes and the activities that contributed to the achievement of those outcomes. An assessment is then presented on whether the BYP incorporated similar outcomes and activities in their logic model.

Part three presents the conditions that contributed to the achievement of outcomes identified in part two. An assessment is made of whether these conditions were in place in the non-academic component of the BYP. This enabled a revised recommended logic model based on the findings of part two and three of the literature review.

The final part of the literature review assessed the activities of the revised logic model in relation to the Theory of Planned Behaviour (TPB) (Ajzen, 1991). The rationale for engaging in this process was to assess whether the activities of the revised non-academic component

of the BYP were able to modify the behaviours of the BYP students needed for success at tertiary education.

Part 1: overview and description of the evaluation reports.

A total of seven evaluation reports were used to inform the literature review. They were categorised under three headings namely: (1) programmes that assisted students to gain access to tertiary education, (2) programmes that prepared students who had already gained access to succeed at their tertiary studies and (3) programmes that assisted students before gaining access to both do so and succeed at tertiary education. The BYP would fall into (3) as it aimed to assist post grade 12 learners from poor socio-economic backgrounds, to gain access to and succeed at tertiary education.

Evaluation report of a programme that assists with access to tertiary education.

An evaluation was conducted on the IkamvaYouth programme by the Department of Economics at the University of Stellenbosch in 2011. The evaluation aimed to assess the short-term and longer-term outcomes of the programme, to investigate the key success factors of the model, and to assess the whether the programme could be scaled-up to reach a bigger target audience (Spaull, et al., 2011).

IkamvaYouth is a non-profit organisation that aims to "equip children from disadvantaged communities with the knowledge, skills, networks and resources to access tertiary education and/or employment opportunities once they matriculate" (http://Ikamvayouth.org). Students enrol with IkamvaYouth from grade nine. However programme success is measured by the number of Grade 12 learners who gain entry to institutions or employment-based learning opportunities once they matriculate (http://Ikamvayouth.org).

IkamvaYouth offers various activities to their learners in the afternoons after school, on Saturday mornings and during school holidays. The following activities are offered to the registered students: (a) Tutoring and homework sessions, (b) career guidance, (c) mentoring, (d) computer literacy, (e) a media, image and expression programme to create

opportunities for learners to express themselves creatively and build self-esteem and (f) health and leadership programmes.

A lack of baseline information and the challenge of finding a comparison group limited the ability of the evaluators to conduct an impact evaluation (Spaull, et al., 2012). Results showed that IkamvaYouth students had outperformed other students in their final matric results (both their classmates and nationally) by a considerable margin, including those from similar backgrounds. It was however not possible that the results achieved were solely attributable to the IkamvaYouth programme (Spaull, et al., 2012).

The grade 12 passes achieved by the 2011 IkamvaYouth students were compared against national statistics and the statistics of the IkamvaYouth feeder schools. It was found that 72% of the IkamvaYouth students received either a diploma pass or a bachelor's pass, compared to 53% nationally and 36% at the IkamvaYouth feeder schools (Spaull, et al., 2012). These findings reflect what the IkamvaYouth programme achieved More IkamvaYouth students were able to access tertiary education compared to the national figures and the IkamvaYouth feeder schools.

The second evaluation presented is a meta-analysis conducted by Gullatt and Jan (2003). Their analysis presented the evaluation findings of four college outreach programmes in the USA. The college outreach programmes sought to prepare students from poor socio-economic backgrounds to gain access to college (Gullatt & Jan, 2003). The evaluations of the four programmes presented in the meta-analysis used randomised controlled trials (RCT) with comparison groups and therefore effectiveness assessments could be conducted.

The meta-analysis findings revealed that (1) students who received counselling were considerably more likely to attend college and complete their first year of studies, (2) there were lower dropout rates compared to students from similar backgrounds, (3) the programmes that intervened earlier and provided personalised assistance, coupled with prospects of scholarship, improved student behaviour in enrolment and retention in tertiary education and (4) students who had contact with their mentors at least once a week did

significantly better in terms of their tenth grade academic results, their 11th grade academic results, first year college attendance and college retention.

Evaluation reports of programmes that assist with success at tertiary education.

The third evaluation presented is the Advancement Programme (AP) offered at the University of Port Elizabeth (UPE). The University of Port Elizabeth Advancement Programme (UPEAP) is a one year, full time course for foundation students at UPE. Students register for some of their first year major subjects and also participate in the advancement programme. UPEAP focus is on increasing students' belief in their abilities to reach their goals and providing the necessary support. Students meet with the same facilitator twice a week, in groups of 15. The facilitator also acts as a mentor for the students. The module comprises of four components, namely (a) academic and life skills, (b) mentoring, (c) peer support and (c) experiential learning methods through the use of portfolios which encourages reflection and introspection by students (Wood & Olivier, 2004).

The academic and life skills module is designed to increase the self-efficacy of students so that they can approach their studies with increased confidence, a positive attitude, and the belief that they can succeed (Wood & Olivier, 2004).The underlying assumption of this programme is that if students acquire the necessary social and academic skills and improve their sense of self-efficacy they will be more successful at completing their tertiary studies (Wood & Olivier, 2004).A preliminary qualitative evaluation was conducted on UPEAP (Wood & Olivier, 2004). It indicated, through self-reported questionnaires, that the programme did increase the self-efficacy of its students. Based on this finding, the assumption was that the students who participated in UPEAP had an increased chance of succeeding at tertiary education.

The fourth evaluation presented is the International Baccalaureate (IB) programme which is a rigorous two year programme for students aged between 16 and 19 (Conley, McGaughy, Davis-Molin, Farkas & Fukuda, 2014). It is a comprehensive programme that is designed to prepare students both academically and non-academically for success in tertiary level education (Conley, et al., 2014).

An evaluation of IB was conducted to explore the impact of the IB diploma programme on college readiness. It examined the academic and non-academic preparation of students who participated in the IB diploma programme in high school. The evaluation used a mixed methods approach to data collection and analysis. The evaluation consisted of an intervention group (referred to as the IB/Honours students in the evaluation) and a comparison group (referred to as the non-IB/Honours students) (Conley, et al., 2014). The IB/Honours students participated in the IB programme at high school whereas the non-IB/Honours students did not.

The study collected college readiness information from these two groups of students who matriculated and gained access to the Robert D. Clark Honours College at the University of Oregon in the USA. The study examined both IB/Honours and Non-IB/Honours students' levels of academic, social, and emotional adjustment and investigated the degree to which the IB Diploma Programme facilitated preparation for the transition from high school to college (Conley, et al., 2014, p. 1).

The evaluation found that there was no significant difference between the IB/Honours students and the non-IB/Honours students. The reason for this could be that in order to gain access to an Honours class the students need to display a well-developed level of academic and non-academic skills. The two groups might well have been equally prepared for the programme. Hence, if the current IB/Honours students had not participated in the IB Diploma programme then perhaps some of them would not have been accepted into the Robert D. Clark Honours College at the University of Oregon. Overall, this study suggests that the IB diploma programme could be helpful in understanding how to better promote critical academic and non-academic skills that could lead to improved tertiary preparation (Conley, et al., 2014).

The fifth evaluation presented is the on the academic and life skills programme offered to first year students at the Hormozgan University in Iran (Fallahchai, 2012). The evaluation sought to assess the effectiveness of the academic and life skills programme on academic achievement for first year students, with particular interest on those from a disadvantaged background (Fallahchai, 2012). The research used a quasi-experimental design; a pre-test,

post-test design with a control group (Fallahchai, 2012). The sample consisted of 170 first year students, from the 2010 student cohort, who were randomly selected and stratified based on age, gender and faculty. Participants were then assigned to either the intervention group or the control group.

The intervention group attended a 10 week programme of academic and life skills training. This programme consisted of an introduction to the related educational program, principles of reading and learning methods, note-taking techniques, memory recollection at exams, cognitive self-conscious acquisition, anger management skills, stress coping strategies, decision making and problem solving, communication skills, creative and critical thinking. The intervention group were trained in sessions of 90 to 120 minutes

The intervention group participants were found to have achieved significantly higher scores in life skills and academic achievement compared to the control group (Fallahchai, 2012). There was no significant difference observed between the male and female intervention group participants in terms of their academic achievement. The study found that by providing an academic and life skills programme to first year students would significantly improve their chances of academic success (Fallahchai, 2012).

The sixth evaluation presented is the Learn and Serve America, Higher Education programme, which is a service learning programme presented at participating tertiary institutions. The underlying assumption of the programme is that "participation in service-learning has significant positive effects on student development, especially in the areas of civic and social responsibility, understanding of social problems, personal development (leadership, for example), self-confidence and critical thinking" (Gray, Ondaatje, Fricker & Geschwind, 2010). The evaluation used a mixed methods approach to data collection and analysis over a three-year period with 1300 students from 28 institutions (Gray, et al., 2010).

The evaluation focused specifically on course based service learning among colleges and universities. The intervention group consisted of 725 students enrolled in a service learning course during spring 1997. The control group comprised 597 students enrolled in a similar

course at the same time, but one that did not involve service learning (Gray, et al., 2010). At the end of the course, only 41% of the students responded to the survey and no significant differences were found between the two groups (Gray, et al., 2010).

The evaluation found that participation in a service-learning course had only minimal effects on students' civic participation and life skills, and no effects on their academic and career development. There were no negative effects due to participation in the service-learning course, and there was no evidence that service-learning courses are more demanding than non-service courses (Gray, et al., 2010). However, it was found that there was no consistency in the implementation of the programme. It was also found that the lecturers who incorporated the students' service learning experiences into the course content found a higher level of student satisfaction and self-reported improvements in self-esteem and learning (Gray, et al., 2010). This highlights the possible positive impacts of experiential learning.

Evaluation reports of programmes that assist with access to and success at tertiary education.

The seventh evaluation presented is a meta-analysis conducted by Schultz and Meuller (2006) based on analysis of 20 programme evaluations. These 20 programme evaluations assessed the effectiveness of pre-college outreach programmes in USA. The meta-analysis only included evaluations of programmes that were able to provide evidence for effectiveness (Schultz & Meuller, 2006).

The programmes included in this meta-analysis offered pre-college assistance to students, particularly from disadvantaged backgrounds. The programmes offered academic and social support to students that would assist with gaining access to and succeeding at their college studies (Schultz & Meuller, 2006).

The meta-analysis found that (1) students who participated in the programmes were significantly more likely to enrol in public and private colleges, (2) lower college dropout rates in comparison to income-eligible non-participation students, (3) students were more

than twice as likely to have received degrees and (4) longer participation and program completion were associated with better outcomes (Schultz & Meuller, 2006).

Part 2: Outcomes associated with programme success.

A literature search revealed ten outcomes that were likely to lead to the intended long-term outcomes for tertiary preparation programmes. These outcomes are presented as key themes namely: (a) students cope with academic demands, (b) students are pleased with their career choice, (c) students form a supportive network, (d) students are confident individuals and have high levels of self-esteem, (e) students are culturally competent, (f) students are academically resourceful and efficacious, (g) students are effective communicators, (h) students are critical thinkers (i) students are civically responsible and (j) students are employable. The discussion of each theme presents the rationale for its inclusion, relevant literature about the theme, and whether the non-academic component of the BYP incorporated that particular theme into their programme theory. If the non-academic component of the BYP did not incorporate a particular theme, a recommendation is provided as to possible ways it could be. The key themes are presented below.

Students cope with academic demands.

Considering the high drop-out rate at tertiary education, particularly amongst students from a poor socio-economic background (Letseka, 2009) there are many reasons why students are not completing their tertiary studies. Researchers have indicated that one of those reasons is that students lack certain skills that will help them cope with the demands of tertiary education (Lindhard & Dhlamini, 1990).

In an evaluation conducted on the IB Diploma Programme to examine student readiness for tertiary education (Conley, et al., 2014), it was found that the most critical skills needed to cope with academic demands were time management, problem solving and strong reading skills. In addition to these three critical skills, other key skills identified are organisational skills (Wood & Olivier 2004; Spaull, et al., 2012), studying techniques (Wood & Olivier 2004), revision strategies (Wood & Olivier 2004) and help-seeking behaviours (Wood & Olivier 2004).

As in the IkamvaYouth, UPEAP and IB Diploma programmes, the BYP incorporated basic study skills techniques in its programme activities, such as time management, revision strategies and note taking (Schultz & Meuller, 2006). However, it has been found that the ability to cope with academic demands is also about academic self-efficacy (Chemer, Hu & Garcia, 2001) and academic resourcefulness (Zausniewski & Bekhet, 2011).

The transition from high school to tertiary education can be a very stressful period in a young person's life as tertiary studies require a higher level of independence and maturity (Chemer, et al., 2001). These researchers theorised that people will be more successful in overcoming challenging life transitions if their belief in their ability to succeed (self-efficacy) is high. Bandura (1997, p. 3) described self-efficacy as "the belief in one's capabilities to organize and execute courses of action required to produce given attainments". In academic settings, self-efficacy has been associated with the ability to persist in the face of challenges which in turn is related to success (Schunk, 1981; Wood & Olivier, 2004). It has been found that self-efficacy (Chemer, et al., 2001) and academic resourcefulness (Zausniewski & Bekhet, 2011) are related to more effective problem-solving and decision-making strategies, more efficient methods to planning and managing resources and personal goal-setting behaviour (Fallahchai, 2012).

A study conducted by Majer (2009) on self-efficacy and academic success among first generation tertiary students in Chicago found a significant positive relationship between levels of academic self-efficacy and students' year end results.

South African students from poor socio-economic backgrounds are also generally first generation tertiary students, including the majority of students attending the BYP. This implies that if the BYP planned to strengthen the level of academic self-efficacy and academic resourcefulness of their students, they would be better prepared to cope with the academic demands of tertiary education. Academic resourcefulness and academic self-efficacy are best taught with experiential learning (Wood & Olivier, 2004).

Students are pleased with their career choice.

Selecting the correct programme to study is a vital determinant of students' tertiary success (Morrison, Brand & Cilliers, 2006; Jones, et al., 2008). For students to follow a preferred field of study at a tertiary institution they need to select the appropriate subjects at school (Jones, et al., 2008). In the South African schooling system students are required to make their subject choices at the start of grade ten. These subjects must be followed through up until they matriculate at the end of grade 12 (Bholanath, 2004).

Students from poor socio-economic schools often have limited access to career guidance and are therefore forced to make course decisions with very little information (Jones, et al., 2008). As a result of a mismatch between course selection and student expectations or interests, many students drop out of university (Gullatt & Jan, 2003; Schultz & Meuller, 2006; Bangser, 2008; Jones, et al., 2008; Spaull, et al., 2012). Jones, et al., (2008) highlight that career guidance would increase throughput rates, and avoid the unnecessary sense of personal failure that students experience when they make the wrong career choice.

It is highly possible that many BYP students received poor career guidance whilst still at school. It could therefore be assumed when they commenced BYP course, they would not have clear or realistic expectations of the careers they could pursue. As with the IkamvaYouth programme and the two the meta-analyses, the evaluator recommends that the non-academic component of the BYP incorporates career counselling as a key component of their service delivery to their students. Furthermore, career counselling could incorporate a psychometric assessment tool to help students make realistic choices suiting their interests, abilities, and personalities. This would also assist with their retention at tertiary education and increase their chances of tertiary success.

Students form a supportive network.

Peer support has been found to contribute to the effectiveness of tertiary preparation programmes (Ross, 2007). Students relate better to other students of similar age, background and experiences as themselves than they do to mentors who are usually much

older and therefore do not always understand student's needs and frustrations (Gullatt & Jan, 2003).

In this regard, Ross (2007) conducted a study on a cohort of students on a scholarship scheme for rural students in South Africa. Perceptions of graduates with regard to the factors leading to their success at university/technical college were determined. The graduates highlighted that the key reason for their success at university/technical college had been due to the high level of support received. This support was twofold, firstly the personal contact provided by the main programme mentor and secondly the mutual support amongst the programme students

The UPEAP evaluation found that peer mentors are an important and credible source of information to the students in terms of role modelling those behaviours that lead to success (Wood & Olivier, 2004). Peer mentors should be selected based on their academic and social competence (Wood & Olivier, 2004). Peer mentors are students of similar age and ethnicity but a year or two academically ahead of the mentees. For example if the mentee is a first year student then the peer mentor will be a second or third year student (Monroe, 2002).

The studies presented here highlighted two forms of peer support, one where a cohort of students from the same community provided a support structure to one another during their tertiary studies (Ross, 2007). The other form of peer support was through a peer mentoring programme (Wood & Olivier, 2004).

The evaluator thus recommends that for BYP graduates entering into tertiary education, the BYP staff create a platform for meeting regularly to provide support to one another. This support could be through sharing experiences and challenges they have had to overcome while pursuing their tertiary studies or are currently experiencing. Such support sessions would provide a form of psychosocial support to the students where, through personal experiences, they could share important information with each another.

The BYP could thus offer both a mentoring component, where the BYP staff continues mentoring current students, and also offer a peer mentoring component. .

Students are confident individuals and have high levels of self-esteem.

Ciaccio (1998) fond that a major source of academic failure is students' lack of confidence in their ability to succeed. Central to most research on access and retention at tertiary institutions among students from poor socio-economic backgrounds is a general sense of low self-esteem and a lack of confidence to succeed (Martin, 2002; Lotkowski, Robbins & Noeth, 2004; Jones, et al., 2008;). DuBois, Holloway, Valentine and Cooper (2002) used meta-analysis to review 55 evaluations of mentor programmes and found that mentoring programmes had a significantly positive influence on youth development.

Martin (2002) found that the most effective means of building self-esteem and confidence of students was through psychosocial support and mentoring. Research has shown that mentors play a key supportive role in helping students overcome obstacles to enrol in tertiary institutions (Ross, 2007). Mentors are also referred to as role models (Freedman, 1993).

Mentoring can aid the following outcomes for students from disadvantaged backgrounds: students learning to be more responsible individuals, the mentor acts as a positive role model, the students are supported and guided, it gives the students an opportunity to build positive relationships, and it develops greater self-esteem (Gwam & Vawda, 2005).

The meta-analysis of 20 programme evaluations by Schultz and Mueller (2006) reported that 80% of the programmes included in their analysis had a mentoring component. The four programme evaluations included in the meta-analysis by Gullatt and Jan (2003) all reported mentoring as a critical component of their programmes. The evaluation of the UPE Advancement Programmes also indicated that they were able to build students' confidence through their mentoring component (Wood & Olivier, 2004).

According to Guetzloe (1997), mentoring programs have a number of elements in common, the most important being the establishment of a positive relationship between an older individual, usually a volunteer, and a younger person in need of guidance or support. According to Saito and Blyth (cited in Guetzloe, 1997), the most successful mentoring

programs have incorporated the following elements to ensure the mentors bring about the desired outcomes:

- appropriate screening, matching (student and mentor), and training,
- adequate structure for communication and support for mentors (provided by programme staff), and
- opportunities for programme-supported social activities for mentors and youth.

The BYP incorporates a mentoring component. However, the programme has not been clearly defined in past years and finding volunteer mentors had been a constant struggle so this component had been neglected. During 2014 a more concerted effort was made to provide this service to their students. The BYP staff took on the role as mentors for the students. Due to the limited number of staff compared to the number of students no matching process took place. The mentors had one information session but no formal training was provided.

The evaluator therefore recommends that if the BYP students would like the potential benefits of having a mentor, a more stringent process in terms of matching and training is required. The BYP foresaw having the same challenge of finding volunteer mentors for 2015. However, the programme manager indicated that one of the expectations placed on future BYP graduates is that they return as volunteer mentors during their second year or higher level of tertiary studies.

Students are culturally competent.

Loo and Rolinson (1986) found that students from poor socio-economic communities in the USA, where interactions with other races and cultural groups were almost non-existent, had considerable difficulty fitting into university culture. This has also been found in Ghana where children from more affluent metropolitan families had a five times greater chance for success than children from rural communities (Huysamen, 1996). The impact of these influences on the potential for success of black students in South Africa is no different (Stephen, Welman & Jordaan, 2004). Research found that the more the individual was able

to fit in with his/her surroundings, or the university culture, the greater the potential for success (Pascarella, Terenzini & Wolfle, 1986; Spaull, et al., 2012),

The BYP understood the need for their students to be comfortable and confident in interacting with people from different races and cultures thus it stated that one of their outcomes was to ensure that their students were aware of different cultures. If BYP students were not confident and comfortable in interacting with people from different cultures, they would find it difficult to seek help from peers and lecturers which in turn could affect their academic success. It is therefore recommended that the BYP implement activities in the programme that would lead to achieving this outcome.

Students are effective communicators.

A study conducted by Stephen, et al. (2004) assessed whether English language proficiency impacted on academic success of first-year Black and Indian students at a South African tertiary institution. Students enrolled at a tertiary institution between 1996 and 2002 were included in the study. It was found that English language proficiency was significantly associated with academic success. An evaluation conducted on the IkamvaYouth programme (Spaull, et al., 2012) highlighted the importance of speaking English at tertiary level education. This is highlighted by the following responses during an interview conducted with post-IkamvaYouth students:

> "If you can't speak English well enough, you struggle to understand the classes."
> "It's the language, and then we distance ourselves from the other people who can help us with some things because they don't speak like us."
> "I understand English but academic English at university is confusing. It's also difficult to keep track of all the different types of communication on notice boards and email notices."
> "English was a problem and I always had to work harder to know what was going on."

The BYP students have a similar demographic profile as the students recruited by the IkamvaYouth programme. It is therefore assumed that the BYP students would face similar

challenges with the English language as noted above. For most black students, English is either their second or third language (Stephen, et al., 2004). This highlights a skills gap that is very likely to affect student progression at tertiary education. BYP's incorporation of English language skills including reading, writing and spelling should be expanded to include academic English skills required at tertiary level education.

Students are critical thinkers.

The availability of information from multiple sources requires understanding the context in which the information has been written and how credible the information is. This requires the skill of making critical decisions about the information accessed (Fisher, 2001). Critical thinking skills for academic purposes can be extended to students' daily lives as well (Karbalei, 2012).

Tsui (2002, p. 743) defines critical thinking as "students' abilities to identify issues and assumptions, recognize important relationships, make correct inferences, evaluate evidence or authority, and deduce conclusions." Critical thinking is therefore an important skill to have at tertiary level education in order to engage with the learning material effectively (Karbalei, 2012). Secondary education however, does not always teach this skill effectively to students, as there is greater emphasis on rote memorisation and recall rather than critical engagement with the material (Sternberg, 2003).

The importance of teaching critical thinking was reinforced by four tertiary preparation programme evaluations cited in this literature review, including the evaluation of the academic and life skills programme at the Hormozgan University in Iran (Fallahchai, 2012), the evaluation of the International Baccalaureate Diploma Programme (Conley, et al., 2014); the evaluation of UPEAP (Wood & Olivier, 2004); and the evaluation of the IkamvaYouth Programme (Spaull, et al., 2012).

Due to the importance of critical thinking skills needed to succeed at tertiary level education, the BYP incorporated critical thinking skills as a key activity of their overall

programme. It is taught in the Touchstones class and is also a critical teaching strategy underlying all their lessons (SAEP Proposed Bridging Year 2015 document).

Students are civically responsible.

According to Giles, Honnet and Migliore (1991) (cited in Gray, et al., 2010, p. 32), "One of the characteristics of service-learning that distinguishes it from volunteerism is its balance between the act of community service by participants and reflection on that act, in order for both to provide better service and to enhance the participants' own learning .... Service learning therefore combines a strong social purpose with acknowledgment of the significance of personal and intellectual growth in participants."

Gray, et al., (2010) note that service-learning is perceived as a tool to boost critical-thinking skills and provides students with an opportunity to apply their theoretical knowledge through experiential learning. Service-learning was also found to build self-esteem in youth (Israel & Nogueira-Sanca, 2011).

An evaluation of the Learn and Serve America Higher Education (LSAHE) initiative studied the implementation of service-learning in higher education, with particular attention to the factors that hamper or aid strong service-learning programmes (Gray, et al., 2010). Serving more than 20 hours per semester had positive effects on self-rated academic development and life skills. Additionally the data indicated that service learning had stronger and more positive outcomes when course concepts were tightly linked to the service experience of students, and if the students received training and supervision on the service learning role (Gray, et al., 2010).

The BYP included a service-learning component in their programme in order to ensure their students were civically responsible and understood the value of giving back to their communities. Service learning has the ability to instil this quality in students. Moreover it could further enhance self-esteem and critical thinking skills (Gray, et al., 2010).

The BYP could ensure that the students engage in more than 20 hours of service learning per semester in order to start experiencing positive outcomes as found by Gray, et al. (2010). At the time of this research BYP students were required to participate in community service for 100 hours for the year that they were registered with the BYP, which amounts to more than 100 hours of community service per semester.

The evaluator recommends that for the BYP to transform their community service sessions from mere volunteerism into being service learning orientated, the BYP should ensure that the service learning activities are linked to course content (Gray, et al., 2010). One way to achieve this would be by ensuring that as part of the Touchstones and Psychosocial support programme activities, the students reflect on their learning from their community service sessions. This sharing would not only assist the individual student to gain deeper insights into their learning process and so build self-esteem, but would also allow the other students in class to critically unpack each student's learning opportunities (Wood & Olivier, 2004).

Students are employable.

Employability skills were not noted as an outcome of any of the programme evaluations presented in this literature review. However, focus of the evaluations concerned access to and success at tertiary education. Tertiary success does not necessarily equate to employability skills, it is therefore noteworthy that the BYP has a long-term outcome that students are able to graduate into a career. As this is an intended outcome of the BYP, it was important to explore how the programme would achieve this.

The rationale for acquiring tertiary education is to ensure better employment opportunities. However this rationale is complex and is often determined by employability skills, also known as soft skills (Mourshed, Farrell & Barton, 2012). "Employability can be defined as the possession of relevant knowledge, skills and other attributes that facilitate the gaining and maintaining of worthwhile employment" (British Council, 2014).

Once students graduate from tertiary education, they will enter the employment market. The tertiary qualification that students graduate with adds to the knowledge and skills

needed for entering the job market however, certain soft skills are also needed in order to be marketable.

A study aimed at understanding graduate employability in Sub-Saharan Africa was commissioned by the British Council in 2014, led by the University of London and carried out in partnership with Kenyatta University, Kenya; the University of Education, Winneba, Ghana; the University of Free State, South Africa; and the University of Ibada, Nigeria. It was found that one of the reasons for high rates of unemployment and underemployment, especially among graduates in South Africa was that employers felt that graduates were not equipped with the soft skills (employability skills) which would make them work-ready (British Council, 2014).

Figure 10 was extracted from the South African Graduate Recruiters Association (SAGRA) 2013 survey (cited in British Council, 2014), which indicates the various soft skills that South African employers found very important (indicated by the grey bar) together with reports of employers' level of satisfaction with graduates displaying those soft skills (indicated by the blue bar) (British Council, 2014).

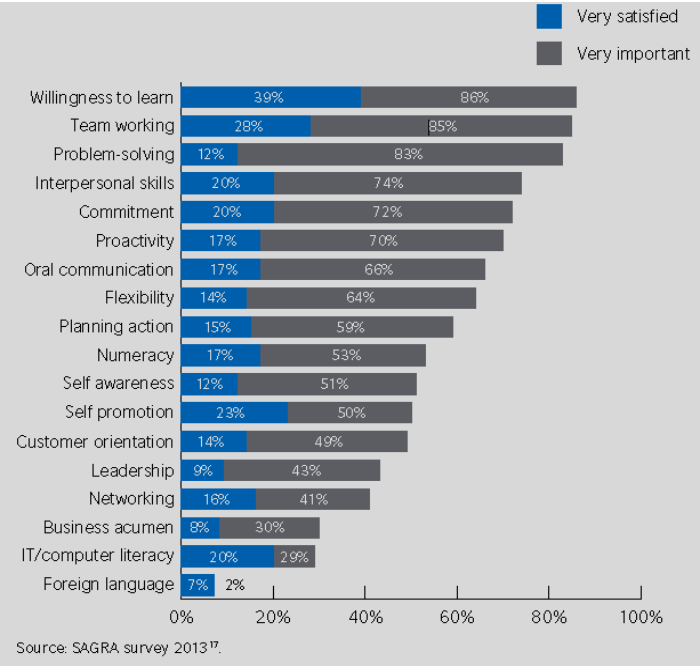

Figure 10. Critical Skills Needed When Entering the Job Market

Figure 10 highlights information that reflects the expectations of employers that do not necessarily include tertiary qualifications for potential employees. This highlights the important role that the BYP could play in teaching their students skills required by employers. However, ensuring that students were employable was not a central focus of their programme and therefore BYP graduates might not necessarily have all the skills noted in figure 10. The extent to which BYP focused on employability was by ensuring their students knew how to search and apply for the jobs they wanted after graduating. Through their current programme initiatives the BYP are addressing some of the skills needed to be employable, namely problem solving, communication, planning skills, self-awareness and computer literacy.

As a recommendation, the BYP could partner with other organisations that offer soft skills training so as to increase the BYP students' chances of employment after graduation. A further recommendation is the BYP students find part time jobs whilst studying as this would provide them with an income, and enable development of their soft and other skills. Generating an income could lead to increased retention at tertiary education, as it has been found that one of the biggest reasons for the high student dropout rates was financial constraints (Gullatt & Jan, 2003; Jones, et al., 2008; Spaull, et al., 2012;).

In summary, part two of the literature review has indicated that if the non-academic component of the BYP aims to achieve its desired long-term outcomes, ten outcomes need to be incorporated in the programme theory. These outcomes are (a) students can cope with academic demands, (b) students are pleased with their career choice, (c) students form a supportive network, (d) students are confident individuals and have high levels of self-esteem, (e) students are culturally competent, (f) students are academically resourceful and self-efficacious, (g) students are effective communicators, (h) students are critical thinkers (i) students are civically responsible and (j) students are employable.

Part 3: conditions that may influence programme success.

Various factors known as moderator variables may influence whether a programme will successfully achieve its desired outcomes (Rossi, et al., 2004). A moderator is defined as a

variable that affects the strength or direction of the relationship between an independent and dependant variable (Carroll, Patterson, Wood, Booth, Rick & Balain, 2007). The four moderators or influencers presented below are considered to have the potential to affect the relationship between the activities and outcomes in the short, medium and long-terms. They were derived from Gullatt and Jan (2003), Schultz and Meuller (2006), Jones, et al. (2008), and Spaull, et al. (2012). These influencers are: (a) strategically timed interventions and long-term investment in students, (b) scholarship/financial assistance, (c) student engagement and (d) the quality of delivery/instruction.

Strategically timed interventions and long-term investment in students.

Gullatt & Jan (2003) highlight that starting early with tertiary preparation programmes over a longer period of time can be beneficial. They recommend that tertiary preparation programmes start during the ninth grade because learners have to make subject choices in the tenth grade. These subject choices should be aligned to learners' career aspirations (Gullatt & Jan, 2003).The BYP assist post-matric students to gain access to and succeed at tertiary education therefore starting earlier is not part of their service delivery model.

Scholarship/financial assistance.

Financial constraints have been noted as one of the key factors preventing students from pursuing tertiary education and also one of the biggest contributors to tertiary drop out among students from poor socio-economic backgrounds (Gullatt & Jan, 2003; Jones, et al, 2008). The BYP does not offer students scholarships or financial aid for their tertiary studies. However, as part of their service delivery plan, students receive information about scholarships and financial aid options. The BYP also assists students with their applications.

This assistance provided by the BYP might alleviate some of the financial anxieties facing students when applying to universities (Jones, et al., 2008).

Student engagement.

The level of a student's engagement with the course material could account for how effective the programme is for each individual student (Kahu, 2013). Kuh (cited in Thomas,

2012, p. 13) defined student engagement as “the time and effort students devote to activities that are empirically linked to desired outcomes of college and what institutions do to encourage students to participate in these activities”. Potential tertiary education students struggle to understand the value that non-academic programme activities may have towards achieving their goal of gaining access to and succeeding at their tertiary studies (Krause & Coates, 2008).

The BYP students were motivated to gain access into tertiary institutions and thus rewrote matric subjects to improve their final matric results. A key focus of the BYP, over and above academic tutoring, was to provide the students with the non-academic skills that would assist them to better cope with the demands of tertiary education. Because the non-academic skills were not directly linked to the matric results or to gaining access to tertiary education, the BYP students might not have understood the importance of the non-academic skills and therefore may not have engaged closely enough with the non-academic programme activities to bring about the intended outcomes.

The BYP attempted to control against this potential lack of involvement by ensuring that all programme activities were compulsory for all students. However, there was still the risk that students might not take the non-academic activities seriously and therefore would engage with the material appropriately. One way the programme staff might be able to ensure that students are more engaged would be to inform them of the importance of each skill at tertiary level education and how it leads to academic success. The programme staff should also ensure that each programme activity has a clear description of the activities how it relates to the outcomes. By explicitly stating the course outcomes students would be encouraged to consciously make the connections and therefore be better equipped, in future, to draw on those skills.

Peer mentoring (Wood & Olivier, 2004) is another method whereby the BYP could ensure that their students engage adequately with the non-academic programme activities.

Quality of delivery.

According to Carroll, et al. (2007, p. 6), "quality of delivery is an obvious potential moderator of the relationship between an intervention and fidelity with which it is implemented". The quality of programme delivery affects the extent to which a programme will achieve its desired outcomes (Carroll, et al., 2007). A meta-analysis conducted by DuBois, et al. (2002) of 55 mentoring studies found that programmes that monitored their programme implementation obtained effect sizes three times larger than programmes that reported no monitoring (mean effects of 0.18 vs. 0.06, respectively). For the purpose of this research, the evaluator was unable to comment on the quality of delivery of the BYP in the absence of a process evaluation. Thus a recommendation would be that an extensive process evaluation of the non-academic component of the BYP be conducted in future. A process evaluation is an evaluation designed to determine whether the programme is or has been delivered as intended to the target audience (Rossi, et al., 2004). Therefore a process evaluation of the BYP will determine whether the BYP is implementing the programme activities as intended and whether the intended target audience is being reached.

In summary, part three of the literature review has highlighted the conditions that may influence the capacity of the non-academic component of the BYP to achieve the key outcomes discussed in part two of the literature review.

It is essential that the programme manager monitor these factors of the programme regularly as these may strengthen or weaken the prospects of the non-academic component of the BYP achieving its desired outcomes (Carroll, et al., 2007).

The BYP manager should ensure that all BYP students are provided with guidance, assistance and support on how to go about applying for scholarships or financial aid. The second factor is to ensure that the BYP students are engaging with the non-academic component at an effective level and that the non-academic teachers/facilitators are encouraging a high level of programme engagement. The third factor is to ensure stringent and consistent monitoring protocols for the quality of service delivery and instruction. The fourth factor is to ensure that students receive this intervention early on in their high school

careers and over an extended period of time, however the target audience of the BYP is post-grade 12 learners thus this factor does not relate to the BYP.

To ensure that the non-academic component of the BYP is able to provide the intended benefits for the target beneficiaries, all the components highlighted in parts two and three of the literature review should be incorporated in the programme theory.

Recommended programme theory for the non-academic component of the BYP.

The revised and recommended programme theory model incorporated the combined programme activities and outcomes of the elicited programme theory (as per evaluation question one) to those activities and outcomes extracted from the literature. Figure 11 presents the revised recommended logic model. The following activities were added to the elicited logic to create it: (a) assistance with completing application forms, (b) payment of tertiary application fees (c) payment for National Benchmark Tests (NBT) to be written and (d) peer support.

The following short-term outcomes were added to the elicited logic model to create the revised logic model: (a) academic self-efficacy, (b) employability skills and (c) cultural awareness.

The following medium-term outcomes were added to the elicited logic model to create the revised logic model: (a) students are pleased with their career choice, (b) students are employable, (c) students are effective communicators, and (d) students form supportive networks.

The following long-term outcomes were added to the elicited logic model to create the revised logic model: (a) students are better prepared to rewrite final matric exams, (b) students gain access to tertiary institutions and (c) students are retained beyond their first year.

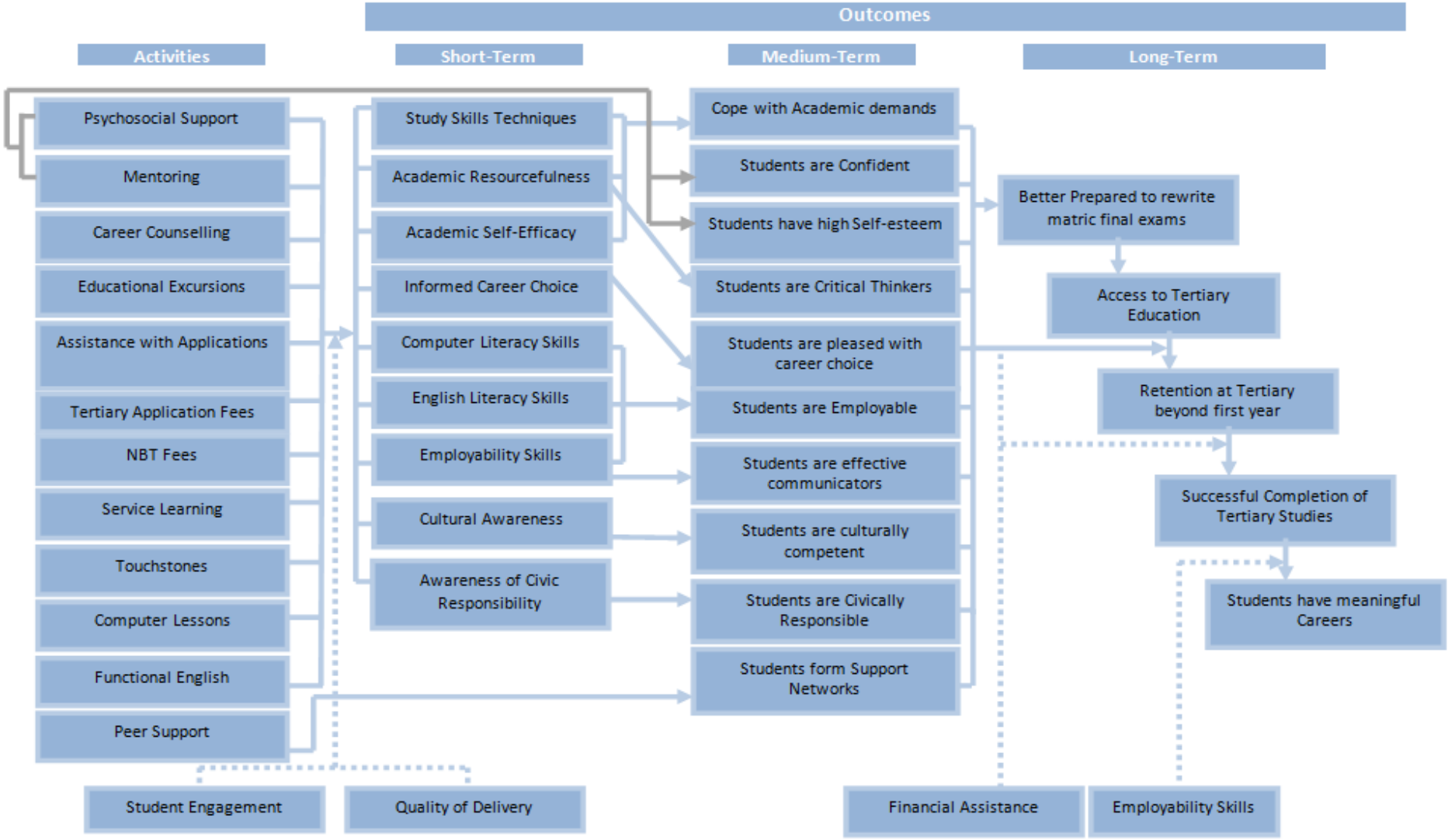

Figure 11. Recommended Variable-Oriented Logic Model for the Non-Academic Component of the BYP

Part 4: social science theory of behaviour change

The recommended logic model of the non-academic component of the BYP, Figure 11, attempted to address all the major skills needs of students, from poor socio-economic backgrounds, that were necessary to develop the behaviours associated with tertiary success. However, behaviour change is a complex issue (Ajzen, 1991). Providing people with knowledge and skills does not necessarily mean that they would automatically behave in the desired manner (Protogerou, Fisher, Aar & Mathews, 2012). In terms of the BYP, "the desired behaviour" would be for the BYP students to implement the non-academic skills throughout their tertiary level studies that they have learned at the BYP.

According to Ajzen (1991) the Theory of Planned Behaviour (TPB) states that four factors determine whether a behaviour will be performed: (a) whether an individual intends to perform the behaviour, (b) whether the individual has the necessary knowledge, skills and ability to perform the behaviour, (c) environmental constraints, that could hinder the behaviour from being performed, and (d) whether the individual has the resources needed to perform the new behaviour.

The Theory of Planned Behaviour further describes three factors that influence the intention to perform a particular behaviour. These three factors are attitude towards the behaviour, motivation to perform the behaviour and one's ability to enforce self-control. These are also known as the behavioural beliefs. The attitude factor will positively influence the individual's intention if the individual agrees with the behaviour that must be exercised and that by exercising the desired behaviour, positive outcomes will be achieved. The second factor that may influence the intention to perform a new behaviour is whether the individual perceives that the new behaviour is accepted by society as positive. If it is then his/her motivation to comply will be greater. These are called normative beliefs. The third factor that may influence an individual's intention to perform a new behaviour depends on the individual's level of self-control, which is also referred to as control beliefs. An individual with strong

control beliefs feels that regardless of how difficult the circumstances are, he/she can exercise the intended behaviour.

Ajzen (1991), states that if these factors are positive then the intention to perform the desired behaviour is enhanced, which in turn would have a stronger influence on the desired behaviour being performed. Figure 12 is a modified graphic depiction of Ajzen's theory of planned behaviour.

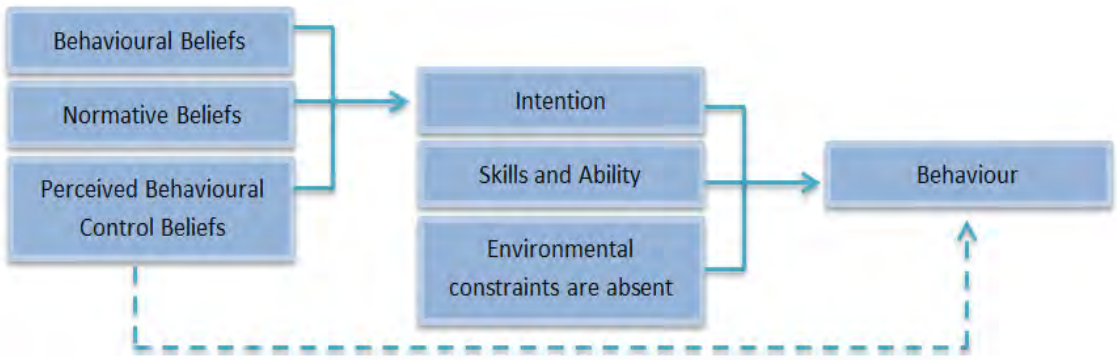

Figure 12. Modified Model of the Theory of Planned Behaviour (Ajzen, 1991)

In order to assess whether the recommended logic model of the non-academic component of the BYP could indeed facilitate behaviour change in line with the Theory of Planned Behaviour, the evaluator plotted the activities of the non-academic component of the BYP to each variable in figure13.

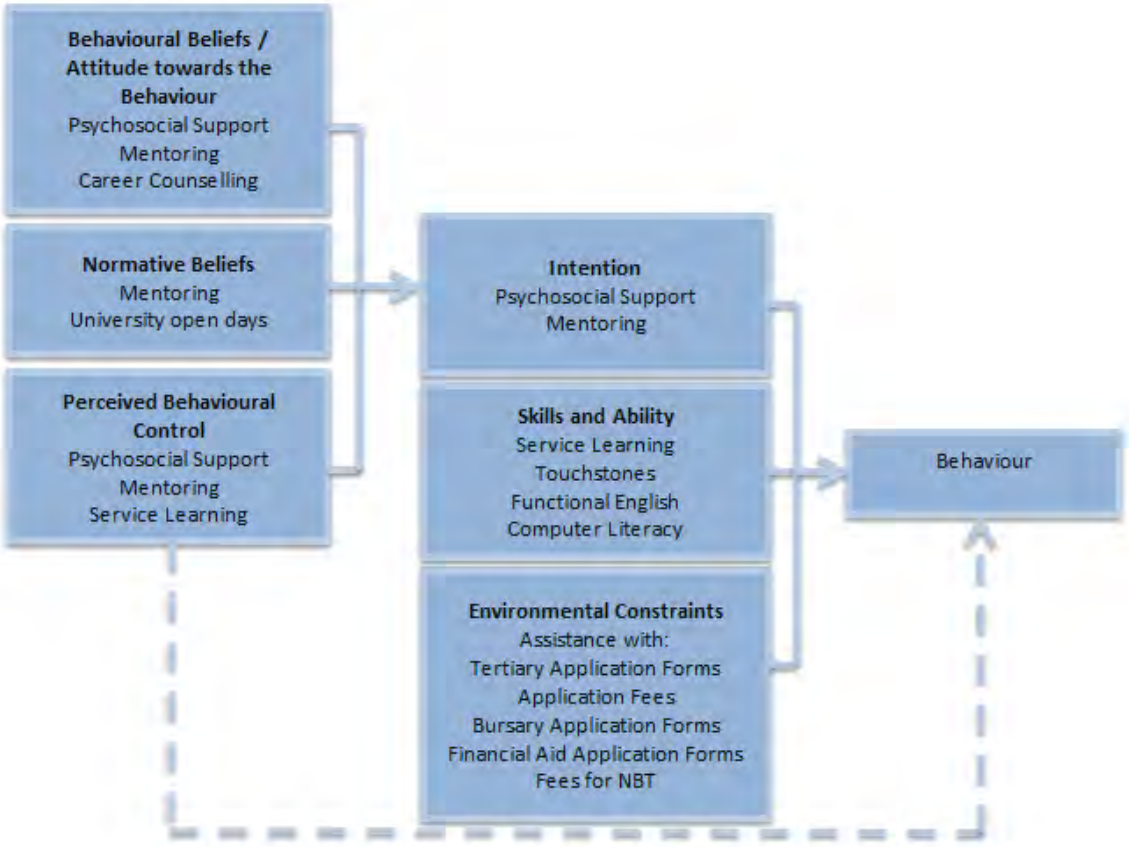

Figure 13. BYP Theory of Planned Behaviour Model (Ajzen, 1991)

Figure 13 graphically depicts how the activities of non-academic component of the BYP fit into the theory of planned behaviour, which reinforces that if the BYP implemented all the non-academic programme activities with fidelity and strength, the prospects of positive benefits being realised by their programme beneficiaries would be high.

Evaluation Question Three: What Indicators, Measures and Standards need to be incorporated in the Outcome Monitoring Framework?

Evaluation question three is presented and follows the results and discussion of the four step process used to develop the outcome monitoring framework for the non-academic component of the BYP. This section presents the key outcomes that were selected for monitoring purposes. It also presents the indicators and measures for each of the selected outcomes. The final section on this evaluation question offers a

recommendation for the procedure to be used when collecting the baseline data and for target setting for the 2015 BYP cohort.

Step one: agreeing on key outcomes to be monitored.

The following outcomes were agreed by the programme manager and programme director, for monitoring purposes:

1. Students are more knowledgeable of the various study skills techniques.
2. Students have academic resourcefulness skills.
3. Students are better prepared to make informed career decisions.
4. Students have knowledge of how to search for the jobs they want.
5. Students have improved English language skills.
6. Students are more aware of the value of social responsibility.
7. Students have increased computer literacy skills.

These seven prioritised outcomes were selected from nine short-term outcomes, and are in line with the logic model. Two of the outcomes were not included as they concern psychosocial aspects that are difficult to monitor within the context of BYP. The rationale for selecting the short-term outcomes rather than medium term outcomes is the programme is running a pilot phase in 2015. The method of service delivery will change, but not the underlying programme theory. The programme stakeholders therefore felt it was appropriate for the pilot programme to monitor whether the programme beneficiaries were actually increasing in knowledge, skills and attitudes. If it were found that students' knowledge, skills and attitudes had not improved in a certain area, it would allow the BYP team to make the necessary improvements promptly.

Step two: selecting key indicators and measures to monitor outcomes.

According to Patton (2008), a good indicator should be specific, measurable, attainable, relevant, and time bound (SMART). Kusek and Rist (2004) note that a good indicator is: (1) clear, which means it should be precise and unambiguous; (2) relevant,

which means it should be appropriate to the programme; (3) economic, which means it should be available at a reasonable cost; (4) adequate, which means it should provide a sufficient basis for assessing performance; and (5) it should be monitorable, which means it can be monitored by someone else. The indicators and measures for each of the key outcomes that were agreed on are presented in Table 10 below. All Indicators listed in Table 10 fit the criteria of good indicators as set out by Kusek and Rist (2004), and Patton (2008).

Table 10

Key Outcomes, Indicators and Measures Agreed on

Outcomes	Indicators	Measures
Students are more knowledgeable of the various study skills techniques.	Performance on academic literacy assessment	Percentage achieved on assessment
Students have academic resourcefulness skills.	Performance on Touchstones class assessments	Percentage achieved on feedback assessment
Students are better prepared to make informed career decisions.	University open day attendance	Number and percentage of University open days attended
	Career Fair attendance	Number and percentage of career fairs attended
	Career guidance sessions attended	Number and percentage of career guidance sessions
Students have knowledge of how to search for the jobs they want.	Completion of job search activities	Percentage of job search activities completed
Students have improved English language skills.	Performance on English language assessments	Percentage achieved on English language assessments
Students are more aware of the value of civic responsibility.	Completed reflections essays for each community service day	Proportion of weekly reflections essays completed
Students have increased computer literacy skills.	Performance on ICDL assessment	Percentage achieved on the ICDL assessment

Step three and step four: establish baseline indicators and targets.

The programme has no baseline data for the selected outcome indicators. As noted, the pilot programme will be initiated in 2015 so baseline data will be collected from the 2015 cohort of BYP students. The following section will first present recommendations on how to collect baseline data for the outcome indicators, second, outline the process of target setting, and third recommend how to practically implement the monitoring framework.

Building baseline information.

In order to monitor the outcomes, baseline data must be established, thus a baseline collection framework is presented for each outcome indicator. Kusek and Rist (2004) describe eight key components that should be established for each indicator when building baseline data as follows:

1. Who or what are the sources of data?

2. What are the data collection methods for each indicator?
3. Who will collect the data?
4. How often should the data be collected?
5. What are the cost implications for data collection and how difficult will it be to collect the data?
6. Who will analyse the data?
7. Who will report the data?
8. Who will use the data?

Table 11 provides a framework for baseline data collection. It provides all the key elements that must be considered when collecting the baseline data.

Table 11

Key Components to be established per Indicator when Building Baseline Data

Data source	Data collection method	Who will collect the data	Frequency to collect	Cost and difficulty to collect	Who will analyse the data	Who will report the data	Who will use the data
Outcome 1: Students are more knowledgeable of the various study skills techniques.							
Indicator 1: Performance on study skills assessments.							
New cohort	Assessment	Academic Literacy Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Outcome 2: Students have academic resourcefulness skills.							
Indicator 1: Performance on Touchstones class assessments.							
New cohort	Assessment	Touchstones Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Outcome 3: Students are better prepared to make informed career decisions.							
Indicator 1: Attendance at career fairs.							
New cohort	Conversation with key individuals	Career Guidance Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Indicator 2: Attendance at career guidance sessions.							
New cohort	Conversation with key individuals	Career Guidance Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Indicator 3: Attendance at University open days.							
New cohort	Conversation with key individuals	Career Guidance Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Outcome 4: Students have knowledge of how to search for the jobs they want.							
Indicator 1: Performance on job search assessments.							
New cohort	Conversation with key individuals	Career Guidance Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Outcome 5: Students have improved English language skills.							
Indicator 1: Performance on English language assessments.							
New cohort	Assessment	Academic Literacy Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Outcome 6: Students are more aware of the value of civic responsibility.							
Indicator 1: Number of completed reflections reports for each community service day.							
New cohort	Conversation with key individuals	Service Learning Coordinator	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff
Outcome 7: Students have increased computer literacy skills.							
Indicator 1: Performance on ICDL assessments.							
New cohort	Assessment	Computer Instructor	Once per cohort	Low	M&E Impact Centre	M&E Impact Centre	Programme Staff

Selecting targets for performance indicators.

Once the baseline data for each indicator has been established, the next step is to select the targets for each indicator (Kusek & Rist, 2004). A target is defined as the minimum ideal number or percentage that the programme is aiming to achieve for a specific outcome indicator by a given time (Kusek & Rist, 2004). "The baseline is the situation before a program[me] or activity begins; it is the starting point for results monitoring. The target is what the situation is expected to be at the end of a program[me] or activity" (UNDP, 2002, pp. 66-67). Targets should be set in relation to the outcome indicator while taking the baseline data into consideration. It is important to take the baseline data into account in order for the targets to be a realistic goal for performance monitoring (Kusek & Rist, 2004). The BYP manager should ensure the targets for each indicator are set once the baseline data has been analysed and reported.

Recommendations for implementing the monitoring framework.

The assessments recommended to collect the data are internal assessments to ensure their relevance to the course content and its cost effectiveness. According to the programme manager, industry specialists are developing an academic literacy assessment for the BYP to ensure that the skills needs of the target beneficiaries are addressed, and that the measurement is valid and reliable.

In order to ensure the monitoring framework is operational, the programme staff will collect the baseline data for each indicator during the first week of the 2015 BYP. The reason for this is to capture an accurate reflection of where the students are relative to each indicator before the programme activities commence.

Data for each indicator should be collected at five months from the date of the baseline data collection process and thereafter in the final month of the cohort year. This means that the BYP staff should assess the students in January for the baseline data. The second assessment should be in June, preferably before the mid-year matric

exams, to assess the level of knowledge and skill the BYP students have acquired. If an improvement is noted in the assessment results compared to the baseline data, the programme staff can assume that their students are better prepared for their mid-year exams due to their improved study skills techniques. If however an improvement has not been found or if it is minimal, the BYP staff will then be able to make the necessary improvements to the programme to ensure that the students are better prepared for their final matric exam rewrite. This monitoring process will ensure that the programme staff are able to pick up on trends so as to make the necessary programme improvements as soon as possible.

The final data collection should be conducted in November before the final matric exams of the BYP students. The information collected in June and November should be recorded on a monitoring dashboard. A template that can be utilised by the BYP impact centre as a monitoring dashboard to record the data can be found in Appendix E. The data should be analysed and reported in relation to the baseline indicators and targets that were set for each indicator. The analyses should focus on whether the knowledge, skills and attitudes of the BYP participants have changed, preferably improved. The analysis will also tell the BYP staff whether the programme was able to reach the targets as set out for each indicator.

Due to the indicators being new to the BYP, it could happen that unrealistic targets were set. If so, the targets can be reviewed however; according to Kusek and Rist (2004) it is important to gather at least three rounds of data before revising the targets. In the case of the BYP that would mean that data should be collected for three cohorts before making a decision to revise the targets. However, before considering reworking the targets it would be important to gain insight into other possible reasons why the programme is not achieving the set targets.

Not meeting targets could be due to various reasons. Firstly it could mean that the course is not being delivered with the correct dosage and intensity (Dane & Schneider,

1998; Cordray & Pion, 2006; Carroll, et, al., 2007). The students might then require more lessons on a particular skill over a longer period of time than currently provided.

Delivering the programme with fidelity is necessary in order to achieve the desired programme outcomes (Cordray & Pion, 2006; Carroll, et al., 2007). This means that the programme must be delivered according to the intended programme plan.

Another reason for the programme not achieving its targets could be that the quality of programme delivery was not up to standard (Dane & Schneider, 1998; Carroll, et al., 2007). Dane and Schneider (1998) also note that participant responsiveness, that is student engagement, could affect the extent to which outcomes were achieved (Carroll, et al., 2007). This information, however, can only be determined by conducting an extensive process evaluation.

By the BYP piloting their new service delivery strategy in 2015 provides an ideal opportunity to build an outcome evaluation into the programme design. The outcome evaluation could reveal critical information on the programme's effect on participants. A quasi-experimental design should be adopted with a pre-post design. The evaluation design would be significantly improved by including a comparison group.

Contribution to the Field of Evaluation

There is very limited research on South African evaluations of similar programmes to the BYP. This research contributes to the body of knowledge within a South African context. This theory evaluation has provided knowledge on (a) how NGO's can assist students from poor socio-economic backgrounds to successfully complete grade 12 with a bachelor's pass to gain access to tertiary education and (b) the critical knowledge, skills and behaviours that should be instilled in students in order to succeed at tertiary education within the required time.

This evaluation will be of value to those who wish to implement similar programmes within a South African context. A recommendation for future research is to publish outcome and impact evaluations of similar tertiary preparation programmes in South Africa in order to add to the knowledge base in this sector.

Limitations

A key limitation of this evaluation has been that the plausibility assessment relied mainly on non-South African evaluation research because effectiveness evaluations within the South Africa context of similar non-academic programmes could not be found. The USA education system is faced with similar access and retention challenges within population groups who come from a similar socio-economic background. This allowed the evaluator to draw inferences for the South African context.

Another limitation to the theory evaluation has been that it was not established whether an alternative approach would produce the same results as expected by the non-academic component of the BYP. It may be, for example, that there are more cost effective methods of programme implementation that are able to achieve similar programme outcomes to those of the non-academic component of the BYP. However, through the literature review process, no radically different approaches to programmes similar to the one studied were found.

A limitation of the proposed monitoring framework is that only the short-term outcomes were included. A more comprehensive monitoring framework incorporating all the components of the logic model should be developed to fully ensure that the non-academic component of the BYP is implemented as planned.

By monitoring the programme process the prospects of achieving the intended programme outcomes are increased. Monitoring of the longer-term outcomes should also be a central element of the tracking process of non-academic component of the BYP. The consistent monitoring of longer-term outcomes would provide programme

staff with an indication of whether the students are in fact gaining access to tertiary education and more importantly, whether the BYP graduates are successfully completing their tertiary education programmes. Such monitoring data would be critical for evaluation purposes as well.

Conclusion

This research addressed one aspect of the issue that while the higher education sector in post-apartheid South Africa is still grappling with the challenge of ensuring that students from poor socio-economic backgrounds gain access to tertiary education, those who do gain access to tertiary institutions often drop out or graduate outside the minimum required time. The aspect addressed was a formative evaluation of the non-academic component of the Bridging Year Programme run by The South African Education and Environment Project, an NGO operating in impoverished communities near Cape Town. That component was targeted mainly at instilling skills to improve the prospects of students once they had entered a tertiary programme of their choice.

A literature review found that by developing non-academic skills, providing sufficient financial support, career counselling and psychosocial support to students from a poor socio-economic background, the prospects for success at tertiary education are significantly increased and that higher levels of education generally led to increased income, improved living standards, access to better employment opportunities, and improved health outcomes.

The three objectives of the evaluation were (1) to elicit the programme theory and the underlying assumptions of the non-academic component of the bridging programme, (2) to assess the plausibility of the underlying programme assumptions, and (3) to develop an outcome monitoring framework for that component.

The programme theory and underlying assumptions of the course component was elicited using an adaptation of Donaldson's (2007) six step process. Through this

process a logic model of the non-academic component of the BYP was developed iteratively, which incorporated the input of the programme manager and the programme staff.

Once the logic model was developed, a plausibility assessment was conducted by means of a literature review, which found that the programme component did incorporate all the activities as similar successful programmes. The literature review also found that the programme success might be increased by incorporating the following ten outcomes in their programme theory: (a) students can cope with academic demands, (b) students are pleased with their career choice, (c) students form a supportive network, (d) students are confident individuals and have high levels of self-esteem, (e) students are culturally competent, (f) students are academically resourceful and self-efficacious, (g) students are effective communicators, (h) students are critical thinkers (i) students are civically responsible and (j) students are employable.

Supposing these recommended outcomes were incorporated into the programme theory, four factors (moderator variables) were also identified which would either strengthen or weaken the prospects course component achieving its desired outcomes: (a) strategically timed interventions and long-term investment in students, (b) scholarship/financial assistance, (c) student engagement and (d) the quality of delivery/instruction.

Once the plausibility assessment was completed, a revised variable-oriented logic model was recommended (figure 11) for the course component, which incorporated the ten recommended outcomes as well the moderating variables.

The course component lacked a monitoring framework therefore once the variable-oriented logic model had been finalised a monitoring framework for the short-term outcomes of the programme were developed. Kusek and Rist's (2004) model was adapted for this process. The framework incorporated indicators and measures that

were developed through consultation with the programme manager of the bridging course. A framework for collecting baseline data and setting targets for the BYP were also developed. Templates were created for the programme staff of the BYP to record the monitoring data.

Based on the literature findings, the non-academic component of the BYP has at least the potential to assist students from a low socio-economic background to succeed at tertiary level education and it might well be already doing so. The long-term outcome of the programme might be optimally realised if the programme incorporates the components as per the recommended programme logic model (figure 11) and if it applies a framework to monitor both the programme implementation and outcomes.

REFERENCES

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, *50*, 179-211.

Anderson, D.R. (2001). In my opinion: The need to get the basics right in wildlife field studies. *Wildlife Society Bulletin, 29*, 1294 – 1297.

Babbie, E., & Mouton, J. (1998).*The practice of social research*. Cape Town: Oxford University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bickman, L. (1987). The functions of program theory. *New Directions for Program Evaluation, 33*, 5-18.

Bholanath, S. (2004). *Effects of career guidance on grade 9 learners' readiness to make career choices* (Unpublished master's thesis). University of Zululand, South Africa.

Botvin, G.J., & Griffin, K.W. (2004).Life skills training: Empirical findings and future directions. *The Journal of Primary Prevention,* 25.

British Council (2014).Can higher education solve africa's job crisis? Understanding graduate employability in sub-saharan africa. Retrieved fromhttp://www.britishcouncil.org/sites/britishcouncil.uk2/files/graduate_employability_in_ssa_final-web.pdf

Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J.,& Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation Science, 2,* 1-9.

Chemers, M.M., Hu, L., & Garcia, B. (2001).Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology, 93(1),*55-64.

Chen, H. (2005). *Practical programme evaluation: assessing and improving planning, implementation, and effectiveness.* Thousand Oaks: Sage Publications.

Ciaccio, J. (1998). Teach success to underachieving middle schoolers. *Education Digest*,*64,*1-16.

Conley, D., McGaughy, C., Davis-Molin, W., Farkas, R., & Fukuda, E. (2014). *International baccalaureate diploma programme: Examining college readiness*. Educational Policy Improvement Centre. Retrieved from http://www.ibo.org/research/policy/programmevalidation/diploma/documents/CollegeReadinessSummaryEng.pdf

Cook, A. &Leckey, J. (1999). Do expectations meet reality? A survey of changes in first-year student opinion. *Journal of Further and Higher Education, 23*(2).

Cordray, D.D., & Pion, G.M. (2006). Treatment strength and integrity: Models and methods (pp. 103-124). In R.R. Bootzin and P.E. McKnight (Eds.), Psychological measurement and evaluation. Washington DC: American Psychological Association.

Dabula, P., & Makura, A. H. (2013).High school students' perceptions of career guidance and development programmes for university access. *International Journal Educational Science*, *5*, 89-97

Dass-Brailsford, P. (2005). Exploring resiliency: Academic achievement among disadvantaged black youth in South Africa. *South African Journal of Psychology,35*, 574-591.

Department of Education (1996). Report: Changing management to manage change. Pretoria: Department of Education/EMD Task Team. Retrieved from: http://www.oerafrica.org/sites/default/files/PCS_Readings_section%201_reading%201.pdf

Donaldson, S.I. (2007). *Program theory-driven evaluation science: Strategies and applications*. New York: Lawrence Earlbaum Associates.

Donaldson, S.I. (2007). *Program theory-driven evaluation science: Strategies and applications*. New York: Lawrence Earlbaum Associates.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology, 92*(6), 1087-1101.

DuBois, D.L., Holloway, B.E., Valentine, J.C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology, 30*, 157-197.

DuBois, D.L., & Neville, H.A. (1997). Youth mentoring: Investigation of relationship characteristics and perceived benefits. *Journal of Community Psychology, 25(3),* 227–234.

Essack, Z., & Quayle, M. (2007). Students' perceptions of a university access (bridging) programme for social science, commerce, and humanities. *Perspectives in Education, 25,* 71-84.

Fallahchai, R. (2012). Effectiveness of academic and life skills instruction on the freshmen academic achievement. *Journal of Life Science and Biomedicine, 2(4)*, 137-141

Fenstermacher, G.D., & Richardson, V. (2005).On making determinations of quality in teaching. *Teachers College Record, 107(1),* 186-213.

Freedman, M. (1993).*The kindness of strangers: Adult mentors, urban youth, and the new voluntarism.* San Francisco: Jossey-Bass.

Fisher, A. (2001). *Critical thinking: An introduction*. UK: Cambridge University Press.

Gray, M.J., Ondaatje, E.H., Fricker, R.D., & Geschwind, S.A. (2010).Assessing Service Learning: Results from a survey of "Learn and Serve America, Higher Education". *Change: The Magazine of Higher Learning, 32(2)*, 30-39.

Gullat, Y., & Jan, W. (2003).*How do pre-collegiate academic outreach programs impact college-going among underrepresented students?* Washington D.C.: Pathways to College Network Clearinghouse. Retrieved fromhttp://www.usc.edu/dept/chepa/IDApays/publications/PrecollegiateOutreachPrograms.pdf

Guetzloe, E. (1997). The power of positive relationships: Mentoring programs in the school and community. *Preventing School Failure*, *41(3)*, 100-104.

Gwam, Z., & Vawda, A. (2005, October).*The impact of mentoring on university foundation students*. *Mentoring: an instrument for transformation*. FOTIM &GAELIC Conference. Retrieved from https://www.academia.edu/1531932/UNIVERSITYBASED_MENTORING_PROGAMMES_FOR_HIGHRISK_FIRST_YEAR_STUDENTS_A_CRITICAL_LITERATURE_REVIEW

Hatry, H., van Houten, T., Plantz, M.C. & Greenway, M.T. (1996). *Measuring programme outcomes: A practical approach*. United Way of America.

Jones, B., Coetzee, G., Bailey, T., & Wickham, S. (2008).*Factors that facilitate success for disadvantaged higher education students: An investigation into approaches used by REAP, NSFAS and selected higher education institutions. Rural Education and Access Programme (REAP) report*. Retrieved fromhttp://www.reap.org.za/REPORTS/RESEARCH/.html

Joseph A., Durlak. E., Emily P., & DuPre (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41,*327–350.

J-PAL Briefcase (2011).*Getting Parents Involved*. Retrieved from http://www.povertyactionlab.org/publication/getting-parents-involved.

Kahu, E.R. (2013). Framing student engagement in higher education. *Studies in Higher Education,38(5)*, 758-773.

Karbalaei, A. (2012). Critical thinking and academic achievement. *Medellín – colombia, 17(2),*121-128.

Klugman, J.R. (2009). *Opening doors and paving the way: Increasing college access and success for talented low-income students.* A White Paper: The Goldman Sachs Foundation. Retrieved fromhttp://www.princeton.edu/pupp/pdf/PUPP_GSF_White_Paper_Opening_Doors_0209.pdf

Krause, K.L. & Coates, H. (2008).Students' engagement in first year university. *Assessment &Evaluation in Higher Education, 33(5),* 493-505.

Kusek, J.Z., & Rist, R.C. (2004).*Ten steps to a results-based monitoring and evaluation system.* Washington, DC: World Bank.

Letseka, M. (2009).University drop-out and researching (lifelong) learning and work .In L. Copper & S. Walters (Ed.).*Learning/work: Turning work and lifelong learning inside out.* HSRC Press: Cape Town, South Africa

Lindhard, N., & Dhlamini, N. (1990). *Lifeskills in the classroom*. Cape Town: Maskew Miller Longman.

Lotkowski, V.A., Robbins, S.B., Noeth, R.J. (2004). The role of academic and non-academic factors in improving college retention. ACT Policy Report. Retrieved from http://www.act.org/research/policy/index.html

Martin, M.,Chemers, L.H., & Garcia, B.F. (2001).Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology, 93(1)*, 55-64.

Masitsa, M. G. (2006). Student motivation: The study approaches of grade twelve learners in township schools. *South African Journal of Higher Education, 20,* 122-136.

Mihalic, S. (2002).*The importance of implementation fidelity*. Blueprints for Violence Prevention Initiative, Center for the Study and Prevention of Violence. Boulder: Colorado.

Milner, K., & Khoza, H. (2008).A comparison of teacher stress and school climate across schools with different matric success rates. *South African Journal of Education, 28*, 155-173.

Modisaotsile, B. M. (2012). Policy brief: The failing standard of basic education in South Africa. *Africa Institute of South Africa, 72*, 1-7. Retrieved from http://www.ai.org.za/wp-content/uploads/downloads/2012/03/No.-72.The-Failing-Standard-of-Basic-Education-in-South-Africa1.pdf

Monroe, S.A. (2002, July). *Effecting self-efficacy in intermediate elementary students doing mathematical problem solving*. Paper presented at Linking Research to Education Conference, University of Calgary. Retrieved fromhttp://www.ucalgary.ca/ distance/cll_institute/Shiela_Montroe.htm

Morgeson, F. P., De Rue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of Management, 36,* 5-39.

Morrison, J. M., Brand, H. J., & Cilliers C. D. (2006).Assessing the impact of student counselling service centres at tertiary education institutions: How should it be approached? *SAJHE 20 (5),* 655-678.

Mourshed, M., Farrell, D., & Barton, D. (2014). Education to employment: Designing a system that works. McKinsey Centre for Government. Retrieved fromhttp://mckinseyonsociety.com/downloads/reports/Education/Education-to-Employment_FINAL.pdf

National Planning Commission (2011).*National Development Plan*. Retrieved from http://www.npconline.co.za/medialib/downloads/home/NPC%20National%20Development%20Plan%20Vision%202030%20-lo-res.pdf

Nzimande, B. (2010). *Keynote Address by Minister of Higher Education and Training Dr Blade Nzimande to the Stakeholder Summit on Higher Education Transformation at the Cape Peninsula University of Technology*. Retrieved from http://www.uj.ac.za/EN/AboutUJ/TransformationOffice/Documents/Nzimande%20speech%20HE%20summit.pdf.

Pascarella, E.T., Teterenzini, P.T., & Wolfle, L.M. (1986).Orientation to college, and freshman year persistence and withdrawal decisions. *Journal of Higher Education, 57(2)*, 155-173.

Oosthuizen, C., & Louw, J. (2013).Developing program theory for purveyor programs. *Implementation Science, 8*, 23.

Patton, M.Q. (1994). Developmental evaluation. *Evaluation Practice, 15*, 311-319.

Preskill, H., & Torres, R. T. (1999).*Evaluative Inquiry for Learning in Organizations*. Thousand Oaks: Sage.

Prew, M. (2009).*Challenges facing education in south africa.* Retrieved from http://www.cepd.org.za/files/pictures/The%20Challenges%20Facing%20Education20Interview%20Nov%2009.pdf

Price, M. (2013). *Convenience Samples: What they are, and what they should (and should not) be used for*. Retrieved from https://hrdag.org/conveniencesamples-what-they-are/

Posavac, E.J., & Carey, R. G. (2007).*Program evaluation: Methods and case studies* (7th ed.). Upper Saddle River: Prentice Hall.

Protogerou, C., Flisher, A.J., Leif, E.A., & C. Mathews. (2012). The theory of planned behaviour as a framework for predicting sexual risk behaviour in sub-Saharan African youth: A critical review. *Journal of Child & Adolescent Mental Health*, *24,* 15-35.

Ramphele M, 2008. *Laying ghosts to rest: Dilemmas of the transformation in South Africa*. Cape Town: Tafelberg.

Redd, Z., Cochran, S., Hair, E., & Moore, C. (2002). *Academic achievement programs and youth development: A synthesis.* Washington D.C: Edna McConnell Clark Foundation. Retrieved from http://www.childtrends.org/what_works/clarkwww/acadach/AcadAchRpt.pdf

Richards, Z. (2012). *Conceptions of academic talent: Perspectives in higher education*. Salzburg Global Seminars: Salzburg, Austria. Retrieved from http://www.salzburgglobal.org/fileadmin/user_upload/Documents/2010-2019/2012/495/Session_Document_ConceptionsofAcademicTalent_495.pdf

Ross, A. (2007). *Success of a scholarship scheme for rural students. SAMJ, 97 (11),* 1087-1090.

Rossi, P.H., Lipsey, M.W. & Freeman, H.E. (2004).*Evaluation: A systematic approach (7th ed.)*. Thousand Oaks: Sage Publications Inc.

Schultz, J.L., & Mueller, D. (2006).*Effectiveness of programs to improve post-secondary education enrolment and success of underrepresented youth: A literature review.* Retrieved fromhttp://jennifermaxfield.weebly.com/uploads/1/2/9/3/12935288/postsecondary_summary_schultz__mueller_2006.pdf

Schunk, D. H. (1981). Modeling and attributional effects on children's achievement: A self-efficacy analysis. *Journal of Educational Psychology,73,* 93-105.

Shadish, W. R., Cook, T. D., & Leviton, L. D. (1991).*Foundations of Program Evaluation: Theories of Practice.* Newbury Park: Sage Publications.

Soudien, C. (2010). Transformation in higher education: A briefing paper. Development Bank of Southern Africa. Retrieved from http://www.dbsa.org/EN/AboutUs/Publications/Documents/Transformation%20in%20higher%20education%20A%20briefing%20paper%20by%20Crain%20Soudien.pdf

Institute for Security Studies (2015). *South African Crime Quarterly, 51*, 1 -55. Retrieved from http://www.issafrica.org/uploads/SACQ51V2.pdf

South African Education and Environment Programme (n.d.).*Bridging year programme*. Retrieved from http://www.saep.org

South African Education and Environment Programme (n.d.).*2012 Annual Report*. Retrieved from http://www.saep.org

South African Education and Environment Programme (2013).*CSI funding proposal to ADT: SAEP's bridging year academy*.

Spaull, N., Burger, R., Burger, C., van der Berg, S., van Wyk, S., & Dzivakwi, R. (2011).*Against all odds: An evaluation of the IkamvaYouth programme and the DG Murray Trust*. Department of Economics, University of Stellenbosch. Retrieved from http://resep.sun.ac.za/wp-content/uploads/2012/10/2012-Report-forDG Murray-Trust.pdf.

Stephen, D.F., Welman, J.C., & Jordaan, W.J. (2004).English language proficiency as an indicator of academic performance at a tertiary institution.*SA Journal of Human Resource Management, 2 (3),* 42-53.

Sternberg, R. (2003). Four alternative futures for education in the United States: It's our choice. *School Psychology Quarterly, 18(4),* 431–445.

Tait, H. & Entwistle, N. *(1996).*Identifying students at risk through ineffective study strategies. *Higher Education, 31*, 97-116.

Tsui, L. (2002). Fostering critical thinking through effective pedagogy. *The Journal of Higher Education, 73 (6)*, 740-763.

United Nations Development Programme Evaluation Office. (2002). *Handbook on monitoring and evaluating for results*. Retrieved

fromhttp://www.undp.org/evaluation/documents/handbook/me-handbook.pdf

United Nations Programme on HIV/AIDS (UNAIDS) (2010). *An introduction to indicators*. Retrieved fromhttp://www.unaids.org/sites/default/files/sub_landing/files/8_2Intro-toIndicatorsFMEF.pdf

University of Edinburgh (2014).*Critical Thinking* [Web post]. Retrieved from http://www.ed.ac.uk/schools-departments/institute-academicdevelopment/postgraduate/taught/learning-resources/critical

University of South Africa [UNISA]. (2011). *Insight*. Higher Education South Africa.Retrievedfromhttp://www.ru.ac.za/media/rhodesuniversity/content/vc/documents/University%20 access%20and%20admissions.pdf

University World News, (2014).*Higher education in the 20th year of democracy.* Retrieved from http://www.universityworldnews.com/article.php?story=20140425131554856

Van der Berg, S.(2008). How effective are poor schools? Poverty and educational outcomes in South Africa. *Studies in Educational Evaluation, 34*, 145-154.

Wilson, Z., Iyengar, S.S., Pang, S.S., Warner, I.M.,Luces, C.A. (2012). Increasing access for economically disadvantaged students: The NSF/CSEM & S-STEM Programs at Louisiana State University. *J SciEducTechnol*, *21*, 581–587.

Wood, L.A., & Olivier, M.A.J. (2004).A self-efficacy approach to holistic student development. *South African Journal of Education, 24(4)*, 289-294.

Yorke, M. & Thomas, L. (2003).Improving the retention of students from lower socio economic groups. *Journal of Higher Education Policy and Management, 25*, 1.

Zausniewski, J.A. & Bekhet, A.K. (2011).Measuring use of resourcefulness skills: Psychometric testing of a new scale. *International Scholarly Research Network.*doi:10.5402/2011/787363

APPENDICES

Appendix A: *Glossary of Terms*

Glossary of Selected Outcome Measurement Terms

Inputs are resources a program uses to achieve program objectives. Examples are staff, volunteers, facilities, equipment, curricula, and money. A program uses *inputs* to support *activities*.

Activities are what a program does with its inputs—the services it provides—to fulfill its mission. Examples are sheltering homeless families, educating the public about signs of child abuse, and providing adult mentors for youth. Program *activities* result in *outputs*.

Outputs are products of a program's activities, such as the number of meals provided, classes taught, brochures distributed, or participants served. Another term for "outputs" is "units of service." A program's *outputs* should produce desired *outcomes* for the program's participants.

Outcomes are benefits for participants during or after their involvement with a program. Outcomes may relate to knowledge, skills, attitudes, values, behavior, condition, or status. Examples of outcomes include greater knowledge of nutritional needs, improved reading skills, more effective responses to conflict, getting a job, and having greater financial stability.

For a particular program, there can be various "levels" of outcomes, with initial outcomes leading to longer-term ones. For example, a youth in a mentoring program who receives one-to-one encouragement to improve academic performance may attend school more regularly, which can lead to getting better grades, which can lead to graduating.

Outcome indicators are the specific items of information that track a program's success on outcomes. They describe observable, measurable characteristics or changes that represent achievement of an outcome. For example, a program whose desired outcome is that participants pursue a healthy lifestyle could define "healthy lifestyle" as not smoking; maintaining a recommended weight, blood pressure, and cholesterol level; getting at least two hours of exercise each week; and wearing seat belts consistently. The number and percent of program participants who demonstrate these behaviors then is an *indicator* of how well the program is doing with respect to the outcome.

Outcome targets are numerical objectives for a program's level of achievement on its outcomes. After a program has had experience with measuring outcomes, it can use its findings to set targets for the number and percent of participants expected to achieve desired outcomes in the next reporting period. It also can set targets for the amount of change it expects participants to experience.

Benchmarks are performance data that are used for comparative purposes. A program can use its own data as a baseline benchmark against which to compare future performance. It also can use data from another program as a benchmark. In the latter case, the other program often is chosen because it is exemplary and its data are used as a target to strive for, rather than as a baseline.

Levels of Outcomes

To this point, ***Measuring Program Outcomes: A Practical Approach*** has not distinguished among different levels of outcomes. This distinction is important, however. In many cases, there is not just one desired outcome for participants, but a series, each contributing to another benefit or change that leads closer to the ultimate outcome the program hopes to achieve for participants.

Various sources recognize different numbers of outcome levels and call them by different terms. The real issue is not the terms, of course, but the concept of a hierarchy of logically related changes or benefits. This manual identifies three levels of outcomes and uses the following terms to denote them:

- **Initial outcomes** are the first benefits or changes participants experience, and are the ones most closely related to and influenced by the program's outputs. Often, initial outcomes are changes in participants' knowledge, attitudes, or skills. They are not ends in themselves, and may not be especially meaningful in terms of the quality of participants' lives. However, they are necessary steps toward the desired ends, and therefore are important as indicators of participants' progress toward those ends.

- **Intermediate outcomes** link a program's initial outcomes to the longer-term outcomes it desires for participants. They often are changes in behavior that result from participants' new knowledge, attitudes, or skills.

- **Longer-term outcomes** are the ultimate outcomes a program desires to achieve for its participants. They represent meaningful changes for participants, often in their condition or status. Although the program may hope that participants go even further in their growth and development and that similar changes will occur throughout the larger community, the program's longer-term outcomes are the most removed benefits that it can reasonably expect to influence.

Appendix B*: Guiding questions to extract the logic model*

1. What are the overall goals of the non-academic component?
2. What are the medium-term and short-term goals of the non-academic component?
3. How will you achieve these outcomes? What are the activities of the non-academic component?
4. What are the outputs of these activities?
5. What are the available resources to ensure these activities are carried out as intended in order to reach the programmes outcomes?
6. What are the underlying assumptions of the non-academic component? (The "If-Then" relationships)
    - Which activities lead to which outputs logically?
    - Which outputs lead to which short-term outcomes?
    - Which short-term outcomes lead to the medium-term outcomes logically?
    - Do the short and medium-term outcomes lead to the long-term outcomes logically?

Appendix C: ***Evaluation Letter of Consent from the BYP Director***

UNIVERSITY OF CAPE TOWN

School of Management Studies
University of Cape Town, Private Bag
Rondebosch 7701
Telephone: +27 21 650 5218
Fax: +27 21 689-7570
3 February 2014

TO WHOM IT MAY CONCERN

Thank you very much for your willingness to enable me of our Master's students to work with a programme from your organization. I appreciate your contribution to the education of our students.

The student will need programme information from you and we request that you or a designated person meet with them regularly to provide access to this information. Your cooperation in this regard will ensure that the student meets deadlines and provides you with a high quality evaluation. In order to keep track of the student's interactions with your organization, we request that you copy the supervisor on all correspondence to the student.

Please note that our students are required to work within the ethical framework of the Faculty of Commerce when collecting information from programme documents or programme recipients. This framework deals with anonymity of data sources, sensitivity when requesting information from people and responsible reporting of results.

We also undertake and ensure you that the student will display professional behaviour at all times while working in your organization or on your programme. At the end of the process, you will receive a useful report which will enable you to make informed decisions regarding your programme.

In order to comply with the rules of the Faculty of Commerce, we request you to sign below to indicate that the student will have access to programme data and records and where applicable, to programme recipients.

Thank you very much.

Yours sincerely

PROF JOSHUA POSTHUMUS
CONVENER: MPHIL PROGRAMME EVALUATION

AGREEMENT TO ACCESS PROGRAMME RECORDS AND/OR RECIPIENTS:

	SAEP	19 Feb 2014
AUTHORISED PERSON	**ORGANISATION**	**DATE**

Appendix D: ***Examples of similar programmes to the BYP in South Africa.***

Grayson, J. (1997). A holistic approach to preparing disadvantaged students to succeed in tertiary science studies. Part II. Outcomes of the Science Foundation Programme.*International Journal of Science Education, 19 (1)*, 107-123.

University of Witwatersrand (2014).*Go to University to Succeed (GUTS).* Retrieved from http://www.wits.ac.za/aboutwits/16764/go_to_university_to_succeed_guts.html

Koen,J., Naik, R., Reeves, M., Roopnarain, A., Lekhuleni, S., Bowman, B., & Richards, Z. (2012). *Promoting fairness in access to higher education in an unequal society: the Student Equity and Talent Management Unit.* Retrieved from http://www.carnegie3.org.za/docs/papers/140_Koen_Promoting%20fairness%20in%20access%20to%20higher%20education%20in%20an%20unequal%20society.pdf

University of Cape Town (2014).*Faculty of Humanities Extended Degrees*.Retrievedfromhttp://www.humanities.uct.ac.za/hum/undergraduate/students/exclusion/extended_degrees

Appendix E: Template to record and analyse monitoring data.

Outcome	Indicator	Measure	Baseline Data January	Target	Mid-Year Data June	Year-end Data November
Students are more knowledgeable of the various study skills techniques.	Performance on academic literacy assessment	Percentage achieved on assessment				
Students have academic resourcefulness skills.	Performance on Touchstones class assessments	Percentage achieved on feedback assessment				
Students are better prepared to make informed career decisions.	University open day attendance	Number and percentage of University open days attended				
	Career Fair attendance	Number and percentage of career fairs attended				
	Career guidance sessions attended	Number and percentage of career guidance sessions attended				
Students have knowledge of how to search for the jobs they want.	Completion of job search activities	Percentage of job search activities completed				
Students have improved English language skills.	Performance on English language assessments	Percentage achieved on English language assessments				
Students are more aware of the value of social responsibility.	Completed reflections reports for each community service day	Proportion of weekly reflections reports completed				
Students have increased computer literacy skills.	Performance on ICDL assessment	Percentage achieved on the ICDL assessment				