# A Study of Strategic Enrolment Management (SEM) in a Continuing Education Institution in Hong Kong:

Senior and Programme Management Perspectives

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#### **ABSTRACT**

The objective of this study is to investigate the dimensions of strategic enrolment management (SEM) in the area of enrolment, retention and graduation from senior and programme management perspectives of a continuing education institution in Hong Kong. How SEM attributes differ at programme level and at institutional level as well as in different programmes of a continuing education institution in Hong Kong are examined. In addition, perceived barriers to implementing SEM and SEM success metrics of a continuing education institution are identified so as to provide a suitable SEM model in a continuing education institution in Hong Kong.

The literature on SEM demonstrated that managing enrolment is a global concern and requires institution-wide effort. The key attributes of SEM from the existing literature are marketing, admission, financial aid, academic advising, orientation, retention, career services, learning assistance and institutional research.

This study employs a qualitative method, including the use of Atlas.ti, a formal content analysis methodology, with the main source of research data from a series of in-depth individual face-to-face interviews with the twenty participants of a continuing education institution in Hong Kong.

The research concludes there are similarities and differences between senior and programme management in the SEM perceptions. The similarities are that both senior and programme management found the attributes of SEM are significant not only to optimize student enrolment, retention and graduation, but also to provide high quality learning experiences for the students. Senior management leads the development of SEM attributes for the institution; programme management designs and oversees the way SEM attributes are carried out and implemented, ensuring all set objectives are achieved as planned to reach institutional aims and mission. In order to achieve enrolment goals and the institutional mission, a continuing education institution in Hong Kong should plan, and implement SEM with the leadership and management of senior and programme levels.

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#### **DECLARATION STATEMENT**

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#### GLOSSARY OF DEFINITIONS/ABBREVIATIONS

#### **CEF** (Continuing Education Fund)

The CEF aims to subsidise adults (aged 18 to 65) with learning aspirations to pursue continuing education and training course in Hong Kong. Each applicant who is a Hong Kong resident may obtain approval for opening an account with CEF once a lifetime only (The Hong Kong SAR Website, accessed on 24 July 2014, http://www.sfaa.gov.hk/cef/).

#### **ED** (Early Decision)

Institutions adopt early decision (ED) as an admission practice by identifying applicants with strong preferences for their institution. Under ED, potential applicants receive early notification of admission in return for a binding commitment to attend a specific institution (Antecol and Smith, 2012).

#### **Enrolment Leaders**

"Enrolment managers focus on their institutional values, select the right talent to surround themselves, and devote themselves to developing others, so that they are on the right track to become the enrolment leaders they are destined to be" (Lingrell, 2014:248).

#### **NLS (Non-means-tested Loan Scheme)**

The non-means-tested loan scheme is used to complement the Financial Assistance Scheme for Post-secondary Students to provide loan(s) to eligible students to settle tuition fees of locally-accredited, self-financing full-time post-secondary education programmes at the level of associate degree, higher diploma or degree (The Hong Kong SAR Website, accessed on 24 July 2014, <a href="http://www.sfaa.gov.hk/eng/schemes/">http://www.sfaa.gov.hk/eng/schemes/</a>).

#### **SEM (Strategic Enrolment Management)**

"A comprehensive process designed to help an institution achieve and maintain the optimum recruitment, retention, and graduation rates of students, where 'optimum' is defined within the academic context of the institution' (Dolence, 1993:6).

**(SPEED)** The School of Professional Education and Executive Development SPEED is a local continuing education institution in Hong Kong that mainly provides top-up degree programmes for both full-time and part-time students (PolyU SPEED Website, accessed on 24 July 2014, http://www.speed-polyu.edu.hk/).

#### The Hong Kong SAR (The Hong Kong Special Administrative Region)

On 1 July 1997, Hong Kong became the first Special Administrative Region of the People's Republic of China, under the principle of "one country, two systems" (Russell, 2001).

#### **Top-up degree programmes**

Top-up degree programmes are for students who have successfully completed a higher diploma or associate degree and want to study further and progress onto the final year of a degree programme (EDB, 2006).

#### **CHAPTER 1- INTRODUCTION**

The Hong Kong Special Administrative Region (SAR) set a target of enabling 60% of Hong Kong's teenagers to participate in post-secondary education beginning in 2001. To meet this goal, the number of accredited self-financing post-secondary programmes offered by local continuing education institutions has grown significantly in the years following the government's pronouncement (EDB, 2006). The rapid growth in the number of accredited post-secondary programmes offered by both existing and emerging continuing higher education institutions, has increased the competitiveness of the educational environment, to such an extent that all institutions in the local continuing education sector now face significant challenges Such concerns are, however, not unique to Hong Kong: managing enrolment is now a global concern. Dennis (1998:7) states that "I have modified what I used to think of as enrolment management, or managing the enrolment of the entering class, to a more fluid and global concept". To cope with the new challenges, many colleges and universities are now looking to increase enrolment through implementation of strategic enrolment management (Bradley & Sheldon, 2003). Therefore, it is necessary for colleges and universities to identify a suitable strategic management model to achieve optimum enrolment so as to increase institutional revenues.

According to Penn (1999), enrolment is no longer simply due to the efforts of the admissions department, but is now an institution-wide effort. Enrolment management becomes most effective when it is strategic and involves comprehensive functions. Strategic Enrolment management (SEM) is an invaluable tool designed to achieve and maintain optimum enrolment and to increase institutional revenue by optimizing educational resources. Enrolment management pioneers say that the key functions or attributes that should be included in a SEM programme are marketing, admission, academic advising, financial aid, orientation, career services, retention, learning assistance and institutional research, since all of these directly impact student enrolment (Dennis, 1998; Dolence, 1993; Dixon, 1995; Hossler et al., 1990; Penn, 1999; Kongono, 2012).

#### 1.1 Background of the Study

Since 2000, the Hong Kong SAR Government has been actively encouraging the private sector to contribute to the development of self-financing post-secondary programmes, especially top-up degree programmes, such that students would have more articulation opportunities upon completion of their associate degree qualifications. As a result of this education policy, there has been a substantial increase in the number of self-financed local programmes via schools of continuing education as the extension of university or a new institution (i.e. community college) affiliated with the parent university.

As a result of the rapid development of self-financed local associate degree or top-up degree programmes providing educational opportunities for secondary school leavers since 2000, the post-secondary participation rate for senior secondary graduates doubled in five years: from 33% in 2001/01 academic year to 66% in the 2005/06 academic year (EDB, 2006). The rate then leveled off in the 2006/07 academic year, and now maintains at slightly above 60%.

Most of the secondary school graduates now have an opportunity to pursue their higher education studies while only a small amount of secondary school leavers need to find employment after graduation. However, the situation will be reversed very soon due to the continued decrease in child population (EDB, 2012). It is predicted that there will be more post-secondary places available than the number of secondary school graduates (EDB, 2012). To be competitive in the dynamic higher education sector, Hong Kong continuing education institutions that provide self-financing institutions should manage enrolment effectively in order to achieve institutional goals and objectives.

#### 1.2 Statement of Problem

The challenges facing Hong Kong continuing education institutions, specifically demographic changes and dynamic competition, could make a significant impact to student enrolment of the institutions; thus, comprehensive strategic planning as well as effective implementation of strategies, goals and objectives of the institutional strategic enrolment management are essential. According to Wilkinson et al. (2007:6), "SEM is an institution-wide responsibility and the central focus of the institution's overall strategic plan". SEM focuses on what is best for students and how to ensure their success while addressing all aspects of the institutional mission.

This study has its primary focus the examination of one local Hong Kong continuing education institution that provides self-financing local top-up degree programmes. The study seeks specifically to examine the dimensions of SEM from the senior and programme management perspective, and how SEM tools and activities differ at the programme level and at the institutional level of a continuing education institution in Hong Kong. In addition, the study will further investigate the barriers to implementing SEM in the selected continuing education institution in Hong Kong. The present study also aims to discover the views of tying SEM to the success metrics; thus, success metrics in the areas of enrolment, retention and graduation are to be evaluated in this research.

Similar to the present study, there are a number of research studies and dissertations examining the field of SEM that focus on one organization to gain a deeper understanding of SEM. McDermott (1998) examined the perceptions of the staff participants involved in a new strategic enrolment planning process at Northwest Community College (NWCC) by adopting a qualitative approach in her empirical studies. Fike and Fike (2008) analyzed predictors of retention for first-time-in-college students who enrolled in a community college in West Texas. In the *Strategic Enrolment Management Journal*, Pirius (2014) explored the implementation of SEM at North Hennepin Community College (NHCC) which is a public college in Brooklyn Park, Minnesota. Pirius (2014) adopted a data-driven approach to SEM development at NHCC and his studies concluded that developing a data culture is critically important to have a successful SEM initiative on campus which is also supported by Yale (2010). These empirical research studies focus on one institution with the benefits of obtaining in-depth understanding of the SEM process.

#### 1.3 Purpose of Study

While some SEM research studies examine students' responses and attitudes towards SEM, another important line of SEM research specifically investigates the attitudes, opinions and experiences of senior management to gain a deeper understanding of this perspective; they are individuals who are involved and committed to the enrolment management planning process in the institution for achieving institutional mission and goals. Abston (2010), for example, identified the enrolment management practices from an administrator's perception at the comprehensive public associate's colleges in Alabama. Hartunian (2011) conducted a qualitative research by interviewing 10 individuals including senior leaders and faculty members in his empirical studies for examining the factors influencing SEM effectiveness at a public state university. In addition, Lee (2010) conducted a mixed method approach to evaluate the implementation of enrolment management at two public universities in the United States by conducting both interviews and surveys with administrators and faculty members.

Similar to the above referenced studies, this research is also designed to examine the dimensions of SEM from the senior and programme management perspective with the ultimate goal of enhancing the institutional mission and goals. A theoretical framework based on a range of leading theories and research has thus been built for this study in order to develop a set of core attributes required of a SEM programme at the stages of enrolment, retention and graduation, so that such an SEM programme could be recognized for its effectiveness within the field of continuing education in Hong Kong. In addition, the study seeks to address how these core attributes integrate as part of the overall SEM process, the challenges faced during the implementation and the specific measurements of the essential attributes at each stage of the SEM process.

As there is no evidence in the literature of prior study regarding the integration of core attributes into the SEM process at a continuing education institution in Hong Kong, the results of the study will help to provide a detailed description of a successful delivery regarding a SEM programme for the consideration of other similar institutions. The study results can also assist senior management personnel in understanding the scope of enrolment management initiatives and the attributes needed to achieve enrolment management goals, as well as broader institutional goals. The measurement of the

success or failure of each corresponding attribute in the primary areas of SEM is also significant in this study so as to enable an institution to determine its effectiveness and efficiency, growth or decline, as well as improvement or deterioration of the SEM programme.

#### 1.4 Rationale

Student enrolment accounts for the majority of the revenue generated by most colleges and universities. In Hong Kong's local continuing education institutions, revenue is primarily earned in the form of student tuition fees; thus, enrolment is the economic engine of the community college system. Dennis (1998) reported that in a 1997 survey conducted by the American Council on Education, 62% of the respondents indicated that enrolment challenges would be one of the most important issues facing their institutions. If colleges and universities are to increase productivity, improve student service, and strengthen quality, then a comprehensive approach to enrolment management is paramount (Huddleston and Rumbough, 1997).

According to the American Association of Collegiate Registrars and Admissions Officers (AACRAO), the leader in strategic enrolment management, SEM was originally conceived as institutions began to cope with declining enrolment. After several years, SEM emerged in higher educational institutions as a leading trend in response to increased accountability and limited resources (Bontrager, 2004). SEM implements institution-wide responsibility and is the central focus of the institution's overall strategic plan.

The concept of enrolment management has been further developed by Dolence (1993:6) in his work on strategic enrolment management. He defines strategic enrolment management as "a comprehensive process designed to help an institution achieve and maintain the optimum recruitment, retention, and graduation rates of students, where 'optimum' is defined within the academic context of the institution". Dolence's (1993) definition emphasizes the need for institutions to identify optimal goals within overall enrolment management strategies. Building on this, Dolence later adds that SEM is an institution-wide process that includes all aspects of an institution's function and culture (Dolence, 1993). SEM thus plays an increasingly important role in an institution's strategic planning that leads to institutional success. Thus, there is great interest in

examining how SEM can be incorporated into an identified continuing education institution in Hong Kong so as to achieve institutional mission and goals.

#### 1.5 Research Objectives and Research Questions

The objectives of this study are to (1) investigate the views and perspectives of senior and programme management in relation to SEM; (2) determine how SEM can be developed at programme level, institutional level and in different programmes; (3) identify the perceived barriers when implementing SEM; and (4) examine the success metrics of SEM in an identified continuing education institution in Hong Kong.

Thus, this study is directed by the following 4 research questions.

#### **Research Questions**

- 1. What are the dimensions of SEM and their differences at programme level and institutional level from senior and programme management perspectives of a continuing education institution in Hong Kong?
- 2. What are the key elements of SEM in different programmes of a continuing education institution in Hong Kong?
- 3. What are the perceived barriers to implementing SEM in a continuing education institution in Hong Kong?
- 4. What are the success metrics of SEM in a continuing education institution in Hong Kong?

#### 1.6 Research Methodology

This is a qualitative study, which analyses the data collected from 20 in-depth individual interviews with senior and programme management personnel regarding their views of, as well as the implementation and measurement issues related to, SEM within an identified continuing education institution in Hong Kong and relevant documents. The senior and programme management personnel selected for this study are the key individuals who are involved in and committed to the enrolment management planning process in a continuing education institution in Hong Kong for achieving enrolment goals and mission of the institution. In addition, the key stakeholders in this research understand the students' concerns because they have close communication with students in formal and informal ways. Activities carried out by senior and programme management to understand students' concerns is presented in Appendix X. Therefore,

the interviews were asking about the respondents' experiences and views on SEM issues where experiences include their understanding of students' needs and expectations. The in-depth interviews were conducted in Cantonese, and have then been transcribed into standard written Chinese for data analysis. Selected coded transcripts have also been translated into English and are discussed in this report.

The data collected through interviews and documents were analysed and managed using Atlas.ti software. The collected interview data were transcribed and coded, and further content-analysed. The analysis leads to the development of a SEM process. As this research is focused on the development of a SEM model in Hong Kong's continuing education sector, as well as the question of how to tie SEM to success metrics, this SEM model is made up of categories and sub-categories that are directly derived from the interview data and documents. The analysis has in fact undergone an iterative process of modification and revision in order to provide coverage of the views expressed by the informants.

#### 1.7 Significance of the Study

This research is significant as it provides information on how SEM may be viewed as an effective and strategic management model from senior and programme management perspectives, tying SEM to the success metrics in the continuing education sector in Hong Kong relating to the impending changes in education policy. In addition, this study contributes to the body of literature concerning SEM in continuing education in Hong Kong. The potential results can be useful at the management level within Hong Kong's continuing education institutions as they seek to improve their institutions' overall strategic plans by incorporating SEM as a means of increasing student enrolment, retention and graduation, and thereby enhancing institutional revenues. Finally, the results of this study can also provide a benchmarking of the viability of SEM in the continuing education sector in Hong Kong.

#### 1.8 Theoretical Framework

The theoretical framework adopted in this study takes as its starting point the principle that effective SEM can be critical for increasing student enrolment, retention and graduation. Thus, a theoretical framework has been built for a SEM programme based

on a range of leading theories and research for this study, in terms of the current understanding of the core attributes necessary for an SEM at each stage of enrolment, retention and graduation, how the essential attributes integrate within the SEM, the challenges faced during the implementation and the specific measurements of the essential attributes at each stage of the SEM process. The literature review will further seek to define SEM and to establish a suitable framework with which to examine how SEM can be developed, implemented and evaluated at a continuing education institution in Hong Kong from the perspectives of senior and programme management so as to construct a suitable SEM programme in a Hong Kong continuing education institution.

#### 1.9 Organization of the Study

This qualitative study is designed to address the research questions through a single case study approach by conducting in-depth interviews. This study consists of five chapters.

Chapter 1 provides an overview of the research problems, purpose and rationale for the study, its assumptions and limitations, and the theoretical framework adopted for the study.

Chapter 2 gives a review of empirical studies of enrolment management in higher education institutions. A detailed literature review on the subject of SEM, including definitions of SEM, the strengths of SEM and the core attributes of SEM, is discussed and explained. The integration of core attributes to SEM in the primary areas of enrolment, retention and graduation is then further elaborated upon. The literature review makes specific reference to the key areas to be addressed in this study: the planning and implementation, barriers to implementation, and issues related to measurement of the primary areas of enrolment, retention and graduation.

Chapter 3 outlines the research design of the study and addresses the reasons for adopting a qualitative single case-study approach. This chapter describes the sampling design together with an appropriate sampling strategy, as well as the research instruments and data analysis used in this study. Ethical considerations including informed consent and data confidentiality are also discussed.

Chapter 4 provides findings of the study. The results from data analysis of interviews and relevant documents using Atlas.ti software are presented in this section.

Chapter 5 presents the discussion and conclusion about the research questions, implications and recommendations for this study.

#### **CHAPTER 2 - LITERATURE REVIEW**

This chapter presents a review of selected literature on SEM, both as a means of providing a theoretical underpinning and empirical framework for the present research about enrolment management, and as a means to demonstrate the need for the present study. Core attributes of strategic enrolment management and the integration of essential attributes within strategic enrolment management are discussed. Moreover, literature in the areas of planning and implementation, as well as its measurement and barriers to its implementation, are critically reviewed. The involvement of the faculty and dean in strategic enrolment management for the establishment of dynamic and interdependent relationships throughout the institution are also considered as a means of developing a strategic enrolment management.

#### 2.1 Definitions and Emergence of Strategic Enrolment Management

There are several definitions for enrolment management and strategic enrolment management (SEM). Kemerer et al. (1982:21) define enrolment management as a concept and a procedure and that:

"Enrolment management (as a concept) implies an assertive approach to ensure the steady supply of qualified students required to maintain institutional vitality...enrolment management (as a procedure) is a set of activities to help institutions to interact more successfully with potential students".

Hossler (1984) suggests that:

"Enrolment management incorporates the following activities: (1) student marketing and recruitment; (2) pricing and financial aid; (3) academic and career counselling; (4) academic assistance programmes; (5) institutional research; (6) orientation; (7) retention programmes; and (8) student services for additional insight on early enrolment efforts and for a more detailed definition of enrolment management" (Commes, 2000:13).

Hossler's (1984) definition expands on the working professional perspective of enrolment management as it is concerned with the overall institution, such that eight organizational areas are identified as being the core areas of the enrolment management

structure. Hossler modified his 1984 definition of enrolment management in 1990, defining enrolment management as:

"An organisational concept and a systematic set of activities designed to enable educational institutions to exert more influence over their student enrolments. Organized by strategic planning and supported by institutional research, enrolment management activities involve student college choice, transition to college, student attrition and retention, and student outcomes. These processes are studied to guide institutional practices in the areas of new student recruitment and financial aid, student support services, curriculum development and other academic areas, all of which affect enrolments, student persistence and student outcomes from college" (Hossler, 2000:78).

Hossler et al. (1990)'s definition emphasizes the organizational concepts and processes which influence all areas of the institution and exert an influence over student success, thereby contributing to the overall enrolment management process. Thus, as an activity, enrolment management is designed to attract and retain students (Vander Schee, 2009).

The definition of enrolment management was further developed by Dolence (1993:6) in his work on strategic enrolment management. He defined strategic enrolment management as:

"A comprehensive process designed to help an institution achieve and maintain the optimum recruitment, retention, and graduation rates of students, where 'optimum' is defined within the academic context of the institution".

Dolence's (1993) definition stresses the need for institutions to identify optimal goals within their overall enrolment management strategies. Furthermore, Dolence (1993) built upon this definition by adding that SEM is an institution-wide process that incorporates all aspects of an institution's function and culture (Dolence, 1993).

According to Huddleston (2000), in order to optimally develop an institution's enrolment, a strategic and integrative plan that includes the identification, attraction, selection, encouragement, registration, retention, and graduation of the targeted student segments is necessary. The following table summarizes the evolution of enrolment management from the 1970's to the 2010's.

Table 1: Evolution of Enrolment Management Definitions

Year	1970's	1980's	1990's	2000's	2010's
Evolution of	A process that	A process and a	Strategic	A strategic and	The S in SEM
Enrolment	brings together	series of	enrolment	integrative plan	may more
Management	often disparate	activities that	management	should include	appropriately
to Strategic	functions having	involve the	(SEM) is a	the	now stand for
Enrolment	to do with	entire campus.	comprehensive	identification,	"sustainable"
Management	recruiting,	It is an assertive	process	attraction,	rather than
	funding, tracking,	approach to	designed to	selection,	strategic
	retaining and	ensure the	achieve and	encouragement,	because of the
	replacing students	steady supply of	maintain the	registration,	changes of
	as they move	qualified	optimum	retention, and	external
	toward, within	students	recruitment,	graduation of	environment.
	and away from	required to	retention, and	the targeted	Enrolment
	the University.	maintain	graduation rates,	student	management
	(Barton, 1975)	institutional	where	segments in	leader needs to
		vitality.	'optimum' is	order to	answer the call
		(Kemerer et al.,	defined within	optimally	for a sustainable
		1982)	the academic	develop pan	enrolment
			context of the	institution's	strategy for
			institution.	enrolment.	achieving
			(Dolence, 1993;	(Huddleston,	institutional
			1996)	2000)	goals.
					(Hossler and
					Kalsbeek (2013)

Source: designed by present researcher

The concept of enrolment management emerged in the late 1970s and early 1980s. Jack Maguire of Boston College, the Dean of Admissions, is credited in 1976 with the first use of the term *enrolment management* to describe institutional efforts at influencing college enrolment. Kemerer et al., (1982) then published the first book about enrolment management in 1982, formalizing the concept and proposing that it is not just an organizational concept but rather a process and a series of activities that involve the entire campus. The first book on enrolment management also defined the enrolment management programme as taking an assertive approach to ensuring the steady supply of qualified students that is required to maintain institutional vitality (Kemerer et al., 1982). Following the publication of that first book, a number of articles, monographs, and books began to emerge on the topic of enrolment management (e.g. Kemerer et al., 1982; Hossler, 1986).

In order to understand the emergence of enrolment management on campus, a context should be provided. The context emphasizes the importance of involving the academic enterprise in enrolment management (Henderson, 2005; Kalsbeek and Hossler, 2008). "The primary focus of enrolment management will be on the confluence of three late-twentieth-century events: the emergence of generally available student aid resources (primarily through federally funded programmes), the development of an extensive

college impact literature, and changes in the organizational structures of universities" (Coomes, 2000:5).

In the 1990s, the theory of enrolment management was further developed by Dolence began to use the word "strategic" next to the term "enrolment (1993), who management", in the form of strategic enrolment management (SEM). The definition given by Dolence (1993:13) is that strategic enrolment management (SEM) is a "comprehensive process designed to achieve and maintain the optimum recruitment, retention, and graduation rates of students, where 'optimum' is defined within the academic context of the institution". According to Dolence (1993), any factors influencing a student's decision to attend or continue in enrolment are fair game. As addressed by Hossler and Kalsbeek (2013), SEM is not only a comprehensive process but also a data-driven, research-dependent process and every successful enrolment management organization has committed resources to support institutional research. From this perspective, SEM management personnel start to consider about the sustainablity of the insitutional's enrolment strategy due to the change of the external environment. "Answering the call for a sustainable enrolment strategy will be the most pressing opportunity for tomorrow's enrolment management leader" (Hossler and Kalsbeek, 2013:17).

The early enrolment management literature was primarily written by working professionals, and has as its focus the processes and strategies that have proven to be successful (e.g. Dennis, 1998; Dixon, 1995; Dolence, 1993, 1997; Hossler et al., 1990; Huddleston, 2000). SEM has developed from a strategy practised at a small number of private colleges to a standard procedure practised at most private institutions during the past two decades (Hossler, 2004). Looking ahead to the challenges of the 21<sup>st</sup> century, successful SEM might be the solution for private institutions to ensure sustained levels of student recruitment, retention and graduation in higher education. To implement SEM more effectively, Pirius (2014) outlined the importance of identifying SEM leadership, building a SEM committee, developing a common understanding of SEM, building SEM goals that recognize the institution's strengths and weaknesses, and dedicating resources for SEM.

According to Vander Schee (2009), an identifiable enrolment management programme of an institution must present the following mutually dependent components:

- "institutional marketing, including, but not limited to, research conducted to identify
  unique institutional characteristics and the characteristics of students who choose to
  enroll, employing varied recruitment techniques in order to reach different identified
  market segments;
- admissions/recruitment, including, but not limited to, entering new student markets, student input into the evaluation of the recruitment process, regular evaluation of all recruitment materials and increasing need-based financial aid awards;
- retention programmes, including, but not limited to, early alert systems, an exit interview process that shares data within the institution, the presence of orientation programmes, and person(s) responsible for the coordination of retention efforts; and
- planning, including, but not limited to, a specific documented long range plan for enrolment management, annual evaluation of enrolment management efforts and results, recent examination of institutional mission, goals and curriculum, and mechanisms to disseminate research data to decision makers, and operation of a structure or model which coordinates enrolment management efforts" (Vander Schee, 2009:4).

Based on the captioned definitions of SEM, a holistic approach to SEM would be as demonstrated in Figure 1.

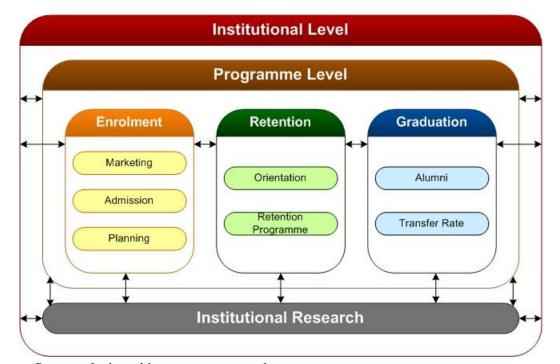


Figure 1: The Holistic SEM model in accordance with SEM definitions

Source: designed by present researcher

#### 2.2 Strengths of SEM

According to Dolence (1993), there are numbers of advantages in applying SEM into institutions: stabilizing enrolments, which means stopping declining enrolment, controlling growth, and smoothing out fluctuations in enrolment; stabilizing finances in order to eliminate deficits, pay off debts and reinvest strategically; optimizing resources to contain growth in the number of employees, and to redirect and refocus employees; improving quality through the elimination of errors and improving student quality ratings; and evaluating strategies and tactics to keep track of what works and what doesn't work in an institution. From the views of Hossler and Kalsbeek (2008), SEM strategies and practices can also be employed to "increase socioeconomic diversity or to enhance institutional prestige, and to optimize enrolment capacity" (Hossler and Kalsbeek, 2013:18).

In practice, there are several empirical examples to demonstrate the above strengths in applying an appropriate SEM model. For example, Moore (1999) demonstrated the power of implementing SEM in San Diego State University (SDSU): SDSU enrolled 1150 more students in the academic year of 1997/1998 than in the previous year, eliminating the need for the \$6.2 million in state funding that had previously been necessary for the provision of services and classes to SDSU's students. Following SDSU's efforts to manage its enrolment in 1996, the SEM plan received resources and support from business leaders and local organizations (Moore, 1999).

Additionally, Gottlieb (2000) illustrates that Rutgers, the largest institution for higher education in the State University of New Jersey system, implemented SEM in early 1990 and has experienced a 31% increase in the number of applications since 1996. One more example is the use of SEM at the California State University at Dominguez Hills (CSUDH), which began in 2009, and allowed CSUDH to hit its enrolment targets for the first time in 10 years. In the fall of 2010, CSUDH exceeded the number of freshman applications for the previous year by over 2,000 applications. In 2010, the University also admitted nearly 10 times the number of transfer students as compared the previous year (Jibby, 2011).

#### 2.3 Review of Empirical Studies on Enrolment Management

In many colleges and universities, student enrolment is a major means of generating revenue. In Hong Kong's local continuing education institutions, revenue is primarily earned in the form of student tuition fees; thus, enrolment is the economic engine of the community college system. The vast majority of SEM articles in general have been more discussion oriented, but recently there has been a shift to empirical research.

Higher education institutions are currently facing dramatic changes: In a 1994 survey conducted by the American Council on Education, 62% of college administrators indicated that enrolment challenges would be one of the most important issues facing their institutions due to the changes in the economy, society, demographics, technology, and financial aid policies (Dennis, 1998). According to Dolence (1993:6), enrolment management is designed to provide "a comprehensive approach integrating with related functions in achieving the optimum recruitment, retention and graduation of students".

In another study conducted by Huddleston and Rumbough (1997), seven related functions are indicated as having been identified as enrolment management areas by colleges and universities. They include institutional research and planning, marketing, admissions, registry, financial aid, student orientation, and retention and advising.

In actuality, enrolment management has been extensively developed to increase new student enrolments in private institutions. In private colleges concerned with generating larger and more profitable enrolments, enrolment management has become the impetus for strengthening articulation with prospective students, as well as for enhancing the retention rate of those new students (Huddleston, 2000).

Komives and Woodard (2003) state that many campuses of colleges and universities have combined key operating units related to recruitment and retention into formal units called enrolment management with the goal of creating a comprehensive plan to enrol more students, to shape the composition of the class, to reduce attrition rates, and to develop appropriate publications, services and electronic alternatives for interacting with the college or university. The key operating units related to recruitment and retention are admissions, records, financial aid, student research and marketing, and they must work together to achieve the enrolment management goal in a competitive environment in higher education (Komives and Woodard, 2003).

Enrolment management is often considered to be an institutional concept applied differently at each institution (Hossler et al., 1990). Many institutions may use terminology associated with enrolment management without a formalized enrolment management plan or without full implementation (Penn, 1999; Abston, 2010). Research indicates that the core attributes of enrolment management are not always effectively implemented and one of the failures of implementation of enrolment management is a lack of integration of core attributes of enrolment management (Black, 2004; Dolence, 1990; Huddleston, 2000). Such failures in implementation inhibit the development of a comprehensive process of enrolment management. In addition, implementation of comprehensive enrolment management is very challenging. There are few empirical studies designed to provide a review of all facets of the comprehensive planning, implementation, and measurement of all of the core attributes which must be implemented in a successful strategic enrolment management, so as to achieve optimum enrolment, retention and graduation goals within an institution.

As previously mentioned, the early enrolment management literature is primarily written by enrolment management working professionals, who focus on procedures and strategies that have proven to be successful (Dennis, 1998; Dolence, 1993; Hossler et al., 1990). There are also major professional organizations of enrolment management professionals such as the National Association for College Admissions Counselling, and the American Association of Collegiate Registrars and Admissions Officers (Kraft, 2007). The main summary of the enrolment management literature is that enrolment management is a series of activities that involve and engage the entire campus community in order to achieve the desired results of recruitment, retention, and graduation goals (Dennis, 1998; Hossler et al., 1990; Dolence 1996; Tinto 1993). There have been, however, some notable studies that are empirical in nature that examine specific research questions relevant to the present research.

For example, Dolence (1990) studied 16 independent and six public enrolment programmes and discovered that fewer than half of the institution had implemented enrolment management effectively because the institutions lacked a comprehensive, strategic approach. Although many institutions were found to use the term enrolment management, their efforts were just focused on marketing programmes and financial aid (Dolence 1990; Dennis, 1998; Penn, 1999).

Simmons (2007) conducted a qualitative study of the effectiveness of enrolment management planning at California community colleges by interviewing 21 enrolment members of college's Enrolment Management committee from four California community colleges. The focus of her empirical study was on the strategic planning and implementation of enrolment management at four California community colleges using essential attributes of enrolment management. However, Simmons (2007) found that the measurement of the successful implementation of essential attributes of enrolment management had not been properly addressed. The findings of Simmons' (2007:176) study demonstrate "a lack of college-wide commitment to enrolment management at the four California community colleges, a lack of cohesive enrolment planning, inadequate understanding of the importance of retention in enrolment management and a lack of integration of key elements of enrolment management".

Rather than relying on a purely qualitative approach, Lee (2010) conducted a mixed method approach to evaluate the implementation of enrolment management at two public universities in the United States by administrating 31 questionnaire surveys and conducting individual interviews with 31 participants. The participants were the administrators and faculty members from Valley University and Mountain University. The perceptions of the implementation of enrolment management at Valley University and Mountain University were compared and reasons for the success or failure of the implementation of enrolment management for each institution were assessed. One shortcoming of Lee (2010) is that his study does not address how the successful implementation of enrolment management could be measured in relation to the core attributes of enrolment management. Lee (2010) concluded that Mountain University was more successful than Valley University in the implementation of its enrolment management through (1) having developed a more successful enrolment management plan, (2) having conducted more effective retention programmes, and (3) through having more developed communication and collaboration practices related to enrolment management.

Hartunian (2011) conducted a qualitative study to examine the factors influencing SEM effectiveness at a public state university in his empirical studies. The 10 participants selected for Hartunian's (2011) study included senior leaders, such as the president, associate vice president for academic affairs, assistant vice president for academic affairs and enrolment services, dean of undergraduate studies, and senior faculty/senate chairpersons. The findings from Hartunian (2011) are that leadership, participation and

communication, strategic planning, and data analysis and monitoring influenced the effectiveness of SEM. One weakness of Hartunian (2011) is that his study primarily focuses on the SEM implementation at institutional level and does not address the implementation effectiveness of SEM at programme level as well as across different academic programmes of the identified public institution.

In reviewing the past empirical studies, it is clear that there have been few studies designed to provide an overview from management perspectives regarding the planning, implementation barriers, and measurement of strategic enrolment management requiring all of the core attributes necessary to successfully achieve optimum enrolment, retention and graduation goals within an institution. Therefore, establishing a comprehensive approach to include these attributes from management level perspectives is necessary for achievement of optimum enrolment, retention and graduation of students. Also, the measurement of the successful implementation of core attributes of strategic enrolment management at the stage of enrolment, retention and graduation should be developed in tandem with the integration of those core attributes of enrolment management. The present study attempts to address this gap in the literature by developing a comprehensive approach to evaluating the use of strategic enrolment management for optimum enrolment, retention and graduation within Hong Kong's continuing education institutions.

#### 2.4 Integrating Core Attributes within SEM

Based on the definitions of SEM, enrolment management is most effective when it is strategic and involves several comprehensive functions. To determine which functions are important, Hossler et al. (1990) address the importance of research as the basis for decision making. They, and other researchers (Dennis, 1998; Dolence, 1993; Dixon, 1995; Hossler et al., 1990; Penn, 1999), say that the key functions or attributes to be included in enrolment management programmes are marketing, admission, academic advising, financial aid, orientation, career services, retention, learning assistance and institutional research, as all of these directly impact student enrolment. The sections below provide an overview of the core attributes to be included in a successful SEM framework.

#### 2.4.1 Marketing

According to Brown and Oplatka (2006), most institutions now recognize the need to market themselves within the competitive climate of the higher education sector. Kotler and Fox (1995:6) have defined marketing as "analysis, planning, implementation and control of formulated marketing programmes designed to bring about voluntary exchanges of values with target markets to achieve institutional objectives". Marketing involves using effective pricing, communication, and distribution to inform, motivate, and service the particular market segments (Kotler and Fox, 1995). Building on this, Dennis (1998) simplified the definition of marketing to mean offering the right academic programmes and courses at the right time, and at the right price to the right student markets. Pandey and Yadav (2012) contend that SEM is not only to address admission related issues, but also put emphasis on fiancial aid, retention and marketing such that more students looking at institution composition as a selling point.

#### 2.4.2 Admissions

Typically, the first formal point of contact that prospective students at an institution make is with the admissions office. The admissions office is one of the major functions in institutions, and is responsible for a variety of activities. The role of the admissions office is to provide information to prospective students, arrange campus visits, conduct tours of facilities and provide in-depth information to prospective students about the resources and assets offered by the institution (Schuh, 2003). The admissions officer becomes a key person within the admissions office as she/he is the institution's representative to have contact with prospective students. A variety of recruitment activities are conducted through admissions such that potential students may inquire, apply and enrol in their respective institutions. Lobasso (2005) emphasizes that the admissions personnel should also possess skills in market research, which help in creating the instititional marketing and enrolment plans. As suggested by Maringe and Carter (2007), an easy application process is one of the decision making factors motivating international African students for studying in UK higher education.

#### 2.4.3 Academic Advising

The function of academic advising is to provide students to "bridge the gap between undergraduates and the institution" (Kau, 2014:4). Academic advising is the most

critical service available for the institution's students, and the major role of academic advising is to set students on a path to successfully accomplishing their goals (Brigham, 2001; King, 1993). According to Komives and Woodard (2003:259):

"[T]he academic advisor's job is to help the student create a plan of study that has a good chance to allow him or her reach a goal. This must be supportive but also academically and developmentally appropriate for a given student. Academic advising offices may be situated within academic affairs or student affairs and may be centralized within the institution or decentralized throughout various colleges and departments. They may also be integrated or linked with offices such as orientation programmes and the counselling centre".

The retention literature from Tinto (1975; 1993) argues that if a student is to be retained, then the need for a connection to the institution should be addressed. A successful advising programme can be an important ingredient linked to the improvement of student retention (Hossler, 1984). McArthur (2005:1) revealed that "the success of the academic advising programme should inspire the administration to give greater support for faculty training and to recognize the significance of developmental academic advising".

This connection between quality advising and student retention has been confirmed by many studies (Tinto, 1975; Tinto, 1993; Hagedorn et al., 2000). Therefore, the involvement of the academic advising staff helps to connect the student to the institution, increasing an ongoing relationship between students and academic advisors, and promoting students' decisions to persist in studying. More recently, Young-Jones et al. (2013:16) found that academic advising impacts multiple factors that contribute to student success; thus, academic advising is one element that should be further developed "to help students achieve educational and career goals while helping institutions to accomplish stated educational missions".

#### 2.4.4 Financial Aid

There has been an increase in research on the areas of financial aid and enrolment decisions in recent years and several studies have demonstrated that financial aid has a significant effect on increasing student enrolment, as well as improving student retention (Dennis, 1998; Hossler, 2000; DesJardins et al., 2002; Singell, 2004). Fiancial aid programmes have grown in scale and expanded in scope with various forms which

have become the norm among institutions (Dynarski and Scott-Clayton, 2013). Institutions are adopting various forms of financial aid to influence enrolment behaviour and enrolment managers are utilizing financial aid resources in the recruitment process to attract new students to enroll and, once these students are enrolled, to influence their persistence in continued enrolment (Hossler et al., 1990). DesJardins et al. (2006:382) quote McKeon's statement in DesJardins et al's paper "we can no lonegr stand idly by while our nation's students, the future of our country are being priced out of the promise of higher education". DesJardins et al. (2006) imply that McKeon's statement shows that both tuition and financial aid act the capability of institutions to achieve their student enrolment, retention and graduation goals.

#### Forms of Financial Aid

According to Curs (2008), many insitutions (i.e. two-year or four-year courses) provide various forms of scholarships and grants as the financial packages to attract and retain students at their institutions. The types of scholarships offered vary from institution to institution, but most fall within the categories of being either merit-based or need-based. Need-based grants are awards that are given to students who have financial need, while merit-based grants are typically awarded to students who demonstrate an outstanding performance, or are awarded to the best and brightest students. Most institutions are now able to assess what their students are willing to pay and then to develop an aid package that entices the student to enrol.

St. John (1990; as cited in Curs, 2008) also argues that not only grants, but also loans and work study can increase the likelihood of student enrolment; however, increase in the cost of tuition decreases enrolment. St. John (1990) also recognizes that students are very responsive to the particular forms of financial aid offered, i.e. whether such aid includes merit-based or need-based aid, grants or loans, and grants or tuition.

#### 2.4.5 Career Services

Heinzen and Rakes (1995) stress the importance of career services in higher education as part of the overall enrolment management efforts. One of the objectives of career services is to increase the student retention level by providing a series of programmes and services that create opportunties for students to strengthen their confidence that they will be equipped and prepared to face the new challeges which begin after graduation.

Several researchers have found that students with strong career plans are more likely to persist in their college studies (Tinto, 1975; Tinto, 2006).

According to Engelland et al. (2000), high quality career services centres aid students in making better job choice decisions by providing students with well-integrated career planing and placement services. To ensure high quality career services, Engelland et al. (2000) suggested that the faculty should also have an obligation to keep monitoring the effectiveness of the campus career services as part of their overall teaching duties. Heinzen and Rakes (1995) outlined the major contributions that career services make to retention of students in the following table (See Table 2).

Table 2: The Major Functions of Career Services for Student Retention

The majority of career services in retaining students				
Current career information	Service-learning programmes			
Career interest assessment	Summer job programmes			
Career seminars and workshops	Career/job fairs			
Part-time job programmes	Resume and cover letter critiques			
Work study employment programmes	Employer information			
Internship, co-op, volunteer programmes	Professional and graduate school information			

Source: Heinzen and Rakes (1995:118)

Hirschy et al. (2011) also argues that high performing career services office should also work with employers seeking candidates through CV or placement file referral services, on-campus interviews and career fairs with additional services of resume assistance, individual career counseling, and mock interviews. Currently, the advancement of technology makes the delivery of a wide variety of online student career services more accessible. The online career services may help "students with the difficult task of balancing life and work by offering these services in alternative time frames and delivery modes" which is deemed to be effective (Venable, 2010:87).

#### 2.4.6 Orientation

Orientation programmes play a role in the overall social and academic growth of a student in the institution. Perigo and Upcraft (1989; as cited in Huddleston, 2000:69) define the orientation programme as "any effort to help freshmen make the transition

from their previous environment to the collegiate environment and enhance their success". The purpose of an orientation programme is to assist students in positive transition from their existing environment to their new environment so as to enhance their success; thus, the role of the orientation process is to strengthen student transitions and retention (Gass et al., 2003; Huddleston, 2000). Although the goals of an orientation programme can vary from institution to institution, the rationale of a successful orientation programme is expected to aid in the following ways: (1) lowered attribution rates, (2) increased academic performance, (3) higher levels of emotional and social development, (4) and more positive attitudes towards the institution (Pascarella et al., 1986; Gass et al., 2003).

Students will increase their social and academic success by attending the orientation programme, which provides students with information about the institution, such as academic advising, registration, extracurricular activities, transition to college life and so on (Huddleston, 2000; Bontrager, 2004). Further supported by Lewis (2011), faculty, advisors, counselors, administrator and support staff would be involved in the development of the student orientation programme in order to introduce newly enrolled students about college expectations, services, and facilities available to the students.

#### 2.4.7 Student Retention

Researchers are greatly interested in the subjects of retention, persistence and attrition and the factors that affect students' decisions to leave their institutions. Tinto (1993:1) points out that "more students leave their institutions or university prior to degree completion than stay". Fike and Fike (2008) outline an average attrition rate of approximately 41% from the first to second year, and a 34% overall persistence-to-degree rate in the United States; thus, it is clear that student retention remains an important social issue within higher education. It is necessary to develop a better understanding of the need for greater student retention efforts within the institution (McLaughlin et al., 1998).

In any discussion of student retention, the first concern is how the term is to be defined and measured by each institution, as student retention is the most widely used measure in education research and practice. Hagedorn (2005) has stated that retention is an institution's key performance indicator, which can also be used to assess the reletive success or failure of an institution. In looking at retention however, the related terms of

student attrition and persistence must also be taken into consideration. Hagedorn (2005) has defined student attritition as a decline in the overall number of students attending a single institution. According to Levitz et al. (1999), students' persistence is a key overall performance indicator of student satisfaction and students' ability to meet their educational goals within the institutional framework. A student's persistence with an institution means that he/she enrols in an insitution and remains enrolled until degree completion; persistence can be measured if the information on a student's particular educational goals is collected and assessed accordingly. Therefore, the success of an institution and the success of its students are inseparable and interchangeable.

Institutions' dropout rates have been a concern for several decades. According to Bailey et al. (2006), the three-year graduation rates for two-year institutions are less than 45%; for four year colleges and universities, the five year graduation rate approximates 50%. Thus, student attrition has become a significant concern past the three-year mark, and the reasons for such students' decisions to drop out are for "financial", "academic", "personal" and "unknown" reasons (Astin, 1985; Ackerman and Schibrowsky, 2008). A recent survey mentioned by Ackerman and Schibrowsky (2008) indicates that 62% of parents believe that a college education is essential for their own children. Despite this, a number of factors affect students' college decisions, including the students' ability, socioeconomic status, ethnicity, gender, age, and the educational backgrounds of their parents (Perna, 2000; Lau, 2003). Leeds et al (2013) reveal that retention activities should be designed to increase interaction and communication with students so as to enhance student integration and engagement. It is also suggested by Topper (2007) that student interaction and engagement encourage students' motivation, introducing a positive perception of their enrolled programme.

# 2.4.8 Learning Assistance

A comprehensive enrolment management system should also include a learning assistance centre, so as to assist students in achieving success academically and reaching their educational goals. Learning assistance centres actually are one of the most widely adopted programmes for increasing the level of academic success of an institution's students. According to Frank Christ, a national leader in this field, learning assistance centres were operating within more than 1,000 post-secondary institutions as of 2004 (Arendale, 2005). Such learning assistance programmes support students

experiencing difficulties in learning in regular classes, regardless of the cause. They include support for students with significant learning difficulties, mild intellectual disabilities and language disorders. The learning assistance programmes provide integrated services to foster the academic and personal growth of students. In some cases these centres may also include developmental education courses as well, which offer remedial courses, ancillary advising and counselling to help students improve their overall readiness for college (Perin, 2004).

According to Lau (2003), students who are experiencing academic difficulties are advised to seek such learning assistance from these learning centres. This is especially true in the case of freshmen who are new to the institution and would therefore be encouraged to enroll in learning assistance programmes to help them adjust also to campus life. The connection between learning assistance and enrolment management is very important at self-financing institutions; as such institutions are likely to attract underprepared students (Hossler et al., 1990). Learning assistance programmes and activities can therefore enhance developmental education of students, and are designed to offer programmes, workshops or services to all undergraduate and underprepared students, allowing as many students as possible to successfully continue their studies (Newburger, 1999). Loeb (2014) extends the contribution of faculty interaction to the arena outside the classroom which helps boost students' confidence in their ability; thus, the ways to strengthen student–faculty interaction should be examined to benefit students at the community college level.

#### 2.4.9 Institutional Research

Most strategic planning in institutions relies on research that supports scanning external conditions and evaluating existing operations (McIntyre, 2011). Institutional research is essential in every stage of a SEM. Hossler et al. (1990) described the use of institutional research as the positioning of the campus in the marketplace, through examination of the correlation to student persistence and the development of appropriate marketing and pricing strategies. The institutional research office provides data analysis and research to the institution for the purposes of better planning and quality improvement. "An institutional research effort manages and provides relevant data including retention rates, historical trends, registration statistics, student characteristics, and enrolment patterns and projections" (Huddleston, 2000:66). In

addition, the institution needs to have easily accessible and accurate data that can be used to build strategic plans and budgets (Yale, 2010). The use of institutional research gathers data and information on demographic trends, labor statistics, economic and political trends, enrolment behavior and academic programme needs (Pirius, 2014).

# 2.4.10 Reputation

Prospective students would also look for the reputation of an institution. According to Beneke and Human (2010), the reputation of the institution was found to be the most important factor in a scholar's decision of a place of further study. Carter and Yeo (2009:169) contend that "marketing strategies not only to attract international students but also addressing the important factor of reputation including reputation of university staff". As addressed by Kusumawati (2013), reputation is one of the important factors in selecting Indonesia public university. Kusumawati (2013:318) states that "a university's reputation influenced attitudes toward choosing an institution in several ways, such as university status (whether public or private), university ranking, and university achievement". It is also suggested by Gray et al. (2003) that an adaptation branding strategy should be adopted if overseas universities plan to promote their education services in Malaysia, Singapore and Hong Kong and the emphasis would be on the reputation of the university as well as career prospects.

The leading enrolment management theorists have outlined attributes that are integral to the success of strategic enrolment management (SEM). A common theme of the enrolment management literature is the need to engage the entire campus community in order to achieve the desired results of recruitment, retention, and graduation goals (Dennis, 1998; Hossler et al., 1990; Tinto 1987). For this study, those attributes are grouped into three core areas. The attributes are fundamental because they provided the required infrastructure, qualities, and features of a mature enrolment management operation. The three primary areas are: (1) enrolment/recruitment, (2) retention and (3) graduation.

As shown in Table 3, the core attributes are utilized in different stages of SEM. Some of the core attributes are used in more than one stage of the enrolment, retention and graduation processes, such as institutional research, financial aid and reputation in order to achieve the desired outcomes of SEM.

Table 3: Integrating Core Attributes into Different Stages of SEM

Critical SEM Drivers	Enrolment	Retention	Graduation
Institutional research	<b>√</b>	<b>√</b>	<b>√</b>
Marketing	<b>√</b>		
Admission	<b>√</b>		
Financial aid	<b>√</b>	<b>✓</b>	
Orientation		<b>✓</b>	
Student retention		<b>✓</b>	
Academic advising		<b>✓</b>	
Learning assistance		<b>√</b>	
Career services			<b>√</b>
Reputation	<b>√</b>		<b>√</b>

Source: designed by present researcher

#### 2.5 Enrolment

"Enrolment management strategies enable institutions to pursue their strategic goals in informed, intentional and integrated ways" (Hossler and Kalsbeek, 2013:3). Enrolment is one of the primary areas in SEM. Huddleston and Rumbough (1997) conducted a survey of enrolment practices at 226 institutions and found that the main purpose of the implementation of enrolment management is indeed to increase student enrolment. A similar study conducted by Lobasso (2006) on the evaluation of enrolment management models at 28 institutions in the Florida Community College system found that increasing enrolment was the primary motivation for implementing enrolment management, with the strongest benefits being found within the institution. The planning and implementation, barriers and measurement issues related to enrolment are to be addressed in this study.

# 2.5.1 Planning and Implementation: Enrolment

As there are changes in the external environment of higher education institutions, enrolment planning should be conducted on a regular basis. Of the need for enrolment planning, Black (2008:3) states "Enrolment planning must be strategic and should be institution-wide and dynamic to position a college or university for future success". An

effective and comprehensive plan should therefore be in place in order to implement any SEM programme within an institution. Furthermore, Abston (2010) argues that the enrolment planning process should involve the support of the entire institutional community, including the president, administrative staff, and all levels of faculty, so as to gain support from all areas of the institution. Strategic enrolment planning is therefore a long-term process to align an institution's fiscal, academic and delivery resources with its changing environment in order to accomplish the institution's mission.

In order to ensure effective enrolment management, strategic and comprehensive planning should first be considered (Dixon, 1995; Hossler 1986). Lee (2010) has expanded on this by stating that enrolment planning can be started by discussing the optimum number of students within the institution, a process which entails an evaluation of current enrolment, goals for the future, and how optimal student number and future enrolment goals relate to the institution's overall mission. An effective enrolment management organization, then, should be able to achieve the objective of identifying the optimum number of students (Jonas and Popovics, 2000).

An enrolment management plan is deemed to be significant which draws on the institution's planning activities within the context of environmental factors to achieve current and future enrolment goals (Lee, 2010). According to Ward (2005), the enrolment plan should be comprehensive and clear, and should cover major enrolment areas such as admissions and financial aid, and include the current state of the institution, enrolment goals to be achieved in the next year and in five or ten years. Many institutions consider a SEM plan to be one of the institution's enrolment management strategies. Recently, there have been an increasing number of institutions which have demonstrated a commitment to developing SEM plans. In 2008, 28% and 37% in Canada and the United States respectively had developed SEM plans, while more than half (51%) of U.S. institutions claimed that they had SEM plans in development (Smith and Gottheil, 2009). As shown in Table 4, Smith and Gottheil (2009) also identified that most of the SEM plans under development or in use had the elements of clearly stated enrolment goals, student recruitment goals and student retention goals, and an evaluation methodology for assessment and monitoring of performance.

<u>Table 4: The Major Elements of a Comprehensive SEM Plan in the US and Canada in</u> 2008

Elements of a Comprehensive SEM Plan	US (%)	Canada (%)
Clearly stated enrolment goals	93	94
Student recruitment goals	100	94
Student retention goals	100	67
Evaluation methodology for assessing and monitoring performance	87	71

Source: Smith and Gottheil (2009)

# 2.5.1.1 Marketing and Admissions

A successful enrolment management plan can be refined with effective *marketing strategies* such that the institution is able to recruit the right number and right mix of students through various marketing and recruitment activities, and to enable students to achieve their academic goals with the support of the admissions office within the institution.

To entice students to enrol in a given institution, marketing the institution becomes significant to the enrolment process. Many institutions have formulated *marketing plans* into their overall strategic planning process in which marketing can help identify the market, assess the institutional potential for the market and guide the development of the institutions' objectives (Dennis, 1998; Hossler et al., 1990). Dennis (1998) also states the following consideration to be addressed during the formulation of a marketing programme:

"A school marketing programme should have clearly articulated goals and strategies and a reasonable time frame in which to accomplish these goals. A school marketing programme should give consideration to develop[ing] new markets based on geographic, demographic and psychographic information, and national trends. It should be consistent with the analysis of a school's institutional and enrolment research. Economics, technological advances, and political trends should also be taken into account when developing strategic marketing plans" (Dennis 1998:32).

Once an institution has developed an appropriate marketing plan, the process of recruiting students can be started (Hossler and Kalsbeek, 2008). Building on this, Nicholls et al. (1995) have proposed that higher education is not a product but rather a service; therefore, the marketing of services must adopt different approaches. As the

nature of educational services is people-based, enhancing relationships with students and possessing an understanding of students' needs are significant factors in marketing research. Bontrager (2004:11) addresses that "market research allows the institution to add the critical issues of student-institution fit by identifying those places where the institutional mission, institutional expertise, student interest and societal needs converge". Institutions should formulate strategic marketing plans by obtaining data concerning students who enrol, retain and graduate, through marketing research activities.

Bontrager (2004) also addresses the importance of effective marketing and marketing plans which support Dolence's (1993) theory that the student can best determine whether the institution will "fit" his or her needs with reference to the market position of the institution (Dolence, 1993; Bontrager, 2004). As mentioned by Hossler et al. (1990), the admissions office, through its marketing and recruitment activities, is the first point of contact between the student and the institution in an enrolment system. A student's choice to select a preferred institution is typically influenced by marketing and the recruitment activities conducted through admissions offices. Understanding what factors influence a student's choice to attend a particular institution can assist institutions in enrolling more students at their campuses. The use of market research, therefore, is for the determination of which factors affect student choice, and enable enrolment managers to exert more influence over student enrolments (Braxton, 1990). Thus, establishing marketing and recruiting strategies is part of an effective overall enrolment management plan.

Enrolment management has always employed marketing strategy and "marketing evolves to include brand marketing, one-to-one relationship marketing, social media marketing, and word-of-mouth marketing, and as institutional visibility, recognition, brand identify, and competitive market position play an increasingly prevalent role in enrolment success" (Hossler and Kalsbeek, 2013:8).

Colleges and universities within admission offices currently apply marketing principles and strategies to develop institutional awareness, identify student demographics, project student demand, and develop enrolment and retention plans (Huddleston, 2000). The role of the admissions office is therefore a very essential part of SEM. The responsibilities of admissions offices, as enumerated by Huddleston (2000) are shown in Table 5.

Table 5: Responsibilities of Admission Offices

	Creating a comprehensive student profile
	Identifying and contacting the potential pool
Admission	Converting prospective students into applicants
Offices Activities and Responsibilities	Maintaining contact with the applicants to sustain their interest in the institution
	Coordinating programmes and activities to help sustain that interest though the application process
	Hosting yield enhancement activities to encourage enrolment
	Providing quality customer service
	Maintaining and developing constituent relations with various community leaders

Source: Huddleston (2000, p.67-68)

Enrolment management involves a marketing orientation toward student enrolment recuritment (Hossler and Karlsbeek, 2013). Clark and Hossler (1990) conclude that a strong marketing programme should provide the institution with valuable information about the institution's target students by identifying their needs, wants and interests. Five discrete elements of marketing products and services within an institution are described by Clark and Hossler (1990) including: outlining a strategic plan and research, developing market analyses, selecting a target market, developing a marketing mix, and implementing and managing the marketing effort.

With the advancement of technology, the Internet has become a major tool in marketing to prospective students, and has replaced and/or minimized the use of direct mail, print, and television advertising, which used to play the major role in generating interest, awareness, and inquiries for programmes. In contrast to the traditional forms of marketing, according to Lewison and Hawes (2007), higher education administration has recently used mass marketing strategies to focus on prospective students with similar academic backgrounds as a 'one size fits all' strategy. Internet marketing has thus become a reliable tool for student recruitment and the institution should create interactive websites to attract prospective students.

### 2.5.1.2 Financial Aid and Its Effects on Enrolment Decisions

Several reviews report that financial aid has significant positive effects on student enrolment decisions (Curs, 2008; DesJardins et al., 2006; Epple et al., 2006; Hossler,

2000; St. John, 1990). Recent reviews of the subject have analysed the effects of financial support on persistence and reveal that students who receive financial aid appear more likely to make consistent progress in the institution. For example, receiving a Pell Grant appears to decrease the probability that a student will withdraw during their first two years of college study (Curs, 2008). In addition to influencing student persistence, financial aid also has a large effect on a student's initial selection on which particular college to attend (Dennis, 1998; Hossler, 2000). Hossler and Kalsbeek (2013) contend that campus-based financial aid helps achieve multiple enrolment goals which can be used in a systematic fashion.

Going beyond this, the simple decision of whether or not to attend college at all can be strongly influenced by the provision of financial aid — a pressure which affects different groups differently. For example, Hossler (2000:82) states that "research has consistently found that African American students and Latino students are more cost sensitive and more responsive to financial aid offers than majority students of similar socioeconomic background". Furthermore, Singell (2004) found that 90% of student participants in the two largest federal aid programmes of the Stafford Loan and the Pell Grant in the States have annual family incomes below US\$40,000. DesJardins et al. (2002) also found that the proportions of American full-time undergraduates at private institutions and those at public institutions receiving financial aid offers were 80% and 66%, respectively in 1995–1996. In recent years such provision of aid has been increasing; Schmidt (2001) reports that the United States has increased the amount of financial aid provided in the form of grants and scholarships from US\$4.15 billion to US\$4.67 billion between 1999–2000 and 2000–2001, an increase of 12.6%.

According to Hossler (2000), institutions began to consider awarding *institutional* scholarships during the 1980s as a way to help generate new enrolment due to the increasing competitiveness between institutions. It is becoming more apparent that financial considerations are one of the primary reasons for enrolment at institutions, especially for needy students. As reported above, enrolment decisions can be influenced by the amount of financial aid awarded. Moreover, institutions may consider offering attractive scholarship awards so as to influence the enrolment decisions of higher-ability students on the basis of financial aid offers (Hossler, 2000). The use of financial aid of various forms is therefore essential to institutions hoping to attract new students and enrolments.

### 2.5.2 Barriers: Enrolment

Simmons (2007) conducted a qualitative study on the effectiveness of enrolment management planning and reveals the reasons why institutions are having difficulties in the areas of enrolment management planning. These reasons included:

- the lack of understanding that enrolment management is an iterative process, not a stagnant process;
- failure to recognize the four cornerstones of enrolment management (institutional commitment, strategic planning, integration and evaluation; and
- failure to understand that responsibility for enrolment management begins with the Office (Simmons, 2007:166).

In a study of administrators' perceptions of the enrolment management in Alabama colleges, Abston (2010) discovered a lack of shared understanding of particular enrolment management activities taking place within an institution. Abston advocated that institutions formulate an enrolment management plan for better SEM planning and implementation to increase enrolment.

# 2.5.2.1 Marketing and Admission

Dennis (1998) and Huddleston (2000) assert that a lack of understanding customer needs dooms many marketing plans to failure; thus, understanding the needs of prospective and enrolled students by means of market research is a significant part of the market planning process. Market research is an effort by an institution to gather information about its customers (i.e. students) and is essential to the "strategic purpose of gaining a competitive advantage by identifying market demand and competitors" (McIntyre, 2011:4). Marketing plans may fail if responsible personnel or financial resources are not committed to implementing the plan, the wrong people are assigned to implement the marketing plans, or no effective evaluation process and/or no clear set of goals and objectives exists (Dennis, 1998).

Huddleston (2000) described one of the admission offices activities and responsibilities as being the identification and contacting of potential prospective students. In the past, a prospective student would likely seek out the institution's information regarding their

programmes and courses of interest and would then personally contact the admissions staff. The admissions representative might then mail the printed prospectus of the institution or attempt to contact the student directly and thereby proceed to answer the students' questions. During this two-way communication between the prospective student and the admissions officer, a relationship develops, and the student is thus influenced by this relationship. Today, however, students can get access to information about the institution using the Internet, and it is no longer necessary to contact institution admissions staff until the student is much further along in his or her decision process. In order to generate higher net tuition revenue, institutions adopt early decision (ED) as an admission practice by identifying applicants with strong preferences for their institution (Antecol and Smith, 2012). Under ED, potential applicants receive early notification of admission in return for a binding commitment to attend a specific institution (Antecol and Smith, 2012).

#### 2.5.2.2 Financial Aid

According to Holley and Harris (2010), the need for financial assistance, especially students and their families facing economic hardship, plays a significant role in the enrolment decision process for affected students. St. John (1990) identified three principles that should guide the use of aid to attract students to enrol.

- Colleges should recognize that student aid makes a difference in affordability in all
  types of institutions and is important. Institutions must find more institutional
  sources to supplement aid packages, especially in a situation in which college
  tuition fees outpace government aid.
- Colleges should link budgeting and aid-packaging strategies closely in the recruitment process, as institutions must be careful to make sure they can afford to serve the students they attract.
- Colleges should be flexible in adjusting aid awards when there are changes in funding and public policies.

# 2.5.3 Measurement of Success: Enrolment

The success of a college's enrolment management is partially measured by how well it influences students to enrol at the institution. A student's choice to attend a particular institution is typically influenced by the marketing and recruitment activities conducted

in conjunction with admissions offices, as well as by the financial aid packages offered by the institutions. Figure 2 outlines the measurement of success of enrolment associated with the metrics of the core attributes of marketing, admissions and financial aid.

Enrolment Number of applicants Number of deposits, Number of enrolled students Number and percent of students for each identified target group Marketing **Financial Aid** Admission Number of inquiries Number of financial Marketing budget generated award packages for new students for each Number of market Conversion of inquiries research targeted programmes to appplicants/admits Number of marketing Amount of financial Conversion of admits to activities for each award for each registered students targeted programme targeted programme Conversion of registered Number of forms of students to attending financial award students Ratio of participants to Progress toward non-participants institutionally identified enrolment targets

Figure 2: Enrolment Metrics

Source: Modified from Bontrager (2004)

# 2.6 Retention

In recent years, more research has addressed issues pertaining to two-year institutions and their students (e.g. Calcagno et al., 2008). Institutions of higher education have come to understand that "retaining student already enrolled has greater potential than efforts to recurit more and more students" (Hossler et al. 1990:53). Before considering planning and implementation of student retention in an institution, it is necessary to determine a variety of factors that affect a student's decision to withdraw from a course or a student's early departure from his or her programme. Table 6 summarizes many of the personal reasons and institutional factors that have been found to affect withdrawal courses in studies of retention (NAO, 2007; Yorke 1999; Davies and Elias, 2003).

Table 6: Factors Influencing Students' Withdrawal from Courses

Retention Studies	(Yorke, 1999)	(Davies and Elias, 2003)	NAO (2007)	Khosravi et al (2013)
Factors influencing student's withdrawal from courses	Wrong choice of field of study	Wrong choice of course	Personal reasons	Poor academic advising
	Academic difficulties	Financial problems	Lack of integration	Lack of campus support services
	Financial problems	Personal problems	Dissatisfaction with course/instituti on	Poor quality of campus life
	Poor quality of the student experience	Academic difficulties	Lack of preparedness	Ineffective financial aid
	Unhappiness with the social environment	Wrong choice of institution	Wrong choice of course	Unsafe and insecure campus environment
	Dissatisfaction with institutional provision		Financial reasons	
			To take up a more attractive opportunity	

Source: designed by the present researcher

Taking into consideration the factors affecting a student's decision to withdraw, effective planning and implementation of retention strategies help to minimize the risk of a student deciding to withdraw from a course of a study or a student's early departure from his or her programmes, thus resulting in higher retention of students within the institution. According to Smith and Gottheil (2009), there are several widely-used retention practices in place throughout Canada and the United States, including financial aid, academic advising, first-year experience programmes such as student orientation, peer tutoring, and student retention programmes. Retention plans and strategies are an important part of the overall SEM, as retention efforts are designed to achieve student retention by ensuring student persistence until goal achievement.

# 2.6.1 Planning and Implementation: Retention

According to Hossler and Kalsbeek (2013), professional enrolment management literature has affirmed that retention is a critical component to define the feature of enrolment management strategy. Much research indicates that student retention in their first year of studies is the key to ultimate degree completion (Pascarella et al., 1986; Tinto, 1993; Meer, Scott, and Neha, 2010). Thus, the elements that contribute to positive learning experiences during the first year within institution have been determined as enhancing the student retention rate and students' subsequent completion of their studies (Meer, Scott, and Neha, 2010). Tinto (1993) suggests that institutions should develop retention plans to provide an opportunity for students to integrate into the campus environment. Similarly, Hossler (2004) argued that a student's first interaction with the campus environment provides the impetus for student persistence; therefore, orientation programmes should be developed to help students adjust to their college life both academically and socially. Beyond orientation and academic advising, Wild and Ebbers (2002) suggest that offering financial aid, developing student retention programmes as well as providing learning assistance all work together to enhance institutional retention efforts.

# 2.6.1.1 Financial Aid Affecting Student Retention

Financial aid can also have an impact on the retention of currently enrolled students. DesJardins et al. (2002) simulated how changes in financial aid packaging affect student retention decisions using the data from the University of Minnesota as the focus of their empirical study. The simulations predicted that greater generosity in the financial aid package would improve student retention; this means that changing loans to scholarships would have a large impact on retention. Singell (2004) confirmed these findings using an alternative empirical approach and data for the University of Oregon. According to Dynarski and Scott-Clayton (2013), financial aid such as grants tied to academic achievement would increase student persistence more than the grants without attached strings. It is also suggested by Dynarksi and Scott-Clayton (2013) that the scope of financial aid programmes would be expanded in the forms of grants, subsidized loans and tax credits.

### 2.6.1.2 Orientation

Early intervention programmes such as orientation have been developed to facilitate academic and social integration for new students to foster student success (Lewis, 2011). Delivering orientation programmes is one way to establish relationships between the students and the institution by introducing students to institutional life. "Institutions commonly offer early registration and orientation programmes, bringing new students to campus during the summer prior to their entry into college. The primary purpose of these programmes is twofold: to register students for first-term courses and to provide preliminary orientation to campus life" (Bontrager, 2004:11). Gass et al. (2003) conducted an empricial study on the effect of the orientation programme named "Summer Fireside Experience Programme" (SFEP) at the University of New Hamsphire. This SFEP consists of a 5-day orientation programme to achieve six of the following objectives (Gass et al., 2003:37):

- foster positive peer-group development
- develop positive interaction with faculty members
- focus attention on career and/or major course of study plans
- heighten interest in academics
- develop a sense of urgency in preparing the student for a positive start to school
- ensuring that each students' interests and expectations are matched to university offerings

The students attending SFEP are compared with students who do not participate in either programme in terms of the areas of attrition/retention rates, grade point averages and student development areas. The results from Gass (2003) show that SFEP has a significant positive impact on student retention, grade point averages, and in the psychosocial areas of autonomy and interpersonal relationships. Gass et al. (2003) also suggest that as they had observed that the orientation programme has long-term effects both during student's undergraduate education as well as after graduation, extending orientation programmes for one semester or longer might help in enhancing students' potential social and academic success.

According to Schuh (2003), collaboration between orientation planners and academic advisors can further provide information to students about general education requirements for specific majors and how to choose courses. Pascarella and Terenzini (1991; as cited in Schuh, 2003) contend that "orientation interventions linked with

stronger direct effects on persistence tend to be longer in duration and more comprehensive in scope (freshman seminars or orientation courses). Nevertheless, even short, pre-freshman orientation may exert a positive indirect effect on student persistence" (Schuh, 2003:56). It is therefore essential for orientation staff members coordinating with academic advisors to deliver an induction programme for students as seamlessly as possible. Understanding the freshman year is in fact critical to student success, such that the first few weeks of student experience are important to their successful transition to institutions (Lewis, 2011).

# 2.6.1.3 Academic Advising

Students view academic advising as an important needed service to increase their satisfaction (Khosravi et al., 2013). According to Young-Jones et al., (2013), academic advising is recognized as an effort toward student retention which is vital to student success. Academic advising plays a role in improving student retention at institutions and universities (Tinto, 1975; Tinto, 1993; Hagedorn et al., 2000). According to Bruning (2002), the most important prescription for effective student retention is cooperation and collaboration between the academic and student affairs areas. The results of Bruning's (2002) study demonstrate that the student–university relationship influences student retention. Therefore, quality academic advising can be one of the ways to enhance the relationship between institutions and students. Astin (1993) contended that "next to peer group, the faculty represents the most significant aspect of the student's undergraduate development".

Kraft (2007) and Campell and Campbell (1997) also provide evidence that the number of contacts a student has with a faculty member can have a positive impact on student's persistence toward a degree; such a form of contact might even be informal conversations outside the classroom. According to Frost (1991), there are three reasons for establishing faculty–student relationships from the perspectives of advising coordinators and advisors. First, advising is a service provided to most students that is unlike most other out-of-class activities. Second, advising can provide a natural setting for out-of-class contacts with the involvement of faculty members. Third, advising is concerned with the intellectual matters that are the most important concerns for students. Frost (1991) gave further examples of contact, which can include informal discussions on intellectual issues, values or career concerns, and courses and academic information.

Therefore, the teaching faculty becomes one of the keys to the institution in the delivery of its advising services as a means of improving institutional student retention (McAuthor, 2005). Similarly, from the perspective of Tinto (1993) and Young-Jones et al. (2013), academic advisors can be an important link in the student's overall level of academic integration, promoting student success in higher education.

# 2.6.1.4 Student Retention Programmes

One important factor in student retention is the sense of community that a student develops, so developing student retention programmes would enhance student success, resulting in increasing student retention (Jefferson et al., 2013). Noel-Levitz, a consulting firm specialising in higher education enrolment management, financial aid, and student retention, honoured seven institutions with its 2001 Retention Excellence Awards at the National Conference on Student Retention in New Orleans (Brotherton and Phaedra, 2001). One of the institutions to win the Retention Excellence Award was Central Wyoming College, a two-year institution based in Riverton, Wyo. which had been losing 66% of its students from one year to the next. To improve the situation, the college implemented a retention programme named "Student Utilizing Comprehensive College Educational Services Successfully (S.U.C.C.E.S.S.).

In 1995, the Central Wyoming College received funding of \$1.7 million through a Title III Strengthening Institutions Grant, and a Student Development Task Force (including faculty and student-service staff) was established to develop the SUCCESS programme, a comprehensive retention initiative. The college hired an institutional researcher to identify factors affecting student decisions to drop out. In addition, the college also assessed the need for developmental coursework through seeking to understand degree-seeking students (Brotherton and Phaedra, 2001). The SUCCESS programme implemented a required one-credit, five-week seminar course that seeks to tie together both the campus-services and academic sides of the student experience, and covering campus resources, working with faculty and advisers, and the college's programmes and policies.

According to Brotherton and Phaedra (2001), the retention rate of the school after the first year of the implementation of the SUCCESS programme increased from 33% to 61%, and the same group's retention rate rose to 74% in the fall of 2000. In addition to increasing the retention rate following the implementation of the SUCCESS programme,

the school also experienced a 15% enrolment increase in 2000, while other area colleges experienced a drop or maintained the same enrolment numbers during the same year.

In addition to the initiatives employed by the SUCCESS at Central Wyoming College, Bean (1990) suggested five activities to enhance student retention, as shown in the following table.

Table 7: Student Retention Activities for Increasing Retention

Student Retention Activities	Retention Outcomes
Identifying and admitting students who match the institution's character	Bean (1990) stresses the importance of understanding what prospective students want from an institution and to consider it when recruiting and admitting students.
Offering the courses that students are interested in when they want them and where	Bean (1990) states that course scheduling may be particularly important for nontraditional students and community college students; many of these students may not be able to take courses from nine to five Monday through Thursday.
Dropping any rule and regulation that governs a students' academic and social life that is unnecessary	If students feel unnecessarily controlled by rules and regulations, then they may favor dropping out.
Providing academic support services.	Advising students is an important support mechanism particularly with nontraditional students.
Providing a supportive social environment for students	A supportive social environment is important for traditional students to discover and establish themselves within their new surroundings.

Source: Bean (1990:158)

### 2.6.1.5 Learning Assistance

In order to promote student persistence, institutions and universities offer a wide variety of academic assistance services and resources. Of this, Roberts and Styron (2008:5) state "it is important for institutions of higher learning to implement and maintain various academic resources that promote student success and increase student persistence because these resources are needed by a significant number of students who are not adequately prepared for the academic challenges they will face at the university". Similarly, Kuh (2008) contends that the institutions should implement and promote the usage of responsive, learner-centred support services, such as peer tutoring and special labs to increase student persistence.

Such a learning assistance programme has several purposes. Christ (1971; as cited in Arendale, 2005) identified six of these: (a) helping participating students to earn higher course grades; (b) providing a central location for students to receive tutorial assistance; (c) providing a referral source to other helping agencies; (d) supplying a comprehensive library of basic study aids, (e) acting as a training agency for paraprofessionals, peer counsellors and tutors; and (f) acting as a centre for faculty development. Through the provision of these six types of resources, effective learning support programmes are linked in meaningful ways to student needs, thereby enhancing student retention and graduation rates.

Learning assistance is designed to support students' learning in developmental education and college-credit courses, which are a significant portion of the college degree programme, especially for underprepared students enrolling in college-credit courses. Learning assistance provides a variety of services such as academic tutoring, computer-assisted learning, assessment, advising, and counselling, and serving to turn the institution into the ideal "learning institution" (Perin, 2004). This ensures that the student receives support and makes academic progress as well as undergoing overall development in academic maturity (Tinto, 2006).

Institutions are expected to set student learning goals so that the course, programme or degree offered aligns to the content and level of learning that students are expected to achieve, while at the same time ensuring that the course conforms to the institution's own standards of quality. In addition to setting clear learning goals, institutions should prepare written documents of expected learning outcomes designed for student services activities or learning support activities and provide clear channels of communication among students and faculty (Maki, 2002; Beno, 2004). In determining whether students can achieve the expected learning outcomes, institutions have the responsibility to collect evidence on how well students are learning. Institutions should therefore design appropriate assessment strategies and faculties should employ both formative and summative assessment strategies, such as assessment guides, to assess what students have learned (Beno, 2004).

## 2.6.2 Barriers: Retention

Dennis (1998:2) provides 10 basic premises for enrolment and retention management:

- 1. "There can be no successful enrolment management programme without a successful retention management programme.
- 2. There can be no successful enrolment management programme without faculty involvement.
- 3. An enrolment management programme can market only what the school has to offer. Perception must match reality.
- 4. A school's financial aid programme will significantly affect its enrolment and retention management programme.
- 5. Enrolment management and retention management should stress goals and focus on accountability and measured outcomes.
- 6. No one has established with absolute certainty why students select to enrol, or decide to leave, a school. There are economic, geographic, sociological, psychological, and intellectual reasons associated with enrolment and retention. There can be no perfect programme.
- 7. It should take at least three years to implement a successful enrolment and retention management programme. Fine tuning and refining the programme should be a never-ending and on-going process.
- 8. To be successful, a school's enrolment and retention management programme must match a school's culture and 'personality'.
- 9. A school's enrolment and retention management staff is not solely responsible for the programme's success or failure. Enrolment and retention management is the responsibility of all campus administrators, staff, and faculty.
- 10. There is not a lot of magic to this. If we treat students well, if we make them feel that they are in an educational partnership with us, if we give them the courses they need to graduate and make our costs affordable, they will come to our schools".

With reference to the 10 premises suggested by Dennis (1998), there are also barriers to the implementation of the core attributes of financial aid, orientation, student retention, academic advising and learning assistance in the stage of retention of the SEM.

## 2.6.2.1 Financial Aid

A lack of financial aid may affect a student's momentum to complete his or her degree. Goldrick-Rab (2010:441) has said of the importance of financial aid: "Students who receive financial aid may have characteristics that reduce the likelihood that they will complete college (and vice versa); thus, comparing the persistence of recipients with non-recipients will yield unsatisfactory results". Furthermore, a study by DesJardins et al. (2002) indicated that both the type of aid and the timing of aid may affect student retention; for example, scholarships given earlier during college appear to be more

effective at preventing dropout. In contrast, Dowd and Coury (2006) find that loans taken in the first year have no effect on degree completion (i.e. no effect on the persistence to the second year and no effect on subsequent degree attainment among students within the institution). Dowd and Coury (2006) further revealed that grants and work study had no significant effects, but aid may represent more to students as this may affect student retention. Therefore, an institution may consider providing financial-aid packages, such as need-based and merit-based aid, as a means of significantly increasing retention, rather than continuing to offer loans and grants (Singell, 2004). Students in Pakistan, Thailand and the Philippines faced the largest increase in barriers to education in 2010, experiencing major cuts in financial assistance (Marcucci and Usher, 2011). Figure 3 shows the higher education affordability in 2010 and 2011 in which Hong Kong has made no change in both tuition fees and student aid.

Figure 3: Higher Education Affordability in 2010 and 2011

		Student Financial Assistance Policy			
		Decrease in student aid	No change in student aid	Small increase in student aid	Significant increase in student aid
	Decrease in tuition				
	No change in tuition	Pakistan, Philippines, Thailand	Argentina, Brazil, Colombia, Egypt, Finland, France, Hong Kong, Indonesia, Israel, Italy, Malaysia, Mexico, Poland, Saudi Arabia, Sweden, Switzerland, Taiwan, Turkey, the UK	Chile, China, Germany, India, Japan, Nigeria, Russian Federation, Spain	
Policy	Small increase in tuition	Netherlands, Canada (Alberta)	Singapore, South Africa, Ukraine	Some US states, Korea, most Canadian provinces	Australia <sup>7</sup>
Tuition Fee Policy	Large increase in tuition			Some US states (e.g. California)	Vietnam

Source: Marcucci and Usher (2011)

### 2.6.2.2 Orientation

There is a positive relationship between orientation programmes and students' ability to successfully make the transition to college during their first term of enrolment (Lewis, 2011). According to Gass et al. (2003), the transition to college is a sensitive time when it comes to student retention rates. A poor student orientation programme can cause students to leave the institutions before completing the first year of studies. Programmes that lack a personal, social connection or that treat students as groups rather than as individuals can lead to feelings of alienation among the student body. Therefore, a strong orientation programme that connects incoming students to upperclassmen and professors alike can greatly increase retention rates (Gass et al., 2003).

#### 2.6.2.3 Student Retention

Student retention is as important as part of enrolment efforts as student recruitment (Hossler and Kalsbeek, 2013). Dennis (1998) states that one of the reasons it is so difficult to implement practical and effective retention management practices is that retention management cuts across all campus lines and divisions. It is not possible to have an efficient programme without involving most campus personnel. You can't have a good retention management programme without faculty co-operation and input. There may be some faculties which will resent anyone who is put in charge of a programme that has academics as essential to its success. Finding and appointing the right person to do the job is difficult. When considering this comment, it becomes clear that faculty involvement is one of the key considerations in the delivery of a successful student retention programme.

## 2.6.2.4 Learning Assistance and Academic Advising

Kolenko et al. (1996) addressed the importance of faculty member involvement in the learning assistance centre. Typically, the most critical barrier to the success of a learning assistance programme is the reluctance of faculty members to become involved as they are not willing to commit to service learning given the pressures of balancing publishing and teaching responsibilities. In order to maximize service learning assistance success to foster students in reaching academic growth, Kolenko et al. (1996) also suggest a dedicated faculty member in the learning assistance centre is necessary to execute the learning mission.

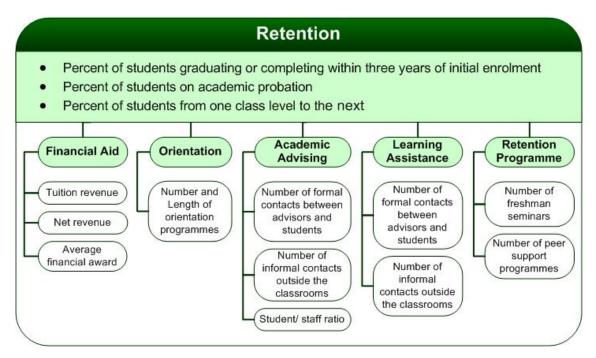
McArthur (2005) confirmed that the challenge to the institution is the connection between quality advising and student persistence. A survey conducted by the American College Testing (ACT) programme and the National Academic Advising Association (NACADA) indicated that "many post-secondary institutions do not capitalize on the benefits of quality advising to improve student achievement" (Young-Jones et al., 2013:8). The greatest difficulty is found in the different meanings of "advising" from the viewpoints of faculty and students. According to Crookston (1994), advising is peripheral to teaching as the central mission of faculty members; it is an additional burden, an extracurricular, nonteaching activity, such that expectations around the functions of the advisors are confusing among academic advisors. Some questions have been raised in relation to the advisor–student relationship by Crookston (1994:5):

"Who takes the initiative in making contacts? Who takes the responsibility for making decisions? What are the limits, controls, and other reality factors that must be understood by both students and academic advisors? What do both parties need to know about each other?"

# 2.6.3 Measurement of Success: Retention

Retention metrics enable an institution to determine its effectiveness and efficiency, as well as to note any improvement or deterioration. The financial aid, orientation, academic advising, learning assistance and student retention are essential as they form the basis for developing retention metrics. By using metrics as key performance indicators, institution can focus sharply on the essential attributes of success in the stage of retention. Figure 4 below gives an overall picture of the relative contribution of these various core attribute measures as predictors of retention.

Figure 4: Retention Metrics



Source: modified from Dolence (1990)

### 2.7 Graduation

In 1995 in the United Kingdom, the national average four-year graduation rate was only 38%, as compared to five-year and six-year graduation rates of 50% and 54% respectively (Money, 1997; as cited in Lau, 2003). Attention to post-graduation aspirations of students is therefore important to many respects of enrolment management. Institutions must ensure that they would provide their students necessary tools and activities to complete their degrees; therefore, making retention and graduation a priority is needed (Kau, 2014).

# 2.7.1 Planning and Implementation: Graduation

Bontrager (2004:12) expressed that "graduation is generally thought of as an ending, when in reality an institution's potential relationship with its students extends far longer after they graduate". Career aspirations are one of the important aspects of determining the student–institution fit in an enrolment decision. It is clear that many students are uncertain of their career goals in the first-year of studying at an institution; therefore, that the institution would assist them in their career identification process is deemed to be an essential factor in ensuring student graduation (Bean 1990). The use of e-mail

accounts to communicate with current students by career services is the most preferred means, so that information about career workshops, seminars would be delivered to all students by means of e-mail (Venable, 2010).

According to Newburger (1999) and Bailey et al. (2006), career service programmes are comprehensive in nature — that is to say, those that combine services and do not offer developmental courses in isolation tend to be more effective, seeking to increase institutional effectiveness and improve student outcomes towards graduation goals. Arrington (2000) addressed the importance of career awareness as the foundation for later successful career planning and exploration. Post graduation activities, student progression and transfer from two to four-year institutions are also contingent for institutions (Zamani, 2001).

#### 2.7.1.1 Career Services

Career centres established at higher education institutions help students in their process of career decision making (Venable, 2010). The importance of career services for students should be understood in the overall context of the mission of the institution and has also been extensively researched. Bejou (2005) also suggested that the school has career services available as one of its top priorities in the graduation stage. The career guidance through career services is essential as well. Arrington (2000) states ensuring all students are provided on-going career exploration activities within their academic curriculum integration can help provide relevance for the students as to how what they are learning now can be related to what they may do in the future. Therefore, the collaboration efforts of counsellors are necessary to work cooperatively with faculty to provide opportunity and support for the integrated career instruction.

Table 8 shows some of the strategies which Heinzen and Rakes (1995) addressed as having been currently in use at Saint Louis University and University of Missouri-Columbia in the States at the time of their study; such services link the career centre services and students, thereby contributing to enhancing student retention and graduation goals.

Table 8: Strategies Linking Career Centre Services and Students in Institutions

	Strategies in Use at Saint Louis University and University of Missouri- Columbia in the States		
Alumni Association Mailer	A one-page letter is written to all admitted applicants from prominent alumni of the school/college in which the prospective student has indicated an interest. This communicates to the student a strong interest in their coming to campus through the words of a successful alumnus.		
Graduate Follow-Up Mailer	This brochure is sent from the Career Centre to all admitted freshmen and transfer applicants. It contains placement statistics for the previous year's graduates to demonstrate with facts that graduates are successful at securing employment after graduation. In addition, this information is disseminated to admissions counsellors and academic departments for the general recruitment of students.		
Alumni Panels	Presentations by alumni have been added to admission's events for prospective students and their parents. Volunteer alumni talk about their on-campus experiences, both in and out of the classroom, present their insights on choosing a major and explain how their education has benefited them in their career.		
Admissions Visits	The career centre staff is also part of large "welcome" sessions held for newly admitted students in area cities.		
Admission Staff Training	Training is provided for admissions counsellors, and is designed to keep them up-to-date regarding career services and programmes, including follow-up data. The staff is also kept informed about current trends in the workplace.		

Source: Heinzen and Rakes (1995:120-121)

In addition to Heinzen and Rakes (1995)'s career services strategies, Arrington (2000) also suggested some strategies used to help implement career awareness, including: curriculum infusion by identifying career competencies to be taught and "folding" them into the academic curriculum; assessment of current career interests with the consideration of family histories, interest inventories, personal narratives; and life skills/personal development in terms of cooperative learning, self-esteem, self-confidence, individual learning styles.

#### 2.7.1.2 Alumni and Articulation

# Post-graduation activities

Bejou (2005) asserted that the graduation ceremony is important to students as this affirms for students that they made the right choice in attending their institution, while at the same time providing them with meaningful recognition for their years of hard work. The research of Palmer and Koenig-Lewi (2008) focused on the relationships that

students develop with their university after their graduation and their findings revealed that there is a positive association between the emotions generated by attendance at a graduation and level of involvement during the student's attendance at the university.

In the post-graduation stage, the students' transition to alumni, the school must maintain contact by developing alumni associations with the implicit or explicit aim of generating sources of financing or sources of future commercial and political influence (Bejou, 2005; Palmer and Koenig-Lewis, 2008). Institutional alumni are one of its most valuable assets in terms of its strategic and social contribution towards the credibility and longevity of the institution (Dumitru et al., 2013). Both the graduation ceremony and alumni associations are essential to students after they have graduated. The alumni relations can be established through activities, thereby establishing a network to connect students and their institutions.

### Articulation and Transfer

Bejou (2005) and Zamani (2001) argued that the institution should provide an articulation pathway and transfer to students making the transition from two-to four-year institutions, allowing them to maintain positive relationships and fostering post-graduate loyalty. As explained by Zamani (2001:16):

"Two- and four-year institutions are often viewed as bridging the gap in baccalaureate degree attainment for many students... ... Academic support professionals at community colleges and senior institutions can address challenges to the transfer function by instituting on-site transfer centres, establishing cooperative admissions agreements, extending outreach activities, clarifying articulation agreements, hosting transfer informational sessions, conducting campus tours, and creating innovative approaches to academic skills acquisition."

Beyond fostering a sense of loyalty to the institution, Bunn (1998) addressed the ways in which the quality of student support services is one of the important factors in the length of time required to graduate. In his study of institutions in North Carolina, Bunn (1998) emphasized that all community colleges in North Carolina have "transfer counsellors" designed to assist students in transferring, contributing towards the excellent graduation rate of the transfer students. Wan (2011) recommended that the Hong Kong SAR Government would expand articulation opportunities for sub-degree graduates such as associate degree or higher diploma graduates, facilitating the development of self-financing degree-awarding institutions and private universities.

#### 2.7.2 Barriers: Graduation

There are barriers to graduation in the areas of career services and articulation and transfer. When implementing a SEM programme, it is necessary to address such barriers and propose remedies to avoid them.

#### 2.7.2.1 Career Services

As explained by Heinz and Rakes (1995:120), "we in career services must move from feeling that enrolment management is not our job to the realization that much of what we already do positively impacts retention and graduation". The involvement of career services must be very proactive and demonstrative. In a similar fashion to academic advising and learning assistance programmes, the participation of staff and faculty is significant to help make students successful learners, both on campus and throughout their work life after they have graduated. One big challenge addressed by Venable (2010:94) is that institutions may need to offer flexible services "to meet students' career development needs with the right mix of technology and human contact".

### 2.7.2.2 Articulation

### Articulation and Transfer

Zamani (2001) found that although two-year community college students intend to transfer to four-year colleges and universities, only 22 percent actually successfully transfer to four-year institutions. Additional studies of this phenomenon have proposed that there are only a limited proportion of two-year institution students who can actually transfer to four-year institutions due to certain barriers (Grubb, 1991). Of this Zamani (2001:16) said, citing McDonough (1997; cited in Zamani, 2001) and Stewart (1988; cited in Zamani, 2001):

"The lack of financial resources is one of many barriers facing community college students who are attending, persisting, and, in some cases, ultimately transferring to four-year institutions. Students coming from low socioeconomic backgrounds are at a disadvantage, as the costs associated with higher education may prohibit even the most talented two-year students from successfully transferring into a baccalaureate degree programme."

Kember (2010) and Wan (2011) also addressed that articulation opportunities for associate degree students in Hong Kong were lacking, so institutions should offer top-up degrees for associate degree students earning their bachelor degree qualification. Therefore, the two-year institution needs to address these issues of the lack of success in the articulation and transfer process.

# 2.7.3 Measurement of Success: Graduation

Graduation rates are in fact tied to the institutional and student profiles, and the rates are as much a function of what the institution is as what it does (Kalsbeek, 2013). The graduation rate for students within 150% of the time in which they would be expected to complete a degree or certificate (i.e. if they took a full-time programme of courses and were academically prepared for college level courses when they began) is the common measure of community college performance (Bailey et al., 2006; Goenner and Snaith, 2004). According to Bailey et al. (2006:493), "the student-right-to-know (SRK) rate is based on an entering cohort of all first-time students who attend full-time when they initially enrol. Students in associate degree programmes are tracked for three years using 150% of the normal time for a 2-year degree. The graduation rate is the ratio of all students who completed a certificate or associate degree at that college within the 150% time period in relation to the total number of students in the initial cohort." Figure 5 outlines the measurement of success in relation to graduation stage of SEM.

Graduation

 Graduation rates
 Student-Right-to-Know rate

Career Services

Uength of career service consultation

Number of consultations

Alumni

Transfer rate

Figure 5: Graduation Metrics

Source: designed by present researcher

# 2.8 SEM as a Process

SEM continues to evolve, expand and be adapted in many new ways (Hossler and Kalsbeek, 2013). SEM is a concept and process that enables the fulfilment of the institutional mission and students' educational goals (Bontrager, 2004). According to Huddleston and Rumbough (1997:3):

"The primary rationale for the development of the enrolment management process is to improve the enrolment environment by enhancing student learning, strengthening academic position, improving student service, increasing market share, enlarging the market, and increasing profitability."

Several authors have addressed the importance of the involvement of faculty and deans in the strategic enrolment management processes (e.g. Dennis, 1998; Henderson, 2005; Braxon, 1990; Tinto, 1993). Henderson (2005:4) has stated of this: "enrolment management cannot succeed unless it is part of the academic fabric of the institution". Thus, SEM is a process for achieving the desired outcomes of the institution, and the process should begin with the support of faculty and dean in fulfilling its institution's mission, followed by the implementation of recruitment, retention and graduation with the integration of core attributes of enrolment management so as to reach the desired institutional goals (Kalsbeek and Hossler, 2008). In addition, SEM is a process that "effectively manages enrolments likely requiring structural change in how various insitution functions are integrated and organized" (Hossler and Kalsbeek, 2013:1).

# 2.8.1 Faculty and Dean Involvement in SEM

Studies in Lundberg (2014:3) confirm that "community college student persistence rate are enhanced by students who felt known and mentored by faculty". Faculty involvement has an impact on campus-wide enrolment management efforts and effective faculty participation should be included in any policy discussion involving SEM. Several studies have been conducted on the impact faculty have in the area of facilitating early transition of new students to the university (Astin, 1993; Dennis, 1998; Hossler et al., 1990; Penn, 1999).

On the topic of encouraging faculty involvement, a 1999 Academic Senate for California Community Colleges paper by the Educational Policies Committee (Patton et al., 2009) presented several principles for effective faculty participation in developing policies and making decisions that affect course offerings. The paper concluded that

"when developing an enrolment management philosophy statement or policy, senates should be certain to include diverse faculty, whose points of view will enrich and improve the decisions" (Patton et al., 2009:27).

Similarly, in an article entitled "Faculty participation: Extending your student recruitment team," written by Bouman, Burcham, and Crains (2005), the authors suggested five faculty participation strategies for encouraging future enrolment of students. The first suggestion was to brief the faculty on the potential benefits of effective faculty involvement in one recruitment activity during weekend recruitment events in which the potential benefits are to encourage future student enrolment. The second strategy is tracking the results of the events. The number of students attending the recruitment activities and enroll at the institution eventually should be recorded and shared among the faculty. This can strengthen the interest of faculty involvement by knowing the tracking results. "Engagement with faculty and collaborative learning outside the classroom are also important contributors to the engagement and learning of community college students" (Lundberg, 2014:2).

Gathering feedback from the faculty is the third strategy to determine what information and training they need so as to tailor the expectations of the faculty. Following the feedback, the fourth suggestion is then to identify the potential faculty who are interested in the recruitment activity and to ask those potential faculty members to participate in the recruitment activity. And finally, recognizing the involvement efforts of faculty who volunteer their time for the recruitment events is necessary. This can be one way to encourage faculty involvement in voluntary activities. Bensimon (2007 as cited in Lundberg, 2014) discovers that the involvement of individual faculty and staff at the community colleges are the primary factors to boost student confidence and hone their academic skills, contributing to student successes as well.

### 2.8.2 The Use of Institutional Research in SEM

It is evident that institutional research is essential in every stage of the SEM programme. The SEM process requires "strategic and empirical research and data analysis to guide its efforts" (Hossler and Kalsbeek, 2013:1). There are several reasons for institutions to initiate research efforts; they are to understand the impact of demographic trends, to assess the institution's positions relative to its competitors, and to evaluate the

effectiveness of programmes and services (Clement and Flannery, 1998). According to Clement and Flannery (1998:98):

"It is important that administrators understand the changing demographics in order to assess the unique positions of their institutions as they plan for the future. ... In the process of determining an institutions' position, it is important to acknowledge that prospective students are likely to differ on one or more important characteristics and [to target] different recruitment strategies to each segment. ... In evaluating the effectiveness of different components of admissions, the two primary goals are to assess students' satisfaction with programmes and services and to understand how programmes and services impact their decision to apply and to enrol."

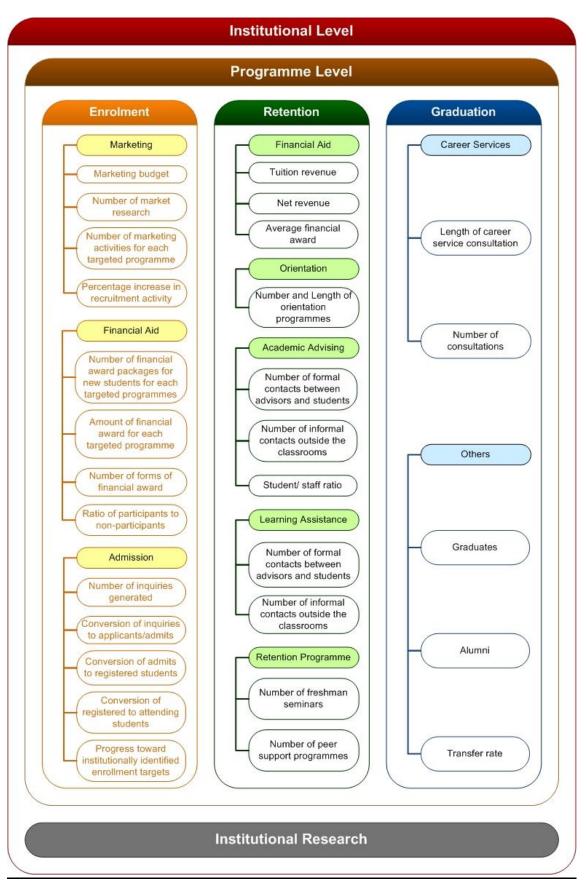
Strategic enrolment management is highly dependent on institutional research so that it can enable institutions to remain sensitive to the marketplace and carefully examine external social trends and internal strengths and weaknesses as they relate to the goal of attracting new students, and students' retention and graduation at the higher education institution (Bontrager, 2004; Huddleston, 2000).

# 2.8.3 SEM Measurement as a Comprehensive Approach

Based on the literature review, the metrics of enrolment, retention and graduation are established and the overall SEM measurement can be developed as a comprehensive approach in the areas of enrolment, retention and graduation with the integration of core attributes of enrolment management.

According to Bontrager (2004) and Dolence (1990), SEM is performance-based and outcomes-oriented, and it requires significant data to determine its effectiveness and efficiency, success or failure, growth or decline as well as improvement or deterioration. As shown in Figure 6, enrolment management relies on metrics that measure the impact of the enrolment management components. These metrics are used to assess the achievement of enrolment, retention and graduation goals, and to benchmark operations and strategies with other institutions. Figure 6 outlines the overall SEM measurement as a comprehensive approach in the primary areas of enrolment, retention and graduation at both the programme and institutional levels.

Figure 6: Strategic Enrolment Management Metrics



Source: designed by present researcher

# 2.9 Goals of SEM

Dixon (1995; cited in Penn 1999:82) has outlined the four goals of SEM as follows:

- (1) "defining the institution's nature and characteristics through the use of objective and subjective methods and marketing them both appropriately and aggressively;
- (2) bringing all relevant campus parties together in the marketing plans and activities around the core institutional goals;
- (3) making strategic decisions about the role and amount of financial aid needed to bring and retain the desired student body; and
- (4) making substantial commitments to people, money and technology to enable plans to be implemented."

In addition, Bontrager (2004) has outlined the core concepts and organizational principles to form the infrastructure of successful SEM as the followings:

- "Establishing clear goals for the number and types of students needed to fulfil the institutional mission.
- Promoting academic success by improving student access, transition, persistence, and graduation.
- Determining, achieving, and maintaining optimum enrolment.
- Enabling the delivery of effective academic programmes.
- *Generating added net revenue for the institution.*
- Enabling effective financial planning.
- *Increasing process and organizational efficiency.*
- Improving service levels to all stakeholders (e.g., prospective and current students, other institutional departments, other institutions, coordinating agencies).
- Creating a data-rich environment to inform decisions and evaluate strategies.
- Creating and continuously strengthening linkages with functions and activities across the campus". (Bontrager, 2004: 9)

With a comprehensive SEM, requiring the integration of core attributes in the stage of enrolment, retention and graduation, the goals of SEM can be achieved within an institution. Wilkinson (2007) further suggests that individuals such as faculty and staff should be involved in the development operational plan so as to achieve the SEM goals. SEM nowadays may be more sustainable rather than strategic due to the rapid changes of the external environment, such that enrolment management leaders should adopt

strategic and sustainable enrolment management in order to reach the SEM goals (Hossler and Kalsbeek, 2013).

# 2.10 Summary of Reviewed Empirical Studies

The reviewed literature provides the concepts and theories in relation to SEM. The literature review addressed past empirical studies regarding issues arising from the planning, implementation and evaluation of SEM in two-year and four-year institutions. Thus, Table 9 provides the foundation for empirical research summarizing different sections of the literature review so as to address the major findings of these empirical studies.

Table 9: Summary of Example Empirical Studies

Reference of Study	Description of Sample	Variables Measured	Major Findings of study
Dolence (1990)	A study of 22 institutions with SEM models	Effectiveness of SEM models	Over half of the enrolment management practices were not being effectively implemented at those institutions. The implementation failure is due to (1) basic design flaws; (2) preconceived ideas that dictated the process; (3) reliance on quick fixes; (4) lack of adequate coordination; (5) inadequate decision making processes; (6) excessive focus on budget; (7) inadequate participation in enrolment management; (8) insufficient link between enrolment management programmes and academics.
Huddleston and Rumbough (1997)	A survey of enrolment management practices at 226 four-year institution	Satisfaction level of SEM	72% of public institutions and 76% of private institutions were either satisfied or very satisfied with enrolment management. However, the retention outcomes had not met expectations with enrolment management operations.
Moore (1999)	A study of SEM in San Diego State University (SDSU)	Effectiveness of SEM	SDSU enrolled 1150 more students in the academic year of 1997/1998 eliminating the need for \$6.2 million state compensation for providing classes and services for their students. As part of SDSU's effort to manage its enrolment in 1996, the SEM plan has received resources and support from business leaders and local organizations.
Gottlieb (2000)	A study of SEM in Rutgers, the largest institution in the State University of New Jersey for	Effectiveness of SEM	Rutgers implemented SEM in early 1990 and has experienced a 31% increase in the number of applications since 1996.

	higher education		
Lobasso (2006)	A quantitative study of SEM models of the 28 Florida community colleges	Evaluation of SEM models	SEM models were new to the four-year institution as SEM practices began in the early-to-mid 1970s. Key enrolment offices, such as Admissions, Records and Registration, Financial Aid, Orientation and Advising were displaced and these key enrolment offices would be incorporated into SEM models as an improvement to existing SEM models. Thus, realignment of related offices was expected to achieve enrolment goals.
Simmons (2007)	A qualitative study of 4 California community colleges	Implementation effectiveness of core attributes of SEM	The implementation of core attributes of SEM was ineffective due to (1) lack of college-wide commitment to enrolment management at the 4 California community colleges; (2) lack of cohesive enrolment planning; (3) inadequate understanding of the importance of retention in enrolment management; (4) lack of integration of the key elements of SEM.
Lee (2010)	A mix-method study to evaluate the implementation of enrolment management at two public universities in the United States	Perceptions of the implementation of SEM at Valley University and Mountain University	Mountain University is found to be more successful than Valley University in the implementation of enrolment management through (1) developing a more successful enrolment management plan; (2) conducting more effective retention programmes; (3) witnessing more developed communication and collaboration practices related to enrolment management.
Hartunian (2011)	A qualitative single-case study to examine factors influencing SEM effectiveness at a four-year university	Factors affecting SEM effectiveness	Factors influencing SEM effectiveness at a four-year public state university were (1) leadership; (2) participation and communication; (3) strategic planning; (4) data analysis and monitoring.

# 2.11 Research Gaps

Based on the summary of past empirical studies, gaps in the literature have been identified and are thus tied to the research objectives of this study. Firstly, the previous empirical research is not comprehensive in looking at all aspects of SEM among different programmes within the same institution from senior and programme management perspectives. Also, previous empirical studies do not effectively identify the barriers to SEM. A comprehensive process on the planning, implementation, and measurement of strategic enrolment management requires successful integration of the

entire associated core attributes for achieving optimum enrolment, retention and graduation goals within an institution. In fact, planning and implementing SEM is challenging in that SEM would be ineffective if it is not properly implemented (Dolence, 1990). Therefore, establishing a SEM programme that includes a successful integration of all of the identified core attributes of enrolment management is significant in this study and should help to achieve optimum enrolment, retention and graduation of students.

Secondly, within the history of the literature on SEM, studies of SEM addressing continuing education institutions in Hong Kong are almost non-existent. This study will help to fill the current gap in the literature on SEM practice at continuing education institutions in Hong Kong. Also, no research evidence is available using a qualitative approach, by investigating the dimensions of SEM from senior and programme management perspectives. The present study is intended to develop an effective approach to SEM from senior and programme management perspectives so as to achieve optimum enrolment, retention and graduation within a continuing education institution in Hong Kong. As there is no evidence in the literature of prior study regarding the integration of core attributes into the SEM process at a two-year continuing education institution in Hong Kong, the results of the study help to contribute new knowledge regarding the delivery of SEM programmes so that other institutions in Hong Kong might learn from the experiences of the institution discussed in the case study.

Thirdly, though the focus of most SEM research is about the implementation of SEM in achieving enrolment and retention goals (Bontrager, 2004; Huddleston and Rumbough, 1997), there are far fewer studies that look critically at the perceptions of success tying SEM to success metrics. This study also fills a gap regarding the perceptions of tying SEM to the success. As a consequence of this, success metrics in the area of enrolment, retention and graduation are required within this research.

Fourthly, according to reviewed literature, there are various barriers in implementing SEM (Abston, 2010; Dennis, 1998; Simmons, 2007), but in Hong Kong, SEM is new to the continuing education sector and there is no evidence of addressing barriers to implementing SEM for Hong Kong's continuing education sector. In order to investigate barriers to a better implementation process, studies on barriers to

implementing SEM in Hong Kong's continuing education sector are necessary in this research.

Fifthly, most research focuses on SEM as a holistic process at institutional level (Dennis, 1998; Dolence, 1993; Henderson, 2005; Huddleston and Rumbough, 1997), little investigation has been done regarding SEM at programme level within the institution and how SEM differs at the programme level and institutional level of a continuing education institution. For example, is there a difference between one programme and another within the same institution? It is also important to look at how the programmes tie into the overall institution (i.e. the relationship between SEM at the programme level and overall SEM at the institutional level). As mentioned by Hossler and Kalsbeek (2013:15), SEM strategies can be used to "balance complex cross-subsidies between and among different populations of students or between and among different academic programmes". Therefore, one important contribution of this research is to identify the difference of SEM among different academic programmes within the same institution from senior and programme management perspectives.

Sixth, there is no evidence in the literature of prior study regarding the use of formal content analysis. This study creates an opportunity to identify possible new dimensions of SEM by employing a formal content analysis methodology, Atlas.ti to develop a comprehensive SEM model that fits for Hong Kong continuing education contexts. Therefore, there is an opportunity to extend the field of SEM by focusing on senior and programme management levels to investigate a continuing education institution in Hong Kong in order to contribute to SEM model building.

#### 2.12 A Model for Looking at SEM Relationships

The model of this study has been built around the idea of a SEM based on a range of leading models and research, and seeks to incorporate an understanding of the core attributes of SEM at each stage of enrolment, retention and graduation, as well as how the essential attributes integrate within the overall framework of the SEM, the challenges being faced during the implementation and the specific measurements of the essential attributes at each stage of the SEM process. The literature review has defined SEM and established a suitable framework with which to examine how SEM can be developed, implemented and measured at institutions in order to achieve institutional goals.

#### **CHAPTER 3 - RESEARCH DESIGN**

The purpose of this chapter is to provide an overview of the research paradigms, research methodology, sampling design and research instrument employed for this study. This chapter comprises two main sections: the first section addresses the reasons for selecting a qualitative method to answer the research questions of this study, while the second section outlines the sample design and details of the data collection process. Ethical considerations and data analysis are also discussed in this chapter.

# 3.1 Research Paradigm

According to Bryman (1992:57), a paradigm is "a cluster of beliefs and dictates which for scientists in a particular discipline influence what should be studied, how research should be done and how results should be interpreted". The two broad paradigms of interpretivism and positivism are different in their philosophical assumptions concerning the concepts of behavior, action, and social reality. Interpretivism emphasizes action, which may be taken as "behaviour with meaning; it is intentional behaviour and as such, is future-oriented" (Cohen and Manion, 1994:36). Interpretivism assumes that social reality is subjective and focuses on the importance of the subjective experience of individuals in creating the social world (Cohen and Manion, 1994). In the interpretive paradigm, "the principal concern is with an understanding of the way in which the individual creates, modifies and interprets the world in which he or she finds himself or herself" (Cohen and Manion, 1994:8).

On the other hand, positivism is an epistemological position that advocates the application of the methods of the natural sciences to the study of social reality and beyond. In the positivist paradigm, "knowledge gained through scientific and experimental research is objective and quantifiable, and reality is therefore stable, observable and measurable" (Merriam, 2001:4). Since positivist research does not tend to explain 'why' and 'how', interpretive paradigm is considered in this study to interpret the views and actual experiences of senior and programme management personnel on the perceived dimensions of SEM. It seeks a deeper and richer understanding of why events occur, accepting that researchers can benefit from dealing with subjective

experience rather than remain restricted to objective, measurable variables. The present approach also examines the views of the senior and programme management personnel towards barriers to implementing SEM and the issue of tying SEM to the success metrics in the selected continuing education institution in Hong Kong. Such views depend largely on certain socially agreed upon and accepted understandings of enrolment management in the context of the continuing education sector in Hong Kong.

## 3.2 Research Methodology

The link between research and philosophy underlying the philosophical traditions helps highlight the unique characteristics of the chosen research paradigm. Qualitative research is commonly associated with the interpretive paradigm which demonstrates "an inductive or theory-generating rather than a deductive or testing mode of an inquiry" (Merriam, 2001:4) and knowledge can be learned by understanding the meaning of the process or experience. On the other hand, quantitative research is often associated with the positivism which is deductive and theory-testing.

The study adopts the interpretive and qualitative approach to investigate the views of senior and programme management personnel of a continuing education institution in Hong Kong in relation to SEM. This study attempts to address the following research questions through the development of standardized semi-structured interview to facilitate the collection of data. The research questions of this study are:

## **Research Questions**

- 1. What are the dimensions of SEM and their differences at programme level and institutional level from senior and programme management perspectives of a continuing education institution in Hong Kong?
- 2. What are the key elements of SEM in different programmes of a continuing education institution in Hong Kong?
- 3. What are the perceived barriers to implementing SEM in a continuing education institution in Hong Kong?
- 4. What are the success metrics of SEM in a continuing education institution in Hong Kong?

The model for this study, shown in Figure 7, has been constructed based on a range of leading SEM frameworks and empirical research in order to answer the research

questions of the current study. The elements in this framework help to address the research questions in the form of: (1) the dimensions of SEM and their differences at programme level and institutional level from senior and programme management perspectives of a continuing education institution in Hong Kong; (2) the key elements of SEM in different programmes in a continuing education institution in Hong Kong; (3) the challenges faced when implementing SEM in a continuing education institution in Hong Kong; and (4) the views senior and programme management in a continuing education institution in Hong Kong have towards tying SEM to the success metrics.

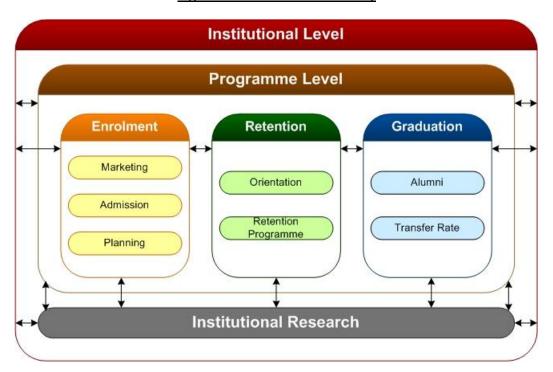


Figure 7: A Model of the Study

Source: designed by present researcher

#### 3.2.1 Qualitative Inquiry

According to Creswell (2002:18), a qualitative approach is:

"one in which the inquirer often makes knowledge claims based primarily on constructive perspectives (i.e. the multiple meanings of individual experiences, meanings socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/ participatory perspectives (i.e., political, issues-oriented, collaborative, or change oriented) or both".

Moreover, a qualitative researcher assumes that the best way of analysing a given situation is to investigate it from the point of view of the people concerned. Qualitative research brings the researcher close to the object of study. Merriam (2009) has said that qualitative research assumes that meaning is embedded in people's experiences and qualitative research takes place in the natural setting to explore a social problem, which "enables the researcher to develop a level of detail about the individual and to be highly involved in [the] actual experiences of the participants" (Creswell, 2003:181). Denzin and Lincoln (1994; as cited in Creswell, 2003) have similarly argued that qualitative researchers are able to study things in their natural setting so as to interpret the meanings of the phenomena which people bring to these objects of study.

In the present study, the researcher is interested in understanding the meanings of socially constructed and actual experiences of the group of senior and programme management personnel from an identified continuing education institution in Hong Kong in relation to SEM; therefore, the present research seeks to involve the participation of senior and programme management personnel in order to determine these individuals' ideas and understanding of the research issues, based on their own experiences with SEM programmes.

According to Schreiber and Stern (2001), a qualitative study is deemed applicable to research in contexts that have not yet received much attention, as well as in cases in which previous research has left significant omissions in such a way that a fresh viewpoint could help to detect areas for intervention in practice. The viewpoint of Schreiber and Stern (2001) applies to this study as the focus of the present research is the consideration of the views and experiences of senior and programme management personnel in relation to SEM, and to investigating the planning, implementation, measurement and barriers to developing SEM in a continuing education institution in Hong Kong.

One of the primary reasons for choosing a qualitative approach is the qualitative nature of the issues under study. Creswell (1998) has emphasized that a qualitative topic of inquiry is necessary as a rationale and compelling reason for choosing a qualitative research approach. According to Creswell (1998:17):

"In a qualitative study, the research question often starts with a how or a what so that initial forays into the topic describe what is going on. This is in contrast to quantitative questions that ask why and look for a comparison of

groups or a relationship between variables, with the intent of establishing an association, relation, or cause and effect."

Creswell's claim is also recognized by Lichtman (2006). Lichtmann (2006:11) argues that qualitative research is holistic, meaning that it "involves the study of a situation or thing in its entirety rather than identification of specific variables".

This research adopts a qualitative analysis with the integration of the collection of both kinds of data to answer the research questions. This research relies on a qualitative methodology using Atlas.ti for a number of reasons. First, SEM is a complex process and procedure. Through a comprehensive study of a continuing education institution in Hong Kong, a qualitative approach provides "a wealth of detailed data about a small number of cases through direct quotation" (Patton, 2002:15). Second, a qualitative study provides "a complex, holistic picture through a narrative that takes the reader into the multiple dimension of a problem or issue and displays it in all its complexity" (Creswell, 1998:17).

The 20 in-depth interviews were carried out to conduct a deep investigation of the dimensions of SEM, differences of SEM at programme level and institutional level as well as at different programmes, barriers, and success metrics of SEM from senior and programme management perspectives.

# 3.2.2 Qualitative Data Analysis Software

The Atlas.ti qualitative data analysis software was used in this study. It employs the Notice-Collect-Think (NCT) method of analytical software for the study of large bodies of textual, graphical, audio, and video data. In addition, Atlas.ti offers a variety of functions for accomplishing the tasks associated with any systematic approach to unstructured data — meaning data that cannot be meaningfully analysed by formal statistical approaches. In this study, the use of Atlas.ti helps the researcher to analyse interviews for meaningful themes, characteristics, and descriptions. Atlas.ti is a codebased programme which enhances the capacity to establish text-defined codes in order to make connections among different codes, thereby developing higher-order classifications and categories (Friese, 2011).

According to Friese (2011), Atlas.ti proposes a method for computer-assisted data analysis using the process of noticing, collecting and thinking (NCT). Of this method,

Friese states: "Researchers begin with noticing things in the data once they have an idea for a label; they begin to collect what they notice in the form of codes" (Friese, 2011:3). However, the focus of this method is not on the entire research process but rather on data analysis. This programme allows the researcher to collect and organize text files by adopting coding, memos and findings into a single hermeneutic unit (HU).

# 3.1.2.1 The Use of Atlas.ti Software in the Higher Education Sector

Scales and Lindsay (2005) have conducted a qualitative assessment of student attitudes toward information literacy by analysing the text of selected student assignments with the use of Atlas.ti so as to explore the students' attitudes. Atlas.ti is one of the leading powerful and widely used commercial computer-assisted qualitative data analysis software tools (CAQDAS) used by research academics in the global aspect for analyzing textual, graphical and multi-media data (Friese, 2011). Ghedin and Aquario (2008) investigated the issue of teaching evaluation in higher education by performing qualitative analysis using Atlas.ti and the results were affirmative.

# 3.1.2.2 Use of formal computerized content analysis programmes in SEM research

The Atlas.ti qualitative data analysis was used in this SEM research which is a formal computerized content analysis programme and the concept of saturation is applied in content analysis. In fact, the vast majority of other qualitative SEM research has not used computerized software to analyze interviewee responses, relying more on "ad hoc" classification schemes. For example, both Simmons (2007) and Hartunian (2011) conducted qualitative research studies on SEM but without employing modern computerized content analysis software to analyze interviewee responses; to date, computerized content analysis software has not been used in prior qualitative SEM studies. Thus, this research makes a contribution to the literature as formalized content analysis is employed in this SEM research.

#### 3.1.2.2 An innovative approach of extending the usage of Atlas.ti Version 7.0

Friese (2011) stated Atlas.ti offers a process of noticing, collecting and thinking (NCT) for researchers by beginning with noticing things in the data; once they have an idea for a label, they begin to collect what they notice in the form of codes. Furthermore, all

reviewed literature can be named specifically within the programme under the in-text citation format, e.g., Friese (2011) instead of the full title of individual literature. Upon completion of the literature review process, the quoted texts, together with the researcher's comments and memos from literature under the same construct will be sorted and output in a text format file which can be read compatibly by Microsoft Word. All these assist the researcher in searching through folders and files for the required information. These measures of efficiency and convenience make qualitative research studies easier, more explicit with better credibility and validity. Since this entire study is adapting the qualitative approach, Atlas.ti Version 7.0 is considered to be deemed appropriate.

# 3.3 Sampling Design

## 3.3.1 Purposeful Sampling

Purposive, or purposeful, sampling is considered to be the most appropriate sampling strategy for this research. In the words of Yin (2011:122), "the samples are likely to be chosen in a deliberate manner known as purposive sampling, and the goal or purpose for selecting the specific study units is to have those that will yield the most relevant and plentiful data, given your topic of study". The participants of this study are sampled purposefully and underwent a semistructured interview.

The researcher may consider using any of the sampling strategies that have been identified by Miles and Huberman for sampling (1994; as cited in Creswell, 1998). According to Creswell (1998), in a qualitative study the researcher requires clear criteria in mind and needs to provide rationales for their sampling decisions. Miles and Huberman (1994; as cited in Creswell, 1998) identified the typology of 16 sampling strategies for purposeful sampling. The researchers may choose several options of typology to explain their sampling decisions. In this study, five of these have been selected to explain the sampling decisions. The typology of the five selected strategies for purposeful sampling is presented in the following table.

Table 10: Typology of Sampling Strategies in this Research Study

Type of Sampling in this Research Study	Purpose
Critical case	Permits logical generalization and maximum application of information to other cases

Typical case	Highlights what is normal or average
Stratified purposeful	Illustrates subgroups and facilities comparisons
Criterion	All cases that meet some criterion; useful for quality assurance
Maximum variation	Documents diverse variations and identifies important common patterns

Source: partially extracted from Creswell (1998:119)

## 3.3.2 Sampling Strategy

According to Jones et al. (2006), identifying sampling criteria is essential for the sampling selection. The sampling criteria can include associated variables, characteristics, qualities, and demographics that are most likely related to the purpose of the study so as to construct a meaningful sample. Given this, the sampling strategy should meet the purposes of the research study at hand and address the primary research questions.

When choosing appropriate research participants to be studied, the first consideration should be to determine a number of selection criteria and to justify the reasons why these criteria are regarded as important. As purposeful sampling is to be selected for the present research, the selection criteria are based on the typology of the selected strategies for purposeful sampling as advanced by Miles and Huberman (1994; as cited in Creswell, 1998). Marshall (1998) further states that this qualitative sampling techniques ensures a broad range of opinions and the utility of the study depends not only on the generalisability of the results but can also provoke readers to compare their own experience with that of the participants.

#### 3.3.3 Senior and Programme Management as the Participants in this Study

While some research studies look at student responses in SEM, another important line of SEM research exclusively examines management personnel responses to gain a deeper understanding of this perspective; they are individuals who are involved and committed to the enrolment management planning process in the institution for achieving the institutional mission and goals (Snowden, 2013; Hartunian, 2011; Kraft, 2007). This study is important to the leadership of the institution as the findings of the study will provide insight into 2-year continuing education to plan, implement and evaluate an effective SEM programme. Therefore, the study may serve as a guide to

other senior management personnel of higher education institutions in Hong Kong to understand the scope of SEM programmes and the success metrics needed to achieve the institutional mission and goals.

## 3.4 A Critical and Typical Case

This study meets the criteria for the critical and typical case rationale. The identified site is a Hong Kong local continuing education institution that mainly provides for both full-time and part-time students, namely, the School of Professional Education and Executive Development (SPEED) which has been selected as the case for investigation in this study. SPEED has been selected as the single institution for this study because it has the largest intake of students among all of the self-financed accredited undergraduate programmes offered by the local continuing education institutions under the umbrella of different universities in Hong Kong. Using SPEED as the single case can be described as what Creswell (1997) called a critical and typical case. This may "permit generalization and application" (Creswell, 1998:118) to other institutions in relation to the implementation of SEM in Hong Kong's continuing education sector. The findings or results from the single study allow a process of analytic generalization (Yin, 2009), and in-depth single case studies are common in modern SEM studies. According to Yin (2009), analytic generalization involves the two-step process. The first involves a conceptual claim whereby investigators show how their case study findings bear upon a particular theory, theoretical construct, or theoretical (not just actual) sequence of events. The second involves applying the same theory to implicate other, similar situations where analogous events also might occur. All research takes place in the form of single studies" (Yin, 2009:43). In the case of the present study, analytic generalization implies that the results of the present study will be applicable to other similar continuing education institutions in Hong Kong. The significance of using a critical and typical case depends not only on the study's findings but also provide broader implications of the findings to the extent that the findings can be generalized to other situations.

#### 3.4.1 Site Selection and Access

The primary data source was from a Hong Kong local continuing education institution, namely, the School of Professional Education and Executive Development (SPEED).

SPEED is a local continuing education institution that mainly provides top-up degree programmes for both full-time and part-time students. According to its official mission statement, SPEED is committed to providing lifelong education opportunities for people with different educational needs in order to help them acquire higher qualifications. SPEED has been selected as the institution for this study because it has the largest student enrolment among all of the top-up degree programmes offered by Hong Kong's local continuing education institutions.

According to the statistics from the Education Bureau of 2011, the top three intakes of the total 34,888 (100%) student enrolment for these universities in the academic years of 2010-11 were 5,592 (16.03%) by SPEED, 4,595 (13.17%) by the School of Continuing and Professional Education (SCOPE), the City University of Hong Kong, 3,007 (8.62%) by the College of International Education and School of Continuing Education, the Hong Kong Baptist University respectively. The significant increase in the intake by SPEED in the last ten years can also justify the selection, i.e. from 273 (4.68%) within the total of 5,831 students (100%) in 2001-02 to what it got in 2013-14. It should also be noted that colleges offering incomplete progression paths leading to undergraduate programmes are precluded from the selection criteria as they will not reflect an entire SEM profile, even they are also a major part of the above intakes (Education Bureau, 2011).

#### 3.4.2 Stratified Purposeful and Maximum Variation

Maximum variation works as a strategy to represent diverse cases to fully display multiple perspectives about the cases, and sampling works well when all individuals studied represent people who have experienced the phenomenon (Creswell, 1998); that is to say, all participants should meet the criterion of having experienced the phenomenon under study. Another criterion concerns the nature of the work. As SPEED is organizing top-up degree programmes, the programme leader and programme officer from each respective programme were selected as the participants. Their participation in this study was meant to display multiple perspectives on the development and implementation of SEM at different programme levels within this institution. All the selected participants carried considerable responsibilities related to the development of strategic planning and enrolment management. These individuals are working in positions at the academic, administrative, and managerial levels of a

continuing education institution in Hong Kong and who had regular personal and professional interaction (Marshall, 1998).

In the case of the sample respondents in the pilot study, their positions require them to execute the duties of a primarily managerial and administrative nature. The senior management personnel of this continuing education institution in Hong Kong help to strategically plan the development of enrolment management. In contrast to the administrative staff, they are responsible for administering and marketing the enrolment, retention and graduation issues of an institution.

## 3.4.3 Willingness of the Respondents

The final sampling consideration is the willingness of the respondents to participate in the research study. Participants were invited for an in-depth individual interview which would last for a minimum of one and a half hours.

# 3.4.4 Sample Respondents

Once the sampling criteria have been identified and the sample size given consideration, the researcher must determine how to locate participants who meet the criteria. The sample of this research study is of a small size, comprising 1 Dean, 1 Cluster Head (Business), 1 Director, 2 Deputy Directors, 1 Programme Director, 5 Programme Leaders, 1 Scheme Leader, 3 Award Leaders of the top-up degree programmes and 5 respective programme managers from an identified continuing education institution in Hong Kong. Two management personnel (i.e. 1 Head of ITU and 1 Programme Leader) were selected to carry out the pilot in-depth study to verify whether it was possible to obtain the required data in the main study. Data analysis of the 20 qualitative transcribed documents was performed by means of Atlas.ti version 7.0.

As can be seen from the list given above, the sample of the present study is of a small size, comprising a total 6 senior management personnel and 14 programme management personnel from a continuing education institution in Hong Kong. However, this does not necessarily limit the applicability of the study. According to Patton (2002; as cited in Jones et al., 2006:70), "there are no rules for sample size in qualitative inquiry". This is typically offered as the strongest rationale for a small sample size that one can

provide. Patton (2002:244) continued by explaining that the appropriate "sample size depends on what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources". We can see from Patton's (2002) statement that it is vital to address the significance of the research study in order to decide on an appropriate sample size.

The significance of this research study is primarily the determination of the perceived dimensions of SEM from the perspective of senior and programme management personnel, as well as assessment of how SEM can be established and implemented successfully within an identified continuing education institution in Hong Kong. In addition to this goal, the study also seeks to examine the perspectives of senior and programme management towards the issue of tying SEM to success metrics. Therefore, it is necessary to understand in-depth the views, perspectives and actual experiences of senior and programme management personnel in relation to SEM; this establishes the intent of the present study. However, on the other hand, the minimum sample size, suggested by Patton (1990:186) should be "based on expected reasonable coverage of the phenomenon given the purpose of the study" to answer the research questions posed at the beginning of this study.

#### 3.4.5 Saturation

The sampling size decision is also associated with the concept of saturation. Marshall (1998:442) indicated that "sampling ceased when categorical and theoretical saturation was achieved". The concept of saturation relates to the point at which increasing the sample size will not result in the provision of any additional data. The saturation theory from Marshall (1998) indicates that a decision can be made on the part of the researcher to discontinue the sampling process once the themes or categories have become saturated. Saturation actually occurs when the inquirer begins to collect the same or similar kinds of information or data in relation to the corresponding categories of research being studied. As further explained by Lincoln and Guba (1985; as cited in Yin, 2009:121), sampling can be continued up until "the point of redundancy.... In purposeful sampling the size of the sample is determined by informational considerations. If the purpose is to maximize information, the sampling is terminated when no new information is forthcoming from new sampled units; thus redundancy is the primary criterion".

In this present study, the sample size of 20 was considered to be appropriate for employing the qualitative study approach in the form of individual in-depth interview as a means of collecting the required qualitative data for this study. The rationale for this sampling size is that it is able to maximize the data and information through specifying a minimum sample. This approach has also been further supported by Patton (2002): namely, Patton (2002) argues that the qualitative sampling decision specifies the foundation of a minimum necessary sample size as being based on the expected reasonable coverage expected to be attained from in-depth study of the phenomenon. In the present case, the sample size of 20 interviewees may be justified for its representativeness in addressing the research problem of the implementation effectiveness of SEM in a continuing education institution in Hong Kong as viewed from the perspectives of senior management personnel in the form of academic and administrative staff.

#### 3.5 Research Instrument

According to Lichtman (2006), interviewing is the most common form of data collection in qualitative research. In-depth interviews, which facilitate the gathering of rich qualitative data, are particularly suitable for this research study. Qualitative interviewing helps to reconstruct events that the researchers have never experienced so as to create portraits of complicated processes by putting together descriptions from separate interviewees (Rubin and Rubin, 2012).

As SEM has not yet been well-developed and implemented in Hong Kong, there is a concern that research participants may simply give socially desirable responses to their views of SEM in the continuing eduction sector in Hong Kong. Thus, the use in-depth interview may enable the collection of a richer set of data to address the dimensions of SEM from the senior and programme management perspective, as well as to determine how SEM can be developed successfully through tying SEM to success metrics in the Hong Kong context. For these reasons, the present study employes qualitative interviewing to engage in conservations with the participants for a purpose. In-depth interviewing with the senior and programme management personnel at this institution in Hong Kong is expected to provide rich data and fruitful discussion about the perceptions of the characteristics of effective SEM at programme level and institutional level and in different programmes as defined in the relevant literature.

#### 3.5.1 Interviews

The use of interviews complements the adoption of a qualitative single case study to obtain the descriptions and interpretations of research participants regarding a phenomenon (Stake, 1995). Yin (2011) has also stated that doing qualitative interviewing is the primary mode of interviewing in qualitative research projects, and differs from the type of structured interviews employed in other types of research for a number of reasons. First, as there is no standard or uniform questionnaire with a complete list of questions to be posed to a participant, the researcher can, in the overall context of the goals of the focus of the study, address specialized verbal questions to any participant based on the context and setting of the interview. This allows the researcher to obtain varied interpretations and descriptions regarding a phenomenon from different participants' perspectives.

Moreover, the use of qualitative interviews allows the researcher to adopt a conversational mode so that he or she would lead the interview using social relationships that are individualized to every participant (Yin, 2011). In addition, it is also important that the questions used in a qualitative interview be open-ended questions rather than closed-ended questions, such that participants would elaborate on their responses by providing in-depth information based on their perspectives (Rubin and Rubin, 2012).

In the present study, data from the interviews was transcribed by a professional transcriptionist, and the transcribed data was managed using the software Atlas.ti. Coding was then established based on the data synthesized to categorize similar themes so that similarities and differences were highlighted.

# 3.5.2 Semi-structured Interviewing

In general, unstructured and semi-structured interviewing are the two common types of interviewing employed when conducting in-depth interviews. Semi-structured interviews will be conducted in the present study with the senior management personnel of an identified continuing education institution in Hong Kong. For Creswell and Yin, semi-structured interviews are preferred in a qualitative case study research (Creswell, 1998; Yin, 2009). In semi-structured interviewing, "the researcher has a specific topic

to learn about, prepares a limited number of questions in advance, and plans to ask follow-up questions" (Rubin and Rubin, 2009:31). This type of interviewing enables the researcher to focus more narrowly on the planned items that speak to the research question.

During the semi-structured interview, basic conceptual questions were asked at the first stage to allow participants to reflect on their personal understanding of the perceived characteristics of SEM, and then to critically evaluate their own perceived dimensions of SEM and how SEM would be developed and implemented and measured with respect to interviewee's actual experiences in relation to enrolment, retention and graduation issues.

Semi-structured interviewing also allows researcher to adopt a responsive interviewing style that allows for more flexibility in responding to the emerging views and thoughts of the participants in relation to the phenomenon of interest. In short, semi-structured interviewing allows for extended conversation between researcher and interviewee (Rubin and Rubin, 2009).

#### 3.5.3 Interview Guide

Two sets of interviews guide were prepared in this study; one set was for senior management level and the other set was for programme management level. The interview guide included all of the questions or issues to be explored during the interview; this guide also helped to adopt a standardized and uniform process for use in the semi-structured interview format. This helped the researcher to bring up questions of importance that occur to them during the interview process, allowing the flexibility to obtain responses from and perspectives of the senior management participants as relevant issues arise.

The interview guide consisted of five themes. The participants were asked about their demographic background, mostly focusing on their working experience, involvement in strategic planning in the selected continuing education institution, and so on. The second section and onwards were based on the following questions. The detailed interview guide is presented in Appendix III.

- 1. Dimensions of SEM in a continuing education institution in Hong Kong from the senior management point of view:
  - Why do students come to us? Why do others choose not to?
  - What kinds of students are we interested in attracting? Is this what we get?
  - Where can we find these students?
  - Do you know the institution's enrolment goals?
  - What is your understanding of the purpose of strategic enrolment management?
  - Can you define strategic enrolment management for your institution based on your understanding?
  - What are some of the key areas or components?
  - In what specific ways do you think that the strategic enrolment management is effective and aligned with the institution's strategic plan?
  - What elements made SEM effective? Why?
  - What are the barriers to an effective SEM? Why?
- 2. Different SEM at the programme level and at the institutional level of a continuing education institution in Hong Kong:
  - Is the school's enrolment optimal? Why?
  - What could the institution do to better recruit and retain students?
  - Is the enrolment of the programme(s) for which you are responsible optimal?
     Why?
  - What could the programme(s) for which you are responsible do to better recruit and retain students?
  - Which programme(s) is/are the most successful in terms of student enrolment?
     Why?
  - Is/are the successful programme(s) more dedicated to enrolment activities?
  - What percentage of your students completes their degrees at your institution? At the programme(s) for which you are responsible?
  - How can you graduate a higher percentage of our students at your institution?
     At the programme(s) for which you are responsible?
- 3. The barriers to implementing SEM in a continuing education institution in Hong Kong:

Enrolment

- What enrolment problems has the programme had in the past?
- How did the institution respond to the problems?
- What are the current pressing enrolment problems? Why?
- What external factors will affect enrolment for the programme for which you are responsible? Why?
- What are the barriers to implementing enrolment programmes and activities at your programme? Why?

#### Retention

- What retention problems has the programme had in the past?
- How did the institution respond to the problems?
- What are the current pressing retention problems? Why?
- What external factors will affect student retention for the programme for which you are responsible? Why?
- What are the barriers to implementing retention programmes and activities at this programme? Why?

#### Graduation

- What graduation issues has the programme had in the past?
- How did the institution respond to the problems?
- What are the current pressing graduation issues? Why?
- What external factors will affect student graduation for the programme for which you are responsible? Why?
- What are the barriers to implementing graduation programmes and activities at this programme? Why?
- What role does the senior academic management play in enrolment management?
- What role do the senior administrative personnel play in enrolment management?
- Are there sufficient research and data analyses to support enrolment management initiatives?
- Is there understanding and support for the enrolment management programme by senior management personnel?
- 4. Perceptions of tying SEM to the success metrics from the perspective of senior management in a continuing education institution in Hong Kong
  - From your understanding, how do you measure the components of (1) enrolment (2) retention (3) graduation based on the core attributes as listed?

# 3.5.4 Pilot Study

To pre-test the interview, a pilot study was carried out to verify whether it would be possible to obtain the data required in the main in-depth case study and main questionnaire survey. Bell (1993) mentioned that a pilot study can aid in the design of

the final interview, including the length of time required, the clarification of instructions and questions, and other comments or suggestions.

In this study, two management personnel (i.e. one Head of ITU and one Programme Leader of Business Management) were selected to carry out the pilot in-depth study to verify whether it is possible to obtain the required data in the main study. The above process was first piloted in a set of two interviews in April 2013 to test the data collection method and the prepared interview questions. The pilot study was undertaken through individual interviews associated with an interview guide to address the research questions of this study. Each interview lasted for approximately two hours.

At the end of each interview, the participants were asked to provide their feedback and comments on the piloted interview as a whole, including the interview guide, and the process of conducting the interview. They were also requested to suggest ways to improve each and every aspect of the interview so as to facilitate the interviews to be conducted in the main study. One participant suggested that the definition of SEM should be written in the interview guide so that each interviewee could refer to the interview guide regarding the theoretical meaning of SEM when necessary. Another participant suggested that the interviewer could ask more follow-up questions, such as "why do you say that?" or "how to achieve that?" in order to gain more in-depth information of the subject. Both participants commented on the way some of the questions should be re-phrased.

Based on the comments and feedback from the two participants in the pilot study, the interview questions were improved and fine-tuned, and were used in the main research for collecting in-depth qualitative data. The latter stage of the research was achieved by conducting 20 individual, face-to-face in-depth interviews. The interview process was both taped and recorded manually to facilitate transcription.

#### 3.5.5 Interview Schedule

The individual, face-to-face in-depth interviews were scheduled during May 2013 to July 2013; thus, 20 individual in-depth interviews were conducted with the senior and programme management involving academic and administrative personnel.

The interviews were pre-arranged, and it was agreed that they were each to last for approximately two hours. It was also agreed in advance that the individual interviews

were recorded and transcribed. The purpose of these interviews is to give the researcher insight into the current issues of strategic management in the selected continuing education institution, including the challenges and difficulties faced, the current strategic model being used and how closely the strategic model matches the intended characteristics of SEM. The interviews were conducted in Chinese (Cantonese) for data analysis and selected codes were finally translated into English for the purposes of this research. Table 11 shows the interview schedule of the research participants.

Table 11: Interview Schedule of Research Participants

Respondent	Post Held/ Job Title	Interview Schedule
Participant 15	Dean	May 2013
Participant 5	Cluster Head (Business)	May 2013
Participant 16	Director	May 2013
Participant 8	Deputy Director (Local Programme)	June 2013
Participant 2	Deputy Director (Overseas Programme)	June 2013
Participant 1	Programme Director	June 2013
Participant A	Head of ITU (Pilot Study)	Done in pilot study
Participant B	Programme Leader (Pilot Study)	Done in pilot study
Participant 4	Programme Leader	June 2013
Participant 3	Programme Leader	June 2013
Participant 13	Programme Leader	June 2013
Participant 12	Award Leader	June 2013
Participant 6	Programme Leader	June 2013
Participant 20	Scheme Leader	June 2013
Participant 18	Award Leader	June 2013
Participant 10	Award Leader	June 2013
Participant 9	Award Leader	July 2013
Participant 11	Programme Leader	July 2013
Participant 17	Marketing Coordinating Manager	July 2013
Participant 7	Programme Officer	July 2013
Participant 14	Programme Manager	July 2013
Participant 19	Marketing Manager	July 2013

#### 3.5.6 Documents

Documents were used to provide examples and supplement the interview content analysis. According to Yin (2009), case studies must be based on six different sources of evidence which are (1) documents (2) archival records (3) interviews (4) direct observation (5) participant observation and (6) physical artifacts. "Documents refer to a wide range of written, visual, digital and physical material relevant to the study at hand" (Merriam, 2009:139). The documents reviewed for this study include the School prospectuses, marketing materials, School website and School Newsletters from the past

four years (See Appendix XII). By obtaining these documents, the researcher was able to identify themes or categories that are either confirmed or contradicted by the participants. As supported by Yin (2009:103), "for case studies, the most important use of documents is to corroborate and augment evidence from other sources". Documents collected would provide evidence of existing SEM variables; thus, the collected documents were thoroughly reviewed and analysed in order to supplement the interview content analysis. Moreover, analyzing documents would assist in the data triangulation. "Increasing rigor and trustworthiness of the findings from qualitative data is accomplished through using more than one type of analysis" (Leech and Onwuegbuzie 2007:575). In this research, in-depth interviews and relevant documents were used for data analysis to "strengthen the rigor and trustworthiness of the findings via methodological triangulation (i.e. consistency among qualitative analytic procedures)" (Leech and Onwuegbuzie, 2007:575).

#### 3.6 Criteria for Judging the Quality of the Research Design

The quality of research designs should be judged on the basis of trustworthiness, credibility, confirmability, and data dependability (Yin, 2009). There are four tests commonly used to establish the quality of any empirical research. As a case study research is regarded as a form of empirical research, these four tests are appropriate to judgments regarding the quality of case studies. The four tests recommended by Kidder and Judd (1986; as cited in Yin, 2009) are summarized as follows:

- *Construct validity*: identifying correct operational measures for the concepts being studied
- *Internal validity*: seeking to establish a causal relationship, whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships
- External validity: defining the domain to which a study's finding can be generalized
- *Reliability*: demonstrating that the operations of a study such as data collection procedures can be repeated with the same results.

In this present study, as the researcher is not going to establish a causal relationship, or this research is not explanatory to investigate how and why event x led to event y; thus, internal validity is not suitably applicable as a criterion for judging the quality of this

research study. Therefore, three tests are to be discussed to ensure the quality of this empirical research in the form of validity and reliability.

#### 3.6.1 Construct Validity

To ensure correct operational measures for the concepts being studied as part of a case study research, establishing and maintaining a chain of evidence during the data collection process is encouraged so as to increase construct validity. In this study, the chain of evidence is relevantly established by means of inviting senior management personnel, in the form of academic and administrative staff, to provide in-depth information in relation to their views of SEM within an identified continuing education institution in Hong Kong.

#### 3.6.2 External Validity

To deal with the problem regarding the generalization of the research findings, external validity has to be considered to ensure the quality of the empirical research. Yin (2009:43) stated that "critics typically state that single cases offer a poor basis for generalizing".

To address this concern, however, the findings or results from the single study are to follow a process of analytic generalization (Yin, 2009). In the process of analytic generalization, the researcher should try to generalize a particular set of results to some broader theory. Analytic generalization involves a two-step process: The first step is to allow the researcher to show how the research study is likely to inform a particular set of concepts and theoretical constructs; the second step is to show how the same theory can be applied to similar situations elsewhere. Theories about transition to other situation become the domain, such that the results of the study can be generalized (Yin, 2009). In the case of the present study, analytic generalization implies that the results of the present study will be applicable to other similar institutions in Hong Kong.

#### 3.6.3 Reliability

Reliability relates to the quality and appropriateness of the inquiry process (Neuman, 2006). The objective of reliability is to ensure that a later researcher following the same

procedure developed by the earlier researcher will be able to arrive at the same findings and conclusions when conducting the same case study all over again (Yin, 2009). For these reasons, the researcher should ensure a consistent, reasonably stable process during the data collection and analysis (Miles and Huberman, 1994; as cited in Jones et al., 2006). To increase the reliability of this study, a case study protocol can be considered in this study. The case study protocol contains the instrument, as well as the procedures and general rules to be followed, which are intended to guide the researcher in carrying out the data collection.

# 3.6.4 Triangulation

Creswell (1998:132) suggests that validation strategies must be employed to "attempt to assess the accuracy of findings". Jones et al. (2006:121) further supported Creswell's words by using the strategy of "triangulation to ensure the interpretations are credible". This takes place through the adoption of multiple methods to confirm findings (Jones et al., 2006). For example, this can be achieved by member checking via recycling of the emerging analysis and conclusions back through at least a subsample of the original participants.

In order to validate this research study, member checking was be adopted by selecting a subsample of the research participants right after the data analysis stage in order to reconfirm the information and findings provided during the interviewing stage. Doing so would ensure the validity of these findings. Moreover, utilizing more than one type of source (i.e. documents) was also implemented in order to triangulate which is a means of "improving the rigor of the analysis by assessing the integrity of the inferences that one draws from more than one vantage point" (Leech and Onwuegbuzie, 2007:579).

#### 3.7 Ethical Considerations

The researcher must be able to understand the ethical principles at stake in carrying out research. According to Smith (1990; as cited in Jones et al, 2006:155), the meaning of ethics in qualitative research:

"[has] to do with how one treats those individuals with whom one interacts and is involved and how the relationships formed may depart from the conception of an ideal. At a commonsense level, caring, fairness, openness, and truth seem to be the important values undergirding the relationships and the activity of inquiry".

The ethical considerations in this present research have mainly been addressed in the form of informed consent and data confidentiality to simplify compliance with the expectations and procedures stated as recommended under Human Subject testing protocols in Hong Kong.

# 3.7.1 Informed Consent

In this study, informed consent was sought to establish a trusting environment within which the participants will feel comfortable to discuss their experiences. The aforementioned senior management of the selected continuing education institution had the aims of the study and any associated potential risks for them with respect to participation explained to them. Furthermore, the researcher explained to these individuals how the confidentiality and identity of participants in the study and the collected data from them was protected.

The ethical issues discussed above were mentioned in the interviews in both the pilot and main study. An informed consent form was provided to participants to seek their willingness to participate in the study before the commencement of the in-depth interview, thereby ensuring confidentiality and anonymity (See Appendix II). By signing the statement of informed consent, the researcher met the obligation to inform participants of the nature of the study and their involvement within the research. Additionally, by signing the informed consent form, the participant indicated that he or she agreed to participate in the audio-taped in-depth interview.

#### 3.7.2 Data Confidentiality

The ability to maintain the confidentiality of research participants is also one of the ethical considerations of the present study. According to Jones et al. (2006:155), "confidentiality refers to the treatment of information that an individual has knowingly disclosed in a research relationship with an expectation that this information will not be disclosed to unauthorized parties without consent". Ensuring data confidentiality

guarantees to the respondents that the information that they have provided in the research context was not shared.

To ensure further confidentiality, a code was assigned to each transcript being taped and recorded so as to protect the participants. The words and quotations of participants used in this study will also be kept anonymous by assigning a number to each participant. This means that "if and when information is shared, no identifiable data will be disclosed" (Jones, Torres and Arminio, 2006:155). As discussed in the previous section, the principles of confidentiality and anonymity were incorporated in this research through the statement of informed consent.

## 3.8 Data Analysis

As mentioned previously, the 20 in-depth interviews were conducted and transcribed in Chinese (Cantonese) for data analysis and important findings were finally translated into English. One of the challenges in qualitative analysis is that there are no such formulas, and the research will need to provide a set of input data in the form of text (Yin, 2011). In this study, the transcriptions of the interviews from senior management and documents were organized and analysed using qualitative data analysis software, Atlas.ti, in order to gain an understanding of the thinking of the interviewed personnel regarding the process of SEM.

## **3.8.1** *Coding*

Developing a coding system for the data is an important part of the analysis. Creating quotations and coding them is the basic activity being engaged in when using Atlas.ti, and is the basis of the data analysis. In most qualitative research, the researcher employs coding, that is, developing coding categories and attaching them to different sections of the interview transcripts to categorize messages or words from participants which might be grouped into themes relating to specific research questions. The purpose of coding is to "move methodically to a slightly higher conceptual level" (Yin, 2011:187). Open coding is part of the analysis in this study based upon the nature of the initial codes and sticking closely to the original items (i.e. keeping the exact words in the original item). After the data collection stage was completed, data analysis took place through an iterative method employing data coding, data reduction, data display, and analysis.

## 3.8.2 First-stage coding and second-stage coding

Based on the coding intent and procedure, the first-level codes were established through an analysis of the core elements in the interviews. After completion of the first level of coding, a second, higher conceptual level of codes could further be established by recognizing the categories within the Level 1 code using the functionality of Atlas.ti. Atlas.ti can differentiate between codes at each particular level and map out similar patterns of categories during the data analysis process (Friese, 2011).

According to Friese (2011), the first phase of coding ends when there are no longer new notices and no more new codes are added. When this happens, the first saturation point has been reached. After the structured code list has been developed, the researcher continues to code the remaining or newly collected data. The second phase of coding is necessary as it "serves as a way to validate the code list. If the code list has been developed usefully, then not many new codes are added at this stage" (Friese, 2011:233).

# 3.8.3 Writing Memos

Writing memos begins at the start of the analysis which is a second, concurrent operation within qualitative data analysis. It is in fact alongside and in parallel with coding. During the coding process, all sorts of ideas were likely to occur and would be possible to become the stuff of memos, resulting in possible inclusion in the overall analysis. As stated by Friese (2011), the purpose of writing memos is to tell fellow researchers and other interested parties what the researcher did such that the quality of the results and the research project as a whole can be evaluated. Coding and writing memos in fact provide the building blocks for the qualitative data analysis of this study.

#### 3.8.4 Categorizing

The aim of developing a coding system is to organize the data into main categories and subcategories (Friese, 2011). All data were coded by establishing categories and related codes. Establishing categories helps to elevate the conceptual power of the analysis from the descriptive level to an increasingly more theoretical level. The categories were

developed based on the study research questions and literature review.

In this study, six categories were created: (1) definition of SEM; (2) dimensions of SEM; and (3) differences of SEM at institutional and programme level; (4) differences of SEM activities in different programmes; (5) barriers to implementing SEM; and (6) success metrics tying to SEM. Following the established categories, the data were organized by code and reviewed to determine the accuracy of the coding process.

# 3.9 Concluding Remarks

This chapter regarding the research design has presented the aspects of research methodology adopted in this current study. This chapter began by explaining the justifications adopted for a qualitative method. The case selected for this study was identified as a continuing education institution in Hong Kong, namely, the School of Professional Education and Executive Development (SPEED), a local continuing education institution that mainly provides top-up degree programmes for both full-time and part-time students. The chapter continued by discussing the sampling design and issues of research sampling.

Following this, the advantages of in-depth interviewing as the form of semi-structured interviewing and documents were employed as the technique to be used to gain insight into the views and actual experiences of senior and programme management in relation to SEM. The credibility and trustworthiness of data obtained in this way were discussed in terms of validity and reliability.

The chapter then concluded with a discussion of the ethical considerations in the present research. Ensuring confidentiality and informed consent establish a trusting environment within which the participants will feel comfortable to discuss their experiences. Finally, the use of transcription and the coding software Atlas.ti as a means of analysing the interview data were discussed. The ultimate goal of the use of this research methodology is to examine the views of senior and programme management in relation to SEM and its importance and differences, barriers to implementing SEM, and how SEM can be tied to success metrics within the institution chosen for this study.

#### **CHAPTER 4 - FINDINGS**

This chapter is organized into 4 different sections and presents the findings of the research study through a qualitative study. The results of analysis of interviews and documents using the Atlas.ti content analysis programme are presented in the following section. Direct quotes from the interviews (both senior and programme management perspectives) and direct transcription from the institutional documents are presented to support the dimensions of SEM, the differences of SEM attributes at programme and institutional levels and in different programmes, barriers to implementing SEM as well as SEM success metrics.

## 4.1 Profile of Participants

Twenty individual in-depth interviews were conducted in this study. concentrates on senior management and programme leaders' and managers' perspectives as they are the key individuals who are involved in and committed to the enrolment management planning process in a continuing education institution in Hong Kong for achieving enrolment goals and the mission of the institution. In addition, the stakeholders in this research understand students' concerns because they have close communication with students in formal and informal ways. Therefore, the interviews were in fact asking their experiences and views on SEM issues where experiences include their understanding of student needs and expectation. Of the twenty interviewees, six were at senior management level and fourteen of them were at programme management level. The fourteen participants of programme management comprise of ten academic staff and four administrative staff who had experience in programme and enrolment management in the self-financing tertiary education sector in Hong Kong. The digitally recorded interviews were transcribed verbatim in Chinese with the results being summarized and translated into English for presentation. Four selected transcriptions were cross-checked by two teachers who taught Research Methods at a higher education institution in Hong Kong for the confirmation of the transcriptions in order to ensure the quality of work. The interview data were coded and analyzed using Atlas.ti, a qualitative data analysis software package.

Table 12: Profiles of Research Participants

Post Held / Job Title	Types of staff (Senior	Years of	Participant
	Management or	Service	Number
	Programme	(years)	
	Management)		
Dean	Senior Management	7	Participant 15
Cluster Head (Business)	Senior Management	6	Participant 5
Director	Senior Management	22	Participant 16
Deputy Director (Local	Senior Management	2	Participant 8
Programme)			
Deputy Director (Overseas	Senior Management	9	Participant 2
Programme)			
Programme Director	Senior Management	14	Participant 1
Head of ITU (Pilot Study)	Senior Management	6	Participant A
Programme Leader (Pilot Study)	Programme Management	6	Participant B
Programme Leader	Programme Management	8	Participant 4
Programme Leader	Programme Management	9	Participant 3
Programme Leader	Programme Management	4	Participant 13
Award Leader	Programme Management	10	Participant 12
Programme Leader	Programme Management	9	Participant 6
Scheme Leader	Programme Management	8	Participant 20
Award Leader	Programme Management	8	Participant 18
Award Leader	Programme Management	8	Participant 10
Award Leader	Programme Management	4	Participant 9
Programme Leader	Programme Management	4	Participant 11
Marketing Coordinating Manager	Programme Management	4	Participant 17
Programme Officer	Programme Management	3	Participant 7
Programme Manager	Programme Management	20	Participant 14
Marketing Manager	Programme Management	4	Participant 19

# 4.2 Code System Structure

After analyzing the interview transcripts using the Atlas.ti content analysis programme, six main theme families were identified which are conducive to the definition of SEM, dimension of SEM, differences of SEM at institutional and programme level, differences of SEM activities at different programmes, barriers in implementing SEM, and success metrics tying to a suitable SEM.

These six main theme families were further sub-divided into categories to support the findings for a SEM development from senior and programme management levels in a continuing education institution in Hong Kong. The following table illustrates six main themes including a total of 58 categories. Details of the code trees using Atlas.ti are presented in Appendix IV.

Table 13: Code System Structure

<u>Theme</u>	<u>Categories</u>
Definition of SEM	Student learning experience
	Lifelong process
	Demand management
Dimensions of SEM	Enrolment -Marketing
	Enrolment - Admission
	Enrolment - Campus environment and facilities
	Enrolment - Programme design
	Enrolment - Career opportunity
	Enrolment - Teacher quality and effectiveness
	Enrolment - Institutional research
	Enrolment - Peer and teacher influence
	Retention - Financial aid
	Retention - Orientation
	Retention - Student retention activity
	Retention - Academic advising
	Retention - Learning assistance
	Graduation - Institutional research
	Graduation - Career services
	Graduation - Articulation
	Graduation - Alumni
Differences of SEM at	Enrolment - Centralized institutional research at institutional
	level
Institutional and	Enrolment - Specific marketing strategy at programme level
Programme Levels	Retention - Student retention activity at institutional level
	Retention - Financial aid at institutional level
	Retention - Academic advising at programme level
	Graduation - Alumni at institutional level

	Graduation - Career services at institutional level
	Graduation - Specific Career Services at programme level
Differences of SEM at	Enrolment - Programme and curriculum development
Different Programmes	Enrolment - Teacher quality and effectiveness
	Enrolment - Marketing
	Enrolment - Admission
	Enrolment - Career opportunity
	Retention - Student retention activity
	Graduation - Career services and opportunities
Barriers to implementing	Enrolment - Poor demand management
SEM	Enrolment - Difficult to admit good student
	Retention - Student deregistration
	Graduation- Articulation
	Graduation - Language capability
	Graduation - Negative graduate's attitude
Success Metrics	Enrolment -Enrolment figure
Tying to SEM	Enrolment - Number of Honours and Scheme programmes
	Enrolment - Ratio of applicants to enrolled students
	Enrolment - Marketing budget
	Enrolment - The amount of need-based merit
	Retention - One-off orientation
	Retention - Dropout rate
	Retention - Types of learning assistance
	Retention - Extent of financial support
	Graduation - Graduation and articulation rates
	Graduation - Number of alumni
	Graduation - Employability rate
	Graduation - Learning outcomes
What makes SEM effective	SEM effective - Resources
	SEM effective - Strategic relationship
	SEM effective - Staff support
	SEM effective - Learning experience

# 4.3 Finding 1 - Definition of SEM

There are different definitions of SEM from the participants of senior management and programme management. According to the collected feedback from the interviews, senior management included the element of lifelong process, but programme management included student learning experience development and demand management as the meaning of SEM.

## Differences - Senior Management

# Lifelong Process

Senior management explained their thoughts on the definition of SEM as a never-ending activity because a student's learning experience will not be ended even after his or her graduation. It is because post-graduation activities would be developed and organized for graduates to extend their learning experience in other forms.

"In fact, there is not an end to student's learning experience. Why I say that? Students may join alumni association as the alumni member. So, they will get involved into it, such as experience sharing among alumni members and current students during some alumni functions. It is a lifelong process I believe"

(Participant 16, Senior Management)

# Differences - Programme Management

#### Student Learning Experience Development and Demand Management

Programme management shared the views that SEM can also be defined as an iterative process in which student's learning experience would be developed such that elements of enriching the student's learning experience would be included in the SEM plan.

"I think [Strategic Enrolment Management] is a comprehensive process. The first step of this process is about marketing and promotion which mean you have to think of a proper channel to reach the potential candidates. Potential candidates would then know more about their preferred programmes by means of marketing. The second step is the learning process of the students when they get admitted to our institution. Student would enjoy the learning experience which is not only the academic knowledge learnt from the lecturer but also the practical knowledge off the book in a particular industry. The third step is the post learning

stage which is about the employability of the students after graduation as well as the recognition of their degree qualification."

(Participant 3, Programme Management)

Enrolment is just the first step in SEM. Once students are admitted to the institution, their learning experiences are becoming very important.

"The word "strategic" implies long term planning in which the school has to plan how students would experience the whole learning process properly through the 1.5 years stay in our school. After students are graduated with productive learning experience, they may find a good job and work for the society."

(Participant 17, Programme Management)

Programme management also explained their views on the purpose of SEM. They considered SEM as an instrument to manage student demand. The institution would offer relevant and suitable programmes in the marketplace to meet community needs where SEM would assist in managing student demand.

"I think it [strategic enrolment management] is a matching which aligns the institutional resources with student demand. It is about how to cope with student demand based on the available resources provided by the institution."

(Participant 4, Programme Management)

"It is about the matching of programme design and industrial/community needs. When designing a new programme, it has to consider whether there is an evidence of community needs as well as the likely employment prospects. If there is a new demand for a particular industry, a new programme may be developed to meet the community needs."

(Participant 10, Programme Management)

# 4.4 Findings - Research Question 1 - What are the Dimensions of SEM and their Differences at Programme Level and Institutional Level from Senior and Programme Management Perspectives of a Continuing Education Institution in Hong Kong?

This section provides an overview of the dimensions of SEM from senior and programme management perspectives. Included in this section is information on the similarities and differences of the different dimensions of SEM at programme level and institutional level in the (1) enrolment, (2) retention and (3) graduation stages in a continuing education institution in Hong Kong. Documents are used to supplement the interview content analysis.

## 4.4.1 Enrolment Stage

It is essential to determine what attributes influence the enrolment decision of prospective students in a two-year institution. Participants of senior and programme management were asked the questions about SEM attributes and their corresponding activities to increase enrolment at programme level and institutional level during the interview (See Appendix III of the interview guide).

Participants then shared their range of views on the important SEM attributes of the enrolment stage and there are similarities and differences between senior level and programme level in SEM dimensions. The SEM attributes in the enrolment stage were analyzed by identifying recurring concepts of meaningful quotations from the interview transcripts via the Atlas.ti content analysis programme. Codes of SEM attributes in the enrolment stage were developed and generated directly from Atlas.ti (See Figure 8). The frequency count per respondent in the enrolment stage is also shown in Table 14. The significant SEM attributes in the enrolment stage in Figure 8 are discussed accordingly based on the frequency count in Table 14.

E- Campus Facilities and Support
E- Good Quality Student

E- Frogramme Design

E- Institutional Research

E- Peer and Teacher's Influence

E- Ardinission

E- Ardinission

E- Teacher Quality and Effectiveness

E- Articulation

Figure 8: The Attributes of SEM in the Enrolment Stage

Table 14: The Frequency Count of the Core SEM Attributes in the Enrolment Stage

SEM Dimensions in the Enrolment Stage	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Marketing	18	3.0	50	3.6	68
Programme Design	16	2.7	43	3.1	59
Institutional Research	12	2.0	33	2.4	45
Admission	9	1.5	34	2.4	43
Financial Aid	4	0.7	17	1.2	21
Peer and Teacher Influence	8	1.3	11	0.8	19
Campus Facilities and Support	3	0.5	10	0.7	13
Career Opportunity	2	0.3	6	0.4	8
Teacher Quality and Effectiveness	9	1.5	1	0.1	10

## 4.4.1.1 Marketing

## Similarities - Word of Mouth Marketing

Both senior and programme management believed that marketing is a significant attribute in the enrolment stage so as to attract prospective students to choose a particular institution by organizing various marketing activities to establish the institution's reputation by means of word of mouth.

<sup>&</sup>quot;Word of mouth is significant. If an institution has poor comments from the community, student enrolment would be negatively affected. Though the more advertisement you put, enrolment would not be maximized."

"I think word of mouth is still very powerful tool. One thing we would do is we always send the open admission details to our current students 3 months before the admission exercise, so that current students may refer our programme to their friends."

(Participant 13, Programme Management)

#### Differences - Senior Management

Senior Management mentioned that media and social media such as School Newsletters, TV advertisements and Facebook are important in marketing which helps to promote the institutional reputation and brand. Senior management also explained that their role in marketing is to decide a suitable marketing medium for each programme.

"Media is important in marketing. Which media and when to use the media should considered. Also, once programme prospectus is available for all programmes, we can decide a suitable marketing media for each programme."

(Participant 1, Senior Management)

"Marketing activities include print media, TV media, social media, student activities, student talk. We have done this kind of marketing activities for a long time. Apart from these, institutional recognition is also important, which is whether or not people know the goodwill of your school as well as the academic standard of the institution.

(Participant 2, Senior Management)

Senior management thus reveals that the institution is conducting marketing activities at institutional level currently so as to establish the brand recognition at institutional level as a whole.

## Differences - Programme Management

On the other hand, programme management indicated that the uniqueness of each programme helps build the institutional brand, such that the promotion of each programme's distinctiveness in the form of information sessions, free newspapers, editorials, brochures and the School website are significant.

"Information session, free newspaper, programme brochures, our existing website are the channels that prospective students can get information from. Most importantly, the uniqueness of our programmes is classified as 'product' in marketing. Also, our

marketing team regularly conducts editorials to promote our programmes."

(Participant 3, Programme Management)

#### Specific Marketing Strategy at Programme level

It is necessary to understand student wants and needs specifically such that specific marketing tools can be referred to each specific programme of the institution. Over half of the programme management (10 out of 16 participants) thought that marketing activities and communications were not specific such that the dissemination of marketing information in each specific programme would not be delivered properly to the potential students. In addition, specific marketing activities (See Table 16) are crucial to promote each particular programme within the institution and to disseminate relevant programme information to the target students. The following participants reflected this.

"Marketing activities such as bus advertising and print communications are conducted at institutional level which is broad promotion based to promote our institutional brand; however, such marketing activities are not specific enough to promote the uniqueness of our programmes."

(Participant 9, Programme Management)

"As what I said, some of our programmes are very unique and industrial based. To allow potential candidates to know more about such programmes, specific marketing positioning and promotion are deemed necessary. By doing so, specific marketing information would reach to our target student.

(Participant 10, Programme Management)

The results of the content analysis regarding specific marketing strategy at programme level were supported by the examination of documents. In February of 2013, three programme leaders from Travel and Information Management (TIM), Hospitality Management (HM) and International Business (BUS) were interviewed for the TV Programme "Money World" of Asia Television Limited. They were invited to point out the reasons why their programmes are popular and attractive to prospective students. The three programme leaders consistently addressed the comprehensive curriculum and

application-oriented of these programmes. In addition, student exchange from the Dubai internship programme was printed in the School Newsletter and posted in the programme website as a promotional strategy.

### **Summary of findings**

Both senior and programme management believed that word of mouth marketing is significant to attract prospective students to choose a particular institution by organizing various marketing activities. Senior management indicated that media and social media help promote the institutional brand, but programme management emphasized the uniqueness of each programme helps build the institutional brand; thus, specific marketing strategy at programme level is suggested by programme management.

#### 4.4.1.2 Programme Design

Both senior and management level agreed the importance of programme design in attracting prospective students to enrol in their preferred programmes. However, there are differences between senior and programme management in the views of programme design.

#### Differences - Senior Management

In fact, senior management indicated that the uniqueness of programme design influences students' decision to apply and to enrol, differentiating the position of the institution from other institutions. Designing a programme which is more career-oriented and industry-oriented equips students to find a job easier after graduation due to the recognition of the institution. The majority of the participants spoke of the importance of Honours degree programmes as well as a programme scheme approach as the key competitive edge of the institution which allows students more flexibility on choosing their awards.

"Programme design becomes important in attracting prospective students for their enrolment decision into our institution. Programmes offered should be unique and differentiating from other institutions. They should be properly recognized within the job market so that our graduates can easily start their careers after the associate or top-up degree studies."

(Participant 16, Senior Management)

The results of the content analysis were supported by examination of the documents. For example, as stated by the PolyU President in the SPEED Newsletter of October 2013, Issue 12, this institution began offering the top-up bachelor degree programmes with Honours in the academic year 2012/2013. In total, the institution has produced 8,000 graduates over the years; many of them have become professionals, contributing to the economic development of Hong Kong and the region.

#### Differences - Programme Management

Programme management believed that programme design should put emphasis on student learning outcomes and their learning experiences so that students would be equipped and prepared effectively in the workplace.

"I believe programme design is very important in student enrolment. We should design unique programmes with specific programme and learning outcomes. Also, a programme with more career-oriented or industrial-oriented is very popular and would influence students to apply for. Apart from this, the provision of other learning experience such as complementary study and cocurricular activities is also a vibrant component in programme design"

(Participant 9, Programme Management)

#### **Summary of findings**

Senior management put emphasis on the uniqueness of programme design so as to help differentiate the institutional position; however, programme management believed that student learning outcomes and experiences are the primary focus when designing a programme.

#### 4.4.1.3 Institutional Research

Participants described their experiences in the use of institutional research on student recruitment, and programme development and evaluation. There are similar perceptions in the establishment of institutional research but the use of institutional research between senior and programme management is different.

Similarities - Centralized Institutional Research at Institutional Level

There is no centralized institutional research in the institution. Participants from both senior and programme management agreed that the function of institutional research should be well-established at institutional level. Institutional research, typically in the form of data and analytical support, has significant impact in increasing enrolment and enhancing academic quality, which would help to move toward a successful strategic management.

## Differences – Senior Management

Senior management has to obtain analytical data to understand the market needs, community needs and student needs for decisions concerning new programme development. On the other hand, if the demand of any current programme is insufficient based on the research data, senior management may consider to close any unpopular programmes.

"Institutional research helps us analyze the market development in higher education sector. We need to know all relevant data and information which would assist in new programme and development and evaluation."

(Participant 16, Senior Management)

Moreover, institutional research helps to assist in institutional planning because institutional needs are dynamic in which analytical data and information are essential for effective formal planning in a rapidly changing environment.

"I think institutional research is important for institutional planning purpose. For example, if you are asked to prepare a 5-year strategic plan, you must need to have some data on hand, such as the data in relation to student demand and supply situation. Also, you may need to perform demand forecast as well as analysis for competing effectively in a dynamic market. Institutional research helps to prepare strategic plan for the institution such that I know how to plan the institutional direction for increasing enrolment, and programme upgrading from ordinary degree to honors degree." (Participant 5, senior management)

#### Differences – Programme Management

According to programme management, the institutional research is currently at programme level supported by programme leaders and their respective programme team which is not very systematic and is not a proper arrangement at all because data cannot be shared across different programmes. Over half of the participants raised the issue on the role of institutional research. They thought it should be centralized and functioned at institutional level to allow more systematic data and analytical support within the institution.

"We need to be familiar with the job market situation of our industrial oriented programmes such as Hospitality Management, Travel and Information Management, Marketing and Public Relations, because the trend of the job market is quite dynamics; some jobs must be obsolete but some jobs may be new to the market. However, if institutional research can be centralized at institutional level, resources would be synchronized and market data and analysis would be organized and shared in a systemic way."

(Participant 4, 8 years, academic staff)

## Summary of findings

Both senior and programme management agreed that the function of institutional research should be well-established at institutional level. The use of institutional research from a senior management perspective is mainly for institutional planning and development of new programmes for recruiting new students, but the use of institutional research from the programme management perspective is to assist existing programme leaders to understand the market trend, job opportunities so that more information can be delivered to current students.

#### 4.4.1.4 Admission

#### Similarities –Online Application System

The admission procedure is crucial which should smooth the admission process. The online application system allows potential candidates to submit their application form in a more efficient way in the system has been established for one year. Both senior and programme management stated that online application is essential in the admission exercise, and it is the key tool to strength the admission process.

#### Differences - Senior Management

An information day is to be organized for each programme about 3 months before student admission. Senior management stated that the effectiveness of information day would be affected by the timing of organizing this event, influencing the outcomes of student enrolment.

"Information session is very important in admission. Also, the timing is also important such that programme leader needs to plan for the time of holding the information session."

(Participant 5, Senior Management)

Senior management also mentioned the importance of administrative support for answering student enquiries as part of the admissions procedure. Potential students may seek advice about the programme they are planning to study in terms of the programme structure, programme study, tuition fees, financial support, etc. Thus, providing clear administrative and academic staff contact is essential for potential students who would like to ask programme specific questions.

"We have many administrative staff, around fifty of them. Other than administrative staff, we have also academic staff in which the all those staff information is posted on our school website. What staff info? It is the staff contact of each respective programme including email and telephone contacts. These are the proper communication channels. Interested candidates would call our telephone hotline for general enquires. For programme specific questions, candidates would reach corresponding programme leader or officer to follow up."

(Participant 2, Senior Management)

## Differences – Programme Management

In addition, programme management emphasizes the quality of information day. Participants 3 explained that "the quantity of information day is not a big concern, but the first two information sessions are critical because interested parties would make their effort to attend either the first or the second information session." It is also critical to make two rounds of the admission exercise and extend the admission deadline in the second round.

"We had divided the admission exercises into two rounds since few years ago. But we had admitted over 85% of students in our first round of admission. Thus, we would probably extend our admission deadline in order to maximize the student enrolment in the second round."

(Participant 14, Programme Management)

In order to admit good quality students, programme management should look for candidates with good language and communication skills in the School admission exercise. The programme leader of Hospitality Management indicated that employees with confidence as well as good language and communication skills are sought-after. Therefore, in the School's admission interview, students who can demonstrate such attributes are given preference.

#### **Summary of findings**

Information day is perceived to be significant by senior and programme management; however, their views on this SEM activity are varied. Senior management addressed the importance of timing when organizing information day but programme management focuses on the quality of first two sessions of information day. Moreover, senior management perceived full administrative support as the strength to answer general enquiries of prospective students at institutional level, where programme specific enquiries are managed by respective programme leaders and officers at programme level.

#### 4.4.1.5 Financial Aid (Need-based Only)

#### Similarities – Need-based Financial Aid

Financial aid is considered to be important in the enrolment stage in self-financing tertiary institutions in the form of need-based only, such as Government Grants and Loans. From the perspective of senior and programme management, they both agreed that merit-based financial aid is not a vital factor for the enrolment decisions of students in the Hong Kong tertiary education sector. Offering merit-based financial aid is not significant to students' choice of institutions. Participant 15 explained that "merit-based financial aid is never an attractive way in maximizing a self-financing tertiary institution's enrolment figures in Hong Kong. Students with good academic performance will choose University Grants Committee (UGC)-funded universities, if they have been offered a place, instead of self-financing institutions."

In addition, most participants indicated the importance of need-based financial aid on students' enrolment decision. Participant 14 stated that "the government grant loans, such as Government Grant and Loan, the Government's Non-means-tested Loan Scheme (NLS) or Continuing Education Fund (CEF) are important to students, especially the grant for students in needed. Students with financial needs may apply."

#### **Summary of findings**

Both senior and programme management agreed that need-based financial aid is important in the enrolment stage.

#### 4.4.1.6 Peer and Teacher Influence

Participants spoke of the importance of peer and teacher influence in students' enrolment decisions through the word-of-mouth effect. Senior management indicated peer influence of students is a key driver in students' enrolment decisions but programme management emphasized the importance of teacher influence in affecting their choice of institution.

## Differences - Senior Management

"For example, student A would tell student B how good or bad is the institution he or she is studying in terms of the study pattern, teacher quality, requirement and expectation, studying environment, etc. It is all about our current student's perceptions on our institution and they will share their experiences to their peers."

(Participant 2, Senior Management)

"Potential candidates, most of the time, would decide their enrolment decision based on their senior's classmates recommendations. In other words, potential candidate would prefer listen to and trust our ambassador's recommendation in terms of their learning and studying experience of their chosen institution. This "word of mouth" effect is more important than any other marketing tools. "

(Participant 16, Senior Management)

#### Differences – Programme Management

"Students do trust their teachers who taught them. Teacher's referral on a particular programme is more effective than other marketing tools based on a survey being conducted at the enrolment registration period every year.

(Participant 19, Programme Management)

## **Summary of findings**

Senior management put emphasis on peer influence but programme management put emphasis on teacher influence in affecting a student's enrolment decision.

## 4.4.1.7 Campus Environment and Facilities

#### Similarities – Good Ranges of Campus Facilities

Both participants of senior and programme management stated the importance of good ranges of campus facilities to student choice of institution. Senior management reported that many institutions nowadays have coffee shops and that students would go to such places to chat with their classmates. Also, some public or open areas in institutions are needed for students' project discussions.

"We have two campuses which I believe it's our competitive advantage."

(Participant 15, Senior Management)

"Having a good range of facilities would give potential students confident on choosing our school, our programmes such as good studio, good equipment. Also, green area available for students is good for them in studying."

(Participant 6, Programme Management)

The institution has a range of facilities and resources aimed at making a pleasant environment for students. Institutional facilities also add extra dimensions to life on campus - from the artistic and cultural, to the recreational and athletic.

#### Finding Summary

Both senior and programme management support good ranges of campus facilities to student choice of institution.

## 4.4.1.8 Career opportunity

### Similarities - Sound Career Prospect

Both senior and programme management agreed that the element of career opportunity would definitely affect the enrolment decision of potential candidates. Students would look for a programme with higher recognition and employability. To them, they want to pick a programme that would be of interest to them and, at the same time, the award

qualifications would help find a job efficiently with an adequate starting salary range. According to Participant 20, one of the popular questions that potential candidates asked at the information day was "what are the career opportunities upon completion of this programme"? Students are so concerned about their career development that they want to choose a programme that would help them find a good job. Participant 11 agreed with programme management and commented "The first important thing is whether potential student has any interest on our programmes; the second is whether there are any career prospects."

## **Finding Summary**

Both senior and programme management agreed that sound career prospects is important in affecting the enrolment decision of potential candidates.

#### 4.4.1.9 Teacher Quality and Effectiveness

It is found that senior management (frequency per respondent = 1.5) addressed more attention to teacher quality and effectiveness than programme management (frequency per respondent = 0.1). Senior management considered teacher quality and effectiveness are associated with student enrolment decisions.

## Senior Management

"As a teacher, he or she must update himself or herself from time to time to become a good quality teacher. Student perception towards teacher effectiveness is very important. Prospective students would search staff profile of their preferred institution to evaluate the teacher quality in terms of their publications, scholarly activities and professional qualifications."

(Participant 8, Senior Management)

"I give credits to other staff then; because I know some of us...many of us are very devoted to the job. Our academic staff shows caring to student and they put a lot of effort on students by giving them advice, opinion and support."

(Participant 16, Senior Management)

The results of content analysis were supported by documents. For example, as mentioned in the School website, some of the School academic staff were appointed members of the HKSAR Government or various professional bodies out of recognition for their academic or professional excellence to increase the reputation of academic staff.

## **Summary of findings**

Only senior management considered teacher quality and effectiveness are associated with student enrolment decision.

## 4.4.1.10 Summary of Similarities and Differences - Enrolment Stage

The similarities and differences between senior and programme management in the views of SEM attributes in the enrolment stage are summarized in Table 15. The descriptive statistics details of SEM specific activities are presented in Appendix IX.

<u>Table 15: Similarities and Differences between Senior and Programme Management in the Views of SEM Attributes in the Enrolment Stage</u>

	SEM	SEM	Similarities	Differences	
	Dimensions	Specific		Senior	Programme
		Activities		Management	Management
	Marketing	Website Sending SMS Print media TV Social Media Articulation Talk	Word-of- mouth marketing	Media and social media to promote the institutional brand as whole	Use of marketing activities to emphasize the distinctiveness of each programme  Specific marketing strategy at
	Programme Design	Induction program	Nil	Uniqueness of programme design helps differentiate the institutional position	Emphasis on student learning outcomes and experiences
Enrolment	Institutional Research	Feeder analysis Competitor analysis	Institutional research should be centralized	Institutional planning and new programme development	Assist in existing programme planning and data support
	Admission	Online application Information Day	Online application system	Emphasis on the scheduling of Information Day	Emphasis on the quality of Information Day and quality of prospective students
	Financial Aid	Merit-based scholarship	Need-based financial aid	Nil	Nil
	Peer and Teacher Influence		Nil	Emphasis on peer influence	Emphasis on teacher influence
	Campus Facilities and Support	Green area Open area Ranges of support	Good ranges of campus facilities	Nil	Nil
	Employability/ Career	Information day	Sound career prospects	Nil	Nil

Services	Prospectus			
Teacher	Website staff	Nil	Teacher quality	Nil
Quality and	profile		links to institutional	
Effectiveness			image	

## 4.4.2 Retention Stage

Retention plans and strategies are an important part of the overall SEM, as retention efforts are designed to achieve student retention by ensuring student persistence until goal achievement. To let students feel they are ready to study at higher education level, an institution should think of retention strategies for students. On one hand, these would develop academic preparedness of students; on the other hand, students would establish a sense of belongings towards the institution. Participants of senior and programme management were asked questions about SEM attributes and their corresponding activities to retain students at programme level and institutional level during the interview (See Appendix III of the interview guide). Participants of senior and programme management shared their range of views on the important SEM attributes of the retention stage. The SEM attributes in the retention stage were analyzed by identifying recurring concepts of meaningful quotations from the interview transcripts via the Atlas.ti content analysis programme. Codes of SEM attributes in the retention stage were developed and generated directly from Atlas.ti (See Figure 9). The frequency count per respondent in the enrolment stage is also shown in Table 17. The significant SEM attributes in the retention stage in Figure 9 are discussed accordingly based on the frequency count in Table 16. There are similarities and differences between senior level and programme level in SEM dimensions in the retention stage.

Retention Attributes

R - Career Services

R - Institutional Research

R - Programme Design

R - Admission

R - Peer Influence

R - Admission

R - Others

R - Corientation

R - Learning Assistance

Figure 9: The Attributes of SEM in the Retention Stage

Table 16: The Frequency Count of the Core SEM Attributes in the Retention Stage

SEM Dimensions in the Retention Stage	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Academic Advising	13	2.2	35	2.5	38
Financial Aid	11	1.8	35	2.5	46
Learning Assistance	10	1.7	34	2.4	44
<b>Retention Activities</b>	7	1.2	27	1.9	34
Orientation	2	0.3	15	1.1	17

#### 4.4.2.1 Academic Advising

The purpose and significance of academic advising was highlighted by a number of the participants. There are different views between senior and programme management in the attribute of academic advising.

#### Differences - Senior Management

## Strong Views

"Academic advising is practical or effective when students find difficulties at academic matters. That group of students with academic difficulties would approach our academic advisors for academic advice, such as choosing electives, advice for career development, etc."

(Participant 2, Senior Management)

"I find the purpose of academic advising is very good because it allows student to approach us [academic advisors] about choosing suitable courses or electives, career opportunities"

(Participant 5, Senior Management)

## Differences - Programme Management

#### Weak Views

"Students may find their subject lecturers or programme leaders for academic advice. So, I think academic advising is not very important."

(Participant 4, Programme Management)

"Students would like to find programme leader or teachers who have taught them for academic advice. This is because they know who they are and would be easy to talk to someone who they know".

(Participant 7, Programme Management)

Not many students come to find us last semester. According to what my students said, they found academic advisor not very practical if they don't know this advisor. However, if the advisor is someone who taught the students before, they will approach them accordingly for seeking academic advice and learning and studying advice.

(Participant 10, 8 years, academic staff)

The purpose of academic advising is a good approach for students as stated by senior management; however, students do not find academic advisors helpful because it has been implemented at institutional level. Reflected by programme management, students finally turn to the teachers they know or respective programme leaders for academic advice. It is then suggested that the academic advising function should be implemented at programme level.

#### Academic Advising at Programme Level

According to the experiences of programme management, the function of academic advising is practical or effective when it is implemented at programme level.

"In fact, the academic advisor can be the one who taught that student before so that students would be familiar with advisor. Also, if the advisor's specialism is more or less same as the student's specialism, then student would turn to his or her advisor for specific academic advice."

(Participant 3, Programme management)

As a result, programme management agreed that the optimal way to foster academic advising function it should be operated at programme specific level.

#### **Summary of findings**

Senior management gives a strong view that academic advising should provide an effective support for students, but programme management believed that academic advising is not effective when operated at the School level, such that programme management agreed that this attribute needs to be at programme level.

#### 4.4.2.2 Financial Aid (Merit-based and Need-based)

## Similarities – Various Forms of Financial Assistance

Scholars of financial aid policy addressed the criticality of the growing use of financial aid to achieve retention goals (Hossler, 2000). Both merit-based and need-based financial aids are useful tools to retain the current students. In addition, school-based scholarships do affect their decisions and momentum in retaining and completing their programmes. Both senior and programme management considered financial aid as an important activity to retain current students and their views on financial aid are similar in terms of providing wide ranges of financial assistance.

"Providing need-based and merit-based financial assistance is one of our major initiatives. We have increased the proportion of financial assistance from time to time, including scholarships, internship, summer scholarships, and IT financial assistance for hardship cases. Our contribution on the financial assistance is close to HK \$20 million each year and we are doing quite well on this matter compared to other self-financing tertiary institutions in Hong Kong."

(Participant 15, Senior Management)

"We do provide various forms of financial aid to our students such as Government grant loan, SPEED scholarship, internship scholarship, mainland student scholarship, summer school scholarship overseas exchange scholarship. About the government grant loan, every student would apply when in need; however, the merit-based scholarship is based on the academic results of the current students. Students with good academic performance would have opportunities to obtain such merit-based scholarships."

(Participant 3, Programme Management)

The results of having various forms of financial assistance were supported by the examination of documents. For example, as presented in the School Newsletter in October 2013, Issue 12, the School established scholarships in recent years to encourage students with outstanding academic or co-curricular performance. In 2013, over 100 students received different kinds of scholarship and the Scholarship Presentation Ceremony was held at Chiang Chen Studio Theatre, PolyU on 27 April, 2013, with the presence of families and friends of the awardees to witness their achievements in the past year.

#### Similarities - Merit-based Financial Aid at Institutional Level

The following views of programme management reflect the form and the role of financial aid.

"We have provided certain amount of scholarships to our good quality student in which the nature of scholarship is in school based. The number of scholarship has been increased from time to time; however, due to the financial aid is merit-based at institutional level, there is no guarantee that student from each program would get one. They are all merit-based at school level"

(Participant 11, Programme Management)

"Student exchange scholarship is one of the financed aids in our institution. Students with good academic performance are eligible to apply and the current practice is that this kind of student exchange scholarship is at the school level."

(Participant 7, Programme Management)

## **Summary of findings**

Both senior and programme management agreed that providing wide ranges of financial assistance is important in the retention stage and the form of financial aid at institutional level is merit-based, and the role of the financial aid is certainly to increase student retention and their sense of belongings towards the institution.

#### 4.4.2.3 Learning Assistance

The majority of the participants spoke of the importance of learning assistance as an essential attribute to retain current students by widening their horizons, broadening their intellectual outlook and developing their skills and knowledge in different areas. There

are differences between senior and programme management in the perception of learning assistance.

#### Differences - Senior Management

"We need to establish or organize activities with learning experience such that students from self-financing institutions are the same as the UGC's in terms of student quality because the learning process being experienced at SPEED is more or less the same as UGC's."

(Participant 15, Senior Management)

"Various seminars and workshops on presentation and interview skills as well as personal styling are conducted to facilitate students' personal development. Seminars on study skills such as academic writing and project development, learning and time management skills, case studies in examinations have also been organized to our students. These are so good to current students to develop their skills and knowledge in different areas."

(Participant 2, Senior Management)

## Differences - Programme Management

"Learning assistance includes consultation hours of teachers, complementary studies programme and workshops such as languages, career talks, writing skills, analytical skills, and seminar talks at programme level. However, it appears that good quality student would take more initiatives on such learning assistance especially attending language workshops."

(Participant 4, Programme Management)

"We found our student capabilities such as academic English or Chinese writing are insufficient, such that the language workshops offered to students are of great help to them in improving their writing skills or even presentation skills. More and more of such workshops are always welcome from students perspectives."

(Participant 11, Programme Management)

#### **Summary of findings**

Senior management is concerned about the comprehensiveness and breadth of learning assistance to develop student skills and knowledge in different areas. However, programme management is more concerned about language assistance and enhancement to help students improve their writing skills.

#### 4.4.2.4 Student Retention Activities

Nearly all participants talked about the importance of retention activity so as to nurture their campus life as well as to strengthen students' attachment to the institution, creating a retention culture. Both senior and programme management expressed the importance of organizing student retention activities at school level.

## Similarities - Organizing Student Retention Activities at Institutional Level as Retention Strategy

Participants shared the following quotes.

"I think the school would organize more retention activities at school level, such as camping, outside the classroom activities, social engagements, etc. On one hand, students from different programmes would be able know each other; on the other hand, students would build up relationship with teachers through the channel of the retention activity."

(Participant 5, senior management)

"One retention activity is to invite some potential employers to give some seminar talks. During the seminar talk, the employers would further understand both our students and our school. This would definitely develop future employment to our graduates."

(Participant 3, Programme Management)

In addition, the results of the importance of student retention activity were supported by the examination of documents. For instance, as stated in the Connect November 2010, Volume 2, the institution held 2 seminars in March and April of 2012 to share knowledge about stock market strategies and public administration policies in Greater China. The seminars were attended by hundreds of academics, students and public audience, who exchanged views with speakers enthusiastically.

There are also differences in the perceptions of student retention activity. Senior management perceived that retention activity would enhance the positive institutional image while programme management addressed the strengths of students' attachment to the institution by organizing student retention activity.

#### Differences - Senior Management

"One possible retention activity our institution would do is CSR related activity. Our school would plan to have this kind of activities to allow students with their parents together spending the

whole day for a volunteer work. This would enhance positive image of institution among students."

(Participant 1, Senior Management)

#### Differences – Programme Management

"To foster students holistically, our institution has launched the first Student Ambassador Scheme to engage the first year bachelor's degree students from different programmes who possess diverse talents in addition to their academic performance. They are groomed for advancement into the spokespersons, marketers and student leaders for the School. The precious co-curricular experiences will provide them brilliant opportunities to explore themselves and learn from one another. It will also strengthen their attachment to the School."

(Participant 19, Programme Management)

By organizing retention activities, students would also develop better communication with their teachers; this would increase their sense of belongings towards the institution.

## **Summary of findings**

Both senior and programme management agreed that the arrangement of retention activity can be done at School level so that students would know more of their peers on different programmes, and they would share their learning experiences among different programmes which is a valuable knowledge exchange. Senior management believed that retention activity enhances the positive institutional image, but programme management emphasized that retention activities help increase student attachment to the School.

#### 4.4.2.5 Orientation

Orientation is very important at managing expectation among students. Most programme management addressed the issue of orientation and how the arrangement of orientation programme helps newly enrolled students to get familiar with the institution's environment as well expectations among teachers. Programme management talked about the importance of this activity more than senior management did.

#### Programme Management – Managing Student Expectation

"Orientation is good because students would meet their teachers teaching at their programmes on the commencement of classes in their first year. They would obtain information about the school facilities, their new classmates, and more importantly, our school expectation so that they would equip themselves towards the goal of graduation."

(Participant 6, Programme Management)

"We would give students a road map or general picture at the orientation programme. I found that it is important because students need to know more about the programme that they need to study for 2 year time. They would meet their new classmates on the orientation date and we try to give students a sense of 'family' belongings while studying at their chosen programme."

(Participant 6, Programme Management)

According to programme management, orientation would establish a sense of belongings among current students on their institution. Orientation would allow new students to meet their new classmates peers, and their influence from one to another such as learning experience would be developed in this stage; teachers who will teach them; get them to know school facilities and support, programme expectation in a relaxing way so that they know how to adopt the appropriate study method in the new learning environment and manage their expectations at the first attempt.

#### **Summary of findings**

Programme management found orientation helps establish a sense of belongings among current students on their institution. Senior management has no significant observation on orientation.

#### 4.4.2.6 Summary of Similarities and Differences - Retention Stage

The similarities of differences between senior and programme management in the views of SEM attributes in the retention stage are summarized in Table 17. It is apparent that programme management is a layer of management between senior management and students. Programme management has to ensure the implementation of tasks is efficient and goals are accomplished so as to provide higher quality learning experiences for the students.

<u>Table 17: Similarities and Differences between Senior and Programme Management in the Views of SEM Attributes in the retention stage</u>

	SEM	SEM Specific	Similarities	Differences	
	Dimensions	Activities		Senior Management	Programme Management
	Academic Advising	Meeting with advisor at programme specific level	Nil	Strong views – providing an effective support for students	Weak views – not effective because this function is operated at school level Academic
					advising needs to be at programme level
Retention	Financial Aid	Government Loan Scholarship	Various forms of financial assistance  Merit-based financial aid at institutional level	Nil	Nil
	Learning Assistance	Complementary studies Language workshop Teacher consultation hour	Nil	Emphasis on the breadth and comprehensive of learning assistance	Emphasis the need of language assistance to students
	Retention Activities	Internship Guest talk	Organizing student retention activities at Institutional level	Retention activity enhances positive institutional image	Retention activity increases student attachment to the School
	Orientation	O-day	Nil	Nil	Managing student expectation

## 4.4.3 Graduation Stage

Participants of senior and programme management were asked questions about SEM attributes and their corresponding activities in the graduation stage at programme level and institutional level during the interview (See Appendix III of the interview guide). Participants of senior and programme management shared their range of views on the important SEM attributes of the graduation stage. The SEM attributes in the graduation stage were analyzed by identifying recurring concepts of meaningful quotations from the interview transcripts via the Atlas.ti content analysis programme. Codes of SEM attributes in the graduation stage were developed and generated directly from Atlas.ti

(See Figure 10). The frequency count per respondent in the enrolment stage is also shown in Table 18. The significant SEM attributes in the retention stage in Figure 10 are discussed accordingly based on the frequency count in Table 18.

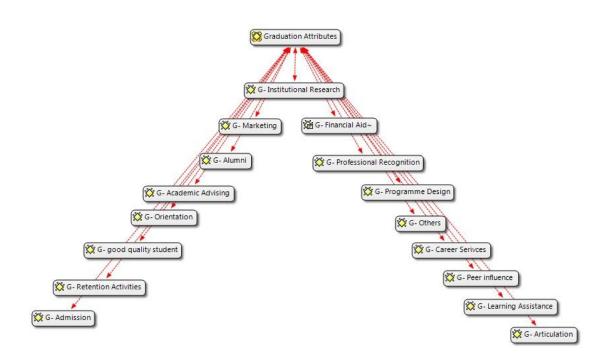


Figure 10: The Attributes of SEM in the Graduation Stage

Table 18: The Frequency Count of the Core SEM Attributes in the Graduation Stage

SEM Dimensions in the Graduation Stage	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Career Services	12	2.0	48	3.4	60
Alumni	5	0.8	26	1.9	31
Articulation	18	3.0	4	0.3	22

#### 4.4.3.1 Career Services

Nearly all participants (18 out of 20 participants) believed that career services are substantially important for students in their final years because this service offers advice, guidance and careers information for all students and recent graduates. Through the careers service, the institution should provide a supportive environment in which students would know how to develop a range of skills and qualities appropriate for the

working world. There are differences between senior and programme management in the views of career services.

## Differences - Senior Management

It is advised by senior management that the career services function should be operated at institutional level.

"If resources are allowed, it is necessary to build up a central careers service centre such that we would build up the link with current employers. Also, we would regularly provide basic training to our students such as grooming, CV writing to increase student's confidence in a job interview."

(Participant 8, Senior Management)

"We have organized some careers workshops at school level to our students, such as careers talk on how to write CV, 10 hints on the job interview, professional talk from celebrities, etc. We do hope these kinds of workshops would help students prepare themselves for the job interview in the form of developing the right attitude towards their potential employers."

(Participant 1, Senior Management)

"We would organize something like career recruitment exhibition which invites corporate companies to come to shortlist and select their preferred candidates as trainees in the institution. This would establish a connection channel with current employers to establish our institution's image."

(Participant 5, Senior Management)

#### Differences – Programme Management

On the other hand, teachers provide specific advice at programme level regarding students' career development. Students approach their teachers for more specific career advice. The current practice is that the programme leader is responsible for helping students for career opportunities by organizing specific talks, providing careers support to students concerned at programme level. Programme management stated their perceptions towards the specificity of career services.

"Students sometimes would come to me or other colleagues to seek for career advice about the job opportunities in their interested industrial sectors."

(Participant 6, Programme Management)

It is suggested that the function of career services is operated at school level such that more workshops concerning more on graduates' attitudes and mindset should be arranged and organized to current and graduating students. In addition, teachers at programme level should provide specific advice regarding students' career development because students would prefer approaching their teachers or programme leaders for more specific career advice.

## **Summary of findings**

Senior management preferred to have a centralized career service at institutional level but programme management suggested that specific career services can be operated at programme level.

#### 4.4.3.2 Alumni

Most participants talked about the element of the alumni association when they were asked about the important activities in the area of graduation. Both senior and programme management agreed that the alumni association should better be organized at institutional level because students from different programmes would join which allows graduates to build up relationships among fellow alumni of the institution.

#### Similarities - Alumni at Institutional Level

Through the activities organized by the alumni association, the connection between graduates, students and institution should be established. The institution is necessary to provide resources in terms of financial support, manpower, as well as marketing support. The network between our current students and alumni members can be built through alumni association at institutional level. The alumni association is essential to students after they have graduated, such that current students should be well informed of this attribute at their graduation stage. This can be achieved by inviting current students to join some of the activities organized by the alumni association.

"Our current alumni association is at school based and we welcome graduated students from every programme to join our alumni. As far as I know, some programme leaders would encourage their respective graduates to join our alumni association. I think the current practice of organizing alumni at school level is deemed appropriate."

(Participant 17, Programme Management)

"Our alumni association is mainly operated by our graduates. Whenever they want to organize some activities to graduates, fresh graduates and even undergraduates, they would contact our marketing team as their counterpart. Overall, the alumni association is working for the whole institution."

(Participant 1, Senior Management)

The results of the alumni content analysis were supported by examination of the documents. For example, as referred in the School Newsletter of October 2013, Issue 12, it states "SPEED Alumni Association strives to unite alumni and the alma mater, and promote the spirit of continuing education of the School. Over the year, the association has been organising different activities to facilitate exchange of the latest information in various industries during alumni reunions".

Moreover, as stated in the School Newsletter, one activity being organized by our alumni is a tagline competition to celebrate the 15th Anniversary of the institution. The alumni invited current students and graduates to design a creative, catchy and inspirational tagline with the theme of "Education and Learning are Our Main Priorities", which is also the mission of the institution. This kind of activity should enhance in the students, no matter whether graduates or current students, a sense of belongings towards our School.

#### **Summary of findings**

Both senior and programme management believed alumni at institutional level helps establish a student network, developing a sense of belonging towards the School.

## 4.4.3.3 Articulation

Most senior management agreed that articulation is deemed to be more important for students at their associate degrees level than the students at their undergraduate level.

## Senior Management – Clear Articulation Pathways

"Associate degree students' first priority is to move back to UGC-funded undergraduate programmes. However, due to the limited places in those programmes, articulation between both the associate and top-up degrees is in fact critical, especially for the case of Hong Kong. Establishing clear articulation pathways to top-up degree

programmes will provide associate degree students with sense of security in materializing their dreams."

(Participant 15, Senior Management)

"Articulation is therefore prime important for associate degree students to fulfill their wishes of becoming a university graduate, for the sake of commencing their career with a full-time job of good prospect. To this effect, progressing to master degrees after their completion of the top-up undergraduate programmes is in fact secondary

(Participant 16, Senior Management)

"Students are concerned about whether their undergraduate degree is awarding Honours degree qualification or just an ordinary degree, because this would be an impact to students when they apply for a Master degree as further studies later on."

(Participant 2, Senior Management)

## **Summary of findings**

Senior management agreed that articulation is deemed to be more important for students at their associate degrees level than the students at their undergraduate level. Programme management has made no significant comment on this attribute.

#### 4.4.3.5 Summary of Similarities and Differences - Graduation Stage

The similarities of differences between senior and programme management in the views of SEM Attributes in the graduation stage are summarized in Table 19. It is seen that there are not much differences between senior and programme management. In fact, the senior management takes the leadership role to define vision and mission of the institution, such as providing a clear articulation pathway towards students. As the leaders in the institution, it is a role of the senior management to be aware of all signs that tell about the state of the institution.

<u>Table 19: Similarities and Differences between Senior and Programme Management in</u> the Views of SEM Attributes in the retention stage

	SEM	SEM	Similarities	Differences	
	Dimensions	Specific		Senior	Programme
nc		Activities		Management	Management
Graduation	Career	Career Fair	Nil	Centralized career	Specific career
lug	Services	Career talk		service at	services at
Lac		Grooming,		institutional level	programme level
5		interviewing			
		workshop			
	Alumni	Alumni	Alumni at	Nil	Nil

	association	institutional		
		level to		
		establish		
		student		
		network		
Articulation	Articulation	Nil	Clear articulation	Nil
	talk		pathways	
			especially at	
			associate degree	
			level	

# 4.5 Findings - Research Question 2: What are the Key Elements of SEM in Different Programmes of a Continuing Education Institution in Hong Kong?

The key elements of SEM activities and tools varied from programme to programme as well as from participant to participant; thus, it is essential to find out key elements of SEM activities among six different programmes of a continuing education institution in Hong Kong in the area of enrolment, retention and graduation. Participants were asked questions about key elements of SEM in different programmes (i.e. six different programmes) in the enrolment, retention and graduation stages during the interview (See Appendix III of the interview guide). These six programmes are presented in Table 20 with the enrolment figure of academic year 2013/2014. There are similar and different views between senior and programme management in the key elements of SEM in different programmes.

<u>Table 20: Enrolment Figures of Six Different Programmes at a Continuing Education</u>
<u>Institution in Hong Kong in Academic Year 2013/2014</u>

	Programmes	Short form of	Enrolment
		the	Figures
		Programme	
1.	Bachelor of Arts (Honours) in	MPR	252
	Marketing and Public Relations		
2.	Bachelor of Arts (Honours) Scheme in	BUS	248
	Business		
3.	Bachelor of Social Science (Honours)	SS	154
	Scheme		
4.	Bachelor of Arts (Honours) in	HM	125
	Hospitality Management		
5.	Bachelor of Arts (Honours) in Travel	TIM	116
	Industry Management		
6.	Bachelor of Arts in Applied and Media	AMA	48
	Arts		

## 4.5.1 Enrolment Stage

Participants were asked about key elements of SEM in the enrolment stage at different programmes during the interview. There are differences of programme specific activities in the area of enrolment among six programmes of a continuing education institution in Hong Kong from senior and programme management perspectives. The frequency count per respondent of core SEM attributes at different programmes in the enrolment stage is shown in Table 21. The key elements of SEM in the enrolment stage in different programmes are discussed accordingly based on the frequency count in Table 21.

Table 21: The Frequency Count of the Core SEM Attributes in the Enrolment Stage

Key SEM Attributes at Different Programmes	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Programme Design	3	0.5	6	0.4	9
Teacher Quality and Effectiveness	2	0.3	5	0.4	7
Career Opportunities	1	0.2	4	0.3	5

## 4.5.1.1 Programme Design - TIM and MPR Programmes

There are differences between senior and programme management in the views of programme design. Senior management concentrated at the importance of the programme recognition from the public, but programme management focused at the practical experiences of students when designing a programme.

## Differences - Senior Management

"TIM students would join a public case study competition organized by Hospitality Sales and Marketing Association International (HSMAI), Greater China Chapter. In April 2013, two TIM students have reaped championship in this competition, and the participating students found it was a valuable opportunity to apply the travel industry management related knowledge learnt from the classroom to the real world setting and students will embrace future opportunity from a new perspective. Moreover, the excellent student achievement would help promote the TIM programme to prospective students"

(Participant 2, Senior Management)

This position can be seen in documents, for example, as stated in the Connect July 2012, Volume 3, the institution is delighted to cooperate with Hong Kong Association of Travel Agents (HATA) to offer its members the TIM programme. HATA members with Higher Diploma or Associate Degree qualifications can earn a bachelor degree by studying on a part-time basis.

Senior management also raised the importance of professional recognition of the Programme and curriculum development in the MPR programme. Graduates who have successfully completed certain subjects and fulfil the working experience requirements of The Chartered Institute of Marketing (CIM) may be eligible for entry to CIM's Chartered Postgraduate Diploma in Marketing or Professional Diploma in Marketing. In addition, graduates of the programme are also considered to have met the education requirement for full membership of the Hong Kong Institute of Marketing (HKIM). The information is also printed in the Programme Prospectus 2013/2014.

## Differences - Programme Management

Programme management also raised the importance of the industry practicum in both TIM and HM programmes, and the availability of scheme programme, respectively.

"Students from Travel and Industry Management and HM are required to complete 500 hours of industry practicum as a graduation requirement, such that students would obtain solid working experience during their studies and they can be more competitive."

(Participant 13, Programme Management)

"Our Business Scheme has four different award programmes for students to choose, and they like the scheme approach because more electives subjects can be provided to them. Also, students prefer to choose an Honours degree programme than an ordinary degree programme."

(Participant 18, Programme Management)

## **Summary of findings**

Senior management addressed the importance of public recognition but programme management emphasized students' practical experience.

## 4.5.1.2 Teacher Quality and Effectiveness – TIM and MPR Programmes Programme Management

One participant who won a research award says the followings:

"The winning of a Highly Commended Award at the Emerald Literati Network Outstanding Paper Awards 2013 allowed me to gain first-hand information to underpin the theories and his teaching in subjects such as Global Marketing and strategic Marketing. In the future, I would aim to forge more cross-discipline collaboration on research so as to create synergy in teaching."

(Participant 4, Programme Management)

The results of the content analysis were supported by documents, for example, as mentioned by the participants of Hospitality Sales and Marketing Association International (HSMAI), Greater China Chapter, in the SPEED Newsletter of April 2013, students expressed sincere gratitude to the teacher and programme leader of TIM programme who provided insightful advice and enormous support during the competition. The teachers are very experienced with caring attitude.

## **Summary of findings**

From programme management perspectives, teacher quality is found to be significant in MPR programme as good quality teaching should enhance prospective students in their enrolment decision process.

## 4.5.1.3 Career Opportunity - SS Programme

#### Programme Management

Programme management addressed the importance of career opportunity in government sector when graduated from Social Science Honours Scheme.

"Students can gain employment in the areas of public services and government sectors upon graduation of social science programme."

(Participant 11, Programme Management)

"Future job prospect is one of the factors to attract students to enroll our programmes. So, we would invite our best graduates who worked in the government sector to have a sharing session about their career opportunities in the information seminar. Their sharing would make it as testimonials and posted them in our school website as part of the marketing promotion for Social Science Honours Scheme programme."

(Participant 12, Programme Management)

## **Summary of findings**

Programme management illustrated the importance of sound career prospect in Social Science programme so as to attract prospective students.

## 4.5.2 Retention Stage

As retention plans and strategies are an important part of the overall SEM, the retention strategies are also vital among different programmes. Participants were asked questions about key elements of SEM in the retention stage at different programmes during the interview. The frequency count of core SEM attributes at different programmes in the retention stage is shown in Table 22. The key elements of SEM in the retention stage at different programmes are discussed accordingly based on the frequency count in Table 22.

Table 22: The Frequency Count of the Core SEM Attributes in the Retention Stage

Key SEM Attributes at Different Programmes	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Student Retention Activity	2	0.3	6	0.4	8

#### 4.5.2.1 Student Retention Activities - TIM, HM, MPR, BUS and SS Programmes

Both senior and programme management emphasized the importance of student retention activities with different views.

#### Differences – Senior Management

For the Marketing and Public Relations, Business Scheme Programme and Social Science Scheme, participant 18 explained the importance of the China Internship Programme for these students.

"The China Internship programme provides opportunities and sponsorship for students to work as interns and to be exposed to the cultural way of life in the Chinese mainland which is a very good retention activity. Student would spread their positive learning experience to their peers and our school image would be established by word of mouth."

(Participant 16, Senior Management)

## Differences - Programme Management

Participant 13 emphasized the real working experience by the Dubai Internship Programme for TIM and HM students.

"Outstanding students would join the Dubai Internship Programme and assigned to work at the international renowned hotel Burj Al Arab in summer time."

(Participant 13, Programme Management)

This position can also be seen in documents, for example, one student who joined this programme says the following in the Newsletter of September 2012, Issue 10. "I feel honoured to be the chosen student for this internship. Being the first student for this programme means that not only am I representing PolyU SPEED, but I am setting the standard for the other students in the following years too, so it had to be done well."

Guest speakers are invited by the MPR (Marketing and Public Relations) programme for the delivery of professional talks and they were invited to share their successful strategies on how to market their brands. The programme leader and the guest speakers are joined to share their views on how to make use of the new media platforms and public relations strategies to reinforce promotion in an era of information explosion. They gave inspiring answers to the questions from the audiences who enjoyed the talk much. It is appeared that professional talks and summer internship programmes are good retention strategies to retain current students.

## **Summary of findings**

Senior management addressed the importance of enhancing positive institutional image but programme management emphasized the real learning and working experiences delivered to students.

## 4.5.3 Graduation Stage

It is essential to determine what key attributes influence the likelihood of enrolled students graduating from different programmes of a continuing education institution in Hong Kong. Participants were asked questions about key elements of SEM in the graduation stage in different programmes during the interview. Programme management of MPR and AMA addressed that the attributes of career services and articulation are the major SEM attributes in the graduation stage. The frequency count of core SEM attributes in different programmes in the graduation stage is shown in Figure 16. The key elements of SEM in the retention stage at different programmes are discussed accordingly based on the frequency count in Table 23.

Table 23: The Frequency Count of the Core SEM Attributes in the Graduation Stage

Key SEM Attributes at Different Programmes	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Career Services	1	0.2	6	0.4	7

## 4.5.3.1 Career Services and Opportunities – MPR Programme

#### Programme Management

#### Specific Career Services at Programme Level

Participant 10 emphasized the importance of having specific career services at programme level.

"I hope we would provide more careers support to students studying at my programme. As what I said, my marketing and public relations students would like to attend some careers talk in marketing industry because they would apply for this industry after graduation. Thus, careers talk in logistics is deemed appropriate for them."

(Participant 10, Programme Management)

As the MPR programme has been run for 10 years, programme leader would invite successful graduates who are already at management level for delivering career talk so as for sharing their successes among graduating students of MPR programme.

## **Summary of findings**

Programme management addressed the importance of specific career services in MPR programme.

After coding the data by Atlas.ti, the key SEM elements in different programmes of a continuing education in Hong Kong is presented in Figure 11. Atlas.ti provides options for defining different relations between codes. The logical relation chosen in linking codes to "differences of SEM at different programmes" is "a property of" to define the relations.

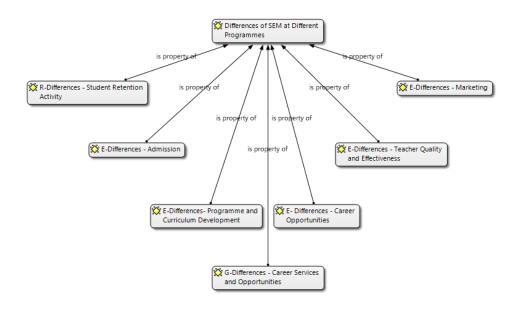


Figure 11: Key SEM Elements at Different Programmes

SEM activities work different ways in different programmes because different programmes have different emphasis in SEM characteristics in the stages of enrolment, retention and graduation due to the nature of the programme. The differences of key SEM activities in different programmes are explored and a summary table of key findings for the cross-programme analysis is presented in Table 24. It is appeared that the lesser the SEM elements to be implemented, the lesser the enrolment figure resulted.

Table 24: The Emphasis of SEM activities in Six Different Programmes of a Continuing Education in Hong Kong

SEM Dimensions	Marketing and Public Relations (MPR)	Travel Industry Management (TIM)	Hospitality Management (HM)	Business Scheme (BUS)	Social Science Scheme (SS)	Applied and Media Art (AMA)
Student Size in Sept 2013 intake (FT students)	252	116	125	248	154	48
Student Retention Activities	Student Ambassador Scheme  The China Internship programme provides opportunities and sponsorship for students to work as interns and to be exposed to the cultural way of life in the Chinese mainland	Student Ambassador Scheme  Outstanding students would join the Dubai internship programme and be assigned to the international renowned hotel Burj Al Arab in summer time	Student Ambassador Scheme  Outstanding students would join the Dubai internship programme and be assigned to the international renowned hotel Burj Al Arab in summer time.	Student Ambassador Scheme  The China Internship programme provides opportunities and sponsorship for students to work as interns and to be exposed to the cultural way of life in the Chinese mainland	Student Ambassador Scheme  The China Internship programme provides opportunities and sponsorship for students to work as interns and to be exposed to the cultural way of life in the Chinese mainland	Student Ambassador Scheme
Teacher Quality and Effectiveness (Uncovered Attribute)	Dedicated teaching staff  Good quality teaching demonstrated by the reputation of programme	Programme leader and teachers are dedicated to provide insightful advice and support with caring attitude	Dedicated teaching staff	Dedicated teaching staff	Dedicated teaching staff	Dedicated teaching staff

	academic staff					
Programme	Graduates who have	Comprehensive	500 hours of industry	Adopting scheme	Adopting scheme	This programme is offered
and	successfully	curriculum and students	practicum as retention	approach – The	approach – The	in collaboration with the
curriculum	completed certain	would join a public case	strategy to retain current	Bachelor of Arts	Bachelor of Social	Hong Kong Art School
development	subjects and fulfil	study competition	students	(Honours) Scheme in	Sciences (Honours)	(HKAS) of the Hong Kong
(Uncovered	the working	organized by HSMAI.		Business, comprising	Scheme, comprising	Arts Centre. Most of the
Attribute)	experience			five programmes	three programmes	classes, studios and
	requirements of The	Company visit was		namely:	namely:	workshops will be
	Chartered Institute	arranged for students at		Bachelor of Arts	<ol> <li>Bachelor of Social</li> </ol>	delivered at HKAS
	of Marketing (CIM)	Cathay Pacific City to		(Honours) in Business;	Sciences (Honours)	premises. This programme
	may be eligible for	gain more in-depth		2. Bachelor of Arts	in Psychology	is very unique in Hong
	entry to CIM's	understanding of airline		(Honours) in Business	2. Bachelor of Social	Kong and the only
	Chartered	service operations		(Finance);	Sciences (Honours)	programme collaborated
	Postgraduate			3. Bachelor of Arts	in Public	with Hong Kong Art
	Diploma in	500 hours of industry		(Honours) in Business	Administration	Centre.
	Marketing or	practicum as retention		(International	3. Bachelor of Social	
	Professional	strategy to retain current		Business);	Sciences (Honours)	
	Diploma in	students		4. Bachelor of Arts		
	Marketing.			(Honours) in Business		
				(Human Resource		
	Graduates of the			Management);		
	programme are also			5. Bachelor of Arts		
	considered to have			(Honours) in Business		
	met the education			(Operations and Supply		
i	requirement for full			Chain Management)		
	membership of the					
	Hong Kong Institute					
	of Marketing					
	(HKIM).					

Career	Invite speakers from	Invite speakers from	Invite speakers from	Invite speakers from	Invite speakers from	Invite speakers from
Services/	corporate	corporate companies to	corporate companies to	corporate companies	corporate companies	corporate companies to
Opportunities	companies to	deliver career talks at	deliver career talks at	to deliver career talks	to deliver career talks	deliver career talks at
	deliver career talks	school level	school level	at school level	at school level	school level
	at school level					
					Students would apply	Graduates are capable of
	Invite successful				for government related	pursuing careers as
	graduates (senior				jobs upon graduations	professional designers,
	management level)				of social science	corporate image creators
	for delivering career				programme	and media artists
	talks because this					
	programme has				Invite best graduates	
	been run for 10				who worked in	
	years.				government sector to	
					have a sharing session	

# 4.6 Findings - Research Question 3 - What are the Perceived Barriers to Implementing SEM in a Continuing Education Institution in Hong Kong?

The perceived barriers to implementing SEM in the area of enrolment, retention and graduation are illustrated. When implementing a suitable SEM programme, it is necessary to address the barriers in every single stage so as to propose remedies for further improvement. Participants of senior and programme management were asked questions about the perceived barriers to implementing SEM during the interview (See Appendix III of the interview guide).

Participants then shared their range of views on the perceived barriers in the enrolment, retention and graduation stages. Codes of perceived barriers were developed and generated directly from Atlas.ti After coding the collected interview data by Atlas.ti, the perceived barriers to implementing SEM of a continuing education institution in Hong Kong has been constructed in Figure 12. Atlas.ti provides options for defining different relations between codes. The logical relation chosen in linking codes to barriers to implementing SEM is "a property of" to define the relations between codes. The developed codes in enrolment, retention and graduation stages are discussed accordingly based on the frequency count.

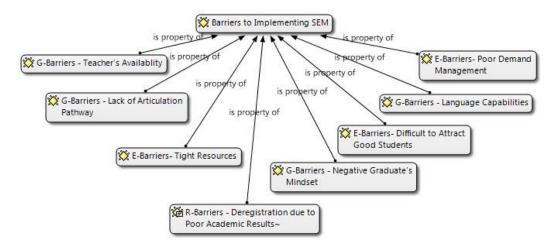


Figure 12: Perceived Barriers to Implementing SEM

# 4.6.1 Perceived Barriers - Enrolment

The perceived barriers in the enrolment stage were analyzed by identifying recurring concepts of meaningful quotations from the interview transcripts via the Atlas.ti content analysis programme. Senior and programme management expressed their concerns that poor demand management as well as difficulties in attracting good quality prospects are

the main perceived barriers to implementing SEM in the enrolment stage. The frequency count of the perceived barriers to implementing SEM in the enrolment stage has been shown in Table 25.

<u>Table 25: The Frequency Count of the Perceived Barriers to Implementing SEM in the Enrolment Stage</u>

Perceived Barriers	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
<b>Poor Demand Management</b>	40	6.7	13	0.9	53
<b>Difficult to Attract Good</b>	2	0.3	7	0.5	9
Quality Students					

# 4.6.1.1 Poor Demand management

# Senior Management

Nearly all senior management (5 out of 6 participants) expressed their negative views on the oversubscription of students as the challenges in the enrolment stage. The oversubscription of students is due to the limitation of campus capacity and poor enrolment planning and management of the institution. The institution is facing pressures on managing student's enrolment. Participants stated that prospective students would apply for more than one institution in which they made up their minds in enrolling one institution at a later stage. In order for maximizing student enrolment, self-financing tertiary institutions normally send out the offering letter to prospective student 30% more than the projected enrolment figures as the current practice, resulting in oversubscribed situation.

"Now we are facing pressures on student's oversubscription matters. Our normal practice in enrolment is to send out offering letters to prospective students more than our places because we know that they are applying for more than one institution and they may not come back to us even we confirm to give them an offer. It is very difficult to guess how many students would come to us finally because we don't know how many institutions they are applying for. That's why we have to send out letters 30% more than our places to secure our enrolment figure. However, this would lead to oversubscription of students if more prospective students finally come to us than our expected student enrolment figure."

(Participant 2, Senior Management)

We are limited by the campus capacity in the short run; our two campuses allow us to admit ten thousand students and it's been already reaching at the full capacity. If we admit more students, it would affect student quality. We may need to ask for government to get more spaces.

(Participant 15, Senior Management)

Since self-financing institution is non-UGC funded institution, the market is very dynamic. There is no guarantee on the resource allocation. Even we plan a quota on student enrolment figures, this quota could fluctuate above or below. This is a very critical step of demand management. We've got to consider more on demand management.

(Participant 8, Senior Management)

# **Summary of findings**

According to the experiences of senior management, oversubscription of students would create a negative reputational image of the institution.

# 4.6.1.2 Difficult to Attract Good Quality Students

# Similarities – Prospective Students' Quality

Both senior and programme management shared their views that self-financing tertiary institution would be the third choice from student's perspective in which prospective students would choose UGC funded programme as their 1st choice, proper university's self-financing programmes as the 2nd choice.

"Our barrier is mainly our prospective student's quality. Our enrolled students are weak in terms of their quality; the better quality students would go to other institutions which is the reality. We are still thinking how to attract good quality student enrolling in our programmes. We would like to establish word of mouth on our flagship programmes such as Marketing and Public Relations, Hospitality Management, etc."

(Participant 15, Senior Management)

"We really want to admit good quality student with high GPA, but we can't in reality; at least at this stage. The top students would consider UGC funded programmes. We would only admit the students who are not considered by UGC programmes. Thus, the student quality is not the best."

(Participant 3, Programme Management)

"The best student would go to senior places offered by UGC funded university. Overall, we would keep the average quality of student but not the top students."

(Participant 19, Programme Management)

# **Summary of findings**

Without a good reputational image of the institution, it is very difficult to admit good quality prospective students.

#### 4.6.2 Perceived Barriers - Retention

Participants of senior and programme management were asked questions about the perceived barriers to implementing SEM in the retention stage during the interview. As said by participants, there are no significant perceived barriers for student retention in general. Participants shared their views that students are more likely to retain once they make their enrolment decision because they would stay in the institution for 3 semesters with an ordinary degree award or 4 semesters with an Honours degree award. Both participants of senior and programme management addressed only the issue of student deregistration. The frequency count of the barriers to implementing SEM in the retention stage has been shown in Table 26.

<u>Table 26: The Frequency Count of the Perceived Barriers to Implementing SEM in the</u>
Retention Stage

Barriers	Senior	Frequency	Programme	Frequency	Total
	Management	Count per	Management	Count per	Frequency
					C
		respondent		respondent	Count

# 4.6.2.1 Student Deregistration

# Similarities – Poor Academic Results

Senior and programme levels addressed the issue of student deregistration matters and two of them stated the followings.

"In fact, we don't have any students leaving the programme once they make their enrolment choice except poor academic results. If students' GPA lowers than 2.00 for two consecutive semesters, they need to deregister of their study.

(Participant 2, Senior Management)

"I have been working here for 4 years, and so far, I have seen only one case of 'drop out' in which a student was deregistered due to poor academic result with GPA less than 2.0 for two consecutive semesters. I haven't seen a case that students dropped for the reason of going into another institution. Once they decided to study

at our programme, they almost try their best to complete the programme."

(Participant 11, Programme Management)

# **Summary of findings**

Student deregistration is the perceived barrier to implementing SEM from both senior and programme levels.

#### 4.6.3 Perceived Barriers - Graduation

Participants of senior and programme management were asked questions about the perceived barriers to implementing SEM in the graduation stage during the interview. When implementing a suitable SEM programme, it is necessary to address such barriers so as to suggest rooms for advancement. The frequency count of the barriers to implementing SEM in the graduation stage has been shown in Table 27.

<u>Table 27: The Frequency Count of the Perceived Barriers to Implementing SEM in the Graduation Stage</u>

Barriers	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Language Capabilities	1	0.2	7	0.5	8
Negative Graduate's Mindset	0	0	6	0.4	6
Lack of Articulation Pathway	4	0.7	1	0.1	5

# 4.6.3.1 Language Capability

# Programme Management

Programme management participants expressed negative opinions that some graduating students have poor language skills in which the reputational image of both the quality of the graduated students and the institution may be damaged.

"Most likely the barrier is about our student's language capability. Since some of our students are not good at English in terms of reading, writing and speaking skills, this may lead to poor academic result, for example, GPA around 2. Thus, the quality of the graduated students would be affected."

(Participant 3, Programme Management)

"Appropriate Language skill is a normal expectation from employees. Employers normally expect an undergraduate having a proper writing and speaking skills no matter English or Chinese language. If an undergraduate gets spelling mistakes when writing a formal letter, employers may doubt the degree qualification of this undergraduate and even worse, they may doubt about the quality of the institution this undergraduate studied.

(Participant 6, Programme Management)

# 4.6.3.2 Negative Graduates' Attitude

#### Programme Management

Few programme management thought that graduate's attitude was also the barriers towards the comprehensive success in a continuing education institution in Hong Kong by implementing SEM. The following quote reflected the view of the participants.

"I found the biggest problem the attitudes and mindsets of our fresh graduates. Some graduating students would think that the society owes them if they would not get a good job offer. We've got to change their negative attitudes by delivering appropriate career related workshops."

(Participant 12, Programme Management)

#### 4.6.3.3 Lack of Articulation Pathway

#### Senior Management

Senior management considered lack of direct articulation pathway from the same school forms a barrier in graduation stage.

"There's no master degree being offered by the School. If graduated students want consider further studying, they need to choose other institutions. So, it is necessary to think of articulation pathway so that our graduated students would consider studying Master degree."

(Participant 15, Senior Management)

# **Summary of findings**

Senior management emphasized the issue of articulation as the perceived barriers in the graduation stage, while programme management mentioned about language capability and graduates' attitude as the main perceived barriers in the graduation stage.

# 4.7 Findings - Research Question 4 - What are the Success Metrics of SEM in a Continuing Education Institution in Hong Kong?

For a successful SEM, it has to be performance-based and outcomes oriented which requires significant data to determine its effectiveness, success or failure, growth or decline. Thus, success metrics are vital in assessing the achievement of enrolment, retention and graduation goals (Bontrager, 2004; Dolence, 1990). Participants of senior and programme management were asked the questions about the success metrics in the enrolment, retention and graduation stages of SEM during the interview (See Appendix III of the interview guide). Participants then shared their range of views on the success metrics in the enrolment, retention and graduation stages. Codes of success metrics of SEM were developed and generated directly from Atlas.ti. Based on the content analysis by Atlas.ti, it is found that there are no much significant differences between senior and programme management in the views of SEM success metrics.

# 4.7.1 Success Metrics - Enrolment

To create an effective enrolment plan, it is also required to plan how to measure the outcomes of enrolment. Thus, the enrolment plan serves as the "road map for achieving specific institutional goals, typically in relation to student's size, enrolment mix, and revenue" (Ward, 2005:9). The success metrics in the enrolment stage were analyzed by identifying recurring concepts of meaningful quotations from the interview transcripts via the Atlas.ti content analysis programme. Both senior and programme management shared the success metrics in the enrolment stage which comprises of study body size, availability of Honours degree programmes, financial assistance and marketing expenses (See Figure 13). The frequency count of success metrics in the enrolment stage is shown in Table 28. The success metrics of SEM in the enrolment stage are discussed accordingly based on the frequency count in Table 28.

Figure 13: Success Metrics - Enrolment

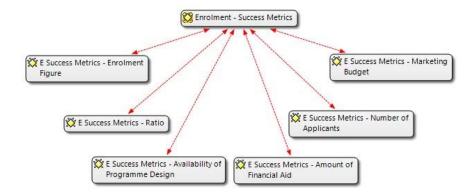


Table 28: The Frequency Count of Success Metrics in the Enrolment Stage

Success Metrics - Enrolment	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
<b>Enrolment Figure</b>	6	1.0	12	0.9	18
Number of Applicants	2	0.3	4	0.3	6
Availability of Programme Design	3	0.5	1	0.1	4
Amount of Financial Aid	1	0.2	2	0.1	3
Ratio of Applicants to Enrolled Students	0	0.0	2	0.1	2
Marketing Budget	1	0.2	1	0.1	2

#### 4.7.1.1 Enrolment Figure of Each Intake

#### Similarities – Enrolment Number

Nearly all participants (18 out of the 20 participants) shared their knowledge that major measurement of success of enrolment is the enrolment figure of each particular programme.

"Enrolment number in each intake is the main measurement of success of enrolment."

(Participant 5, Senior Management)

'Of course the flagship programmes, such as MRP [marketing and public relations] programme, international business programme are very popular with high enrolment figure."

(Participant 7, Programme Management)

# **Summary of findings**

Both senior and programme levels emphasized the importance of enrolment number.

# 4.7.1.2 Number of Applicants and Shortlisted Applicants in Each Particular

# **Programme**

# Similarities – Number of Applicants

It is also important to know the number of applicants and shortlisted applicants in each particular programme. Regarding to applicants and shortlisted applicants, both senior and programme management level would like to know more information about them, such as the reasons why they choose our programme or why they didn't choose our programme finally, where did the students finally go, etc. For shortlisted applicants, the admission team may do the follow up on student's demographic profile in terms of their entrance scores, previous institution, and their previous major of studies.

"Our admission team would keep the record on how many applicants applied for the programme, and how many would come and how many decided not to come, etc. in each intake."

(Participant 3, Programme Management)

#### **Summary of findings**

Both senior and programme levels found that application number of each programme is an important success metric.

# 4.7.1.3 Programme Design – Availability of Honours Degree Programmes Senior Management

Another success metric is the availability to provide more Honours programmes instead of ordinary degree programme. Half of the senior management (3 out of the 6 participants) addressed the importance on number of the Honours degree programme in the self-financing tertiary institution.

"One important reason why we have successful enrolment number this year; that is we have upgraded many of the existing ordinary programmes to Honours degree programmes. Therefore, instead of studying 1.5 years in the institution, students are expected to study 2 full years so as to achieve the Honors qualification. Students prefer to study a degree programme with Honors qualification."

(Participant 1, Senior Management)

# **Summary of findings**

The concern of the availability of Honours degree programmes is more emphasized in senior level.

# 4.7.1.4 Financial Aid - The Amount of Need-based Merits

# Similarities – Amount of Financial Aid

As examined by Hossler (2000:82), "one key finding is that receiving a financial aid award has a significant positive effect on the likelihood that a student will enter the institution that has made the financial aid offer". Also, the amount of the financial aid is a major concern for prospective students in relation to their enrolment decisions. Both senior and programme management agreed that the government grant loans, such as Government Grant and Loan, the Government's Non-means-tested Loan Scheme (NLS) or Continuing Education Fund (CEF) are important to students, especially the grant for students in needed. Students with financial needs may apply.

# **Summary of findings**

Both senior and programme level agree that the amount of financial aid has significant impact on student enrolment decision.

#### 4.7.1.5 Admission - Ratio of Applicants to Enrolled Student

#### Programme Management

Programme Management considered ratio of applicants to enrolled students is important as one of the measurement of successes in the enrolment stage.

"Our current practice is that we would generate the ratio of applicants to enrolled students to the respective programme leaders and programme director as a reference. Normally, the ratio is about 3-3.5, if the ratio is higher than past year's, we might need to explore the underlying reasons on such high ratio. It may due to the student's qualification in terms of their less competitive entrance GPA. If there are other reasons, we would invite marketing team to follow up."

(Participant 14, Programme Management)

The ratio of applicants to enrolled students helps programme leader to do comparison with previous year's data. If there are inconsistencies, programme leader would pass the information to the marketing team for further investigation on the reasons why prospective student do not come to our institution finally. There are two possibilities: the first is that student's previous qualifications are less competitive which would not meet the minimum requirement. The second possibility is the non-registered applicants choose to study at other institutions.

# **Summary of findings**

It is necessary to determine the reasons why those non-registered applicants do not choose our institution.

# 4.7.1.6 Marketing – Marketing Budget and Number of Marketing Activities Similarities - Resources in Marketing

Alam et al. (2010) stated that the recent massive expansion of education through private provision has introduced new horizons in marketing and promotion for education. Using a 'marketing approach' to promote the private education institution through marketing activities is significant. Marketing budget becomes an important element in allocating or regulating the marketing activities.

"I think more marketing budget would further help promote the programme to prospective students. So far, major marketing expenses were spent on popular programmes such as marketing and public relations, hospitality management, etc. It seems to me that more marketing budget would imply more student enrolment."

(Participant 1, Senior Management)

"So far, we have conducted different number of marketing activities to promote the institution so as to attract prospective students. Currently, other than print media and social media, we have Student Ambassador Scheme to strength their attachment to the School."

(Participant 19, Programme Management)

# **Summary of findings**

With more marketing budget, more marketing activities would be involved in private education institution from both senior and programme levels.

#### 4.7.2 Success Metrics - Retention

Retention metrics enables an institution to focus sharply on the essential attributes of success in the stage of retention. Participants of senior and programme management were asked questions about the success metrics of SEM in the retention stage during the interview. Participants expressed their views on the success of measurement in relation to drop-out rate, number of orientation session, variety types of learning assistance, and amount and number of financial packages. After coding the collected interview data by Atlas.ti, the perceived success metrics of SEM has been shown in Figure 14. The frequency count of success metrics in the retention stage has been shown in Table 29. The success metrics of SEM in the retention stage are discussed accordingly based on the frequency count in Table 29.

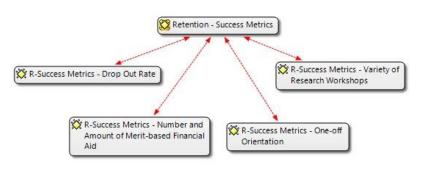


Figure 14: Success Metrics - Retention

Table 29: The Frequency Counts of Success Metrics in the Retention Stage

Success Metrics - Retention	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Drop Out Rate	7	1.2	9	0.6	16
Number and Amount of Merit-based Financial Aid	2	0.3	4	0.3	6
One off Orientation	0	0.0	4	0.3	4
Variety of Research Workshops	3	0.5	0	0.0	3

# 4.7.2.1 Low Drop-out Rate

# Similarities – Drop-out Rate

Drop-out rate is a practical success measure on retention. If students who do not want to continue studying or complete their studies for any reason, they would drop out and leave the programme. Therefore, drop-out rate is an effective measure on whether or not students would retain in the institution. Every participant addressed the drop-out rate for each programme in the institution is very low. Participants agreed that most of the students would complete their studies once they decided to study at this institution. Therefore, both senior and programme management found that low drop-out rate one of the success metrics in retention.

"I have been working here for 4 years, and so far, I have seen only one case of 'drop out' in which a student was deregistered due to poor academic result with GPA less than 2.0 for two consecutive semesters. I haven't seen a case that students dropped for the reason of going into another institution. Once they decided to study at our programme, they almost try their best to complete the programme."

(Participant 11, Programme Management)

"We've got very low dropout rate which was less than 5% I think, because students only stay 3 semesters with us and they would not consider other institutions once they decided to study our top-up programme."

(Participant 15, Senior Management)

# **Summary of findings**

Both senior and programme management found that low drop-out rate is a practical success measure on retention.

# 4.7.2.2 Financial Aid - Amount and Number of Merit-based Financial Aid Similarities – Merit-based Financial Aid

Financial aid is important not only at the stage of enrolment but also to retain students in the institution. As merit-based financial aid such as scholarships do affect student's decisions and momentum in retaining and completing their programmes, the amount as well as the number of merit-based financial aid are critical from students' perspective because students are concerned about how many candidates would be applied successfully and how much the successful applicants would be awarded when applying for the merit-based scholarships.

#### **Summary of findings**

Both senior and programme levels considered that amount and number of merit-based financial aid are important success metrics.

4.7.2.3 Orientation - One off orientation

Programme Management

Participants of programme management said one-off orientation is sufficient for students. It is because fresh students are unfamiliar with the new campus environment in terms of the campuses facilitates and support, learning atmosphere, School and teacher's expectation. It is then critical to organize an orientation section to newcomers. However, once fresh students are familiar with the campus life after their first semester or first year, the function of orientation is no longer important to them; so, orientation is considered to be one-off which is held before the commencement of newcomer's study.

**Summary of findings** 

Programme management has much concerned on the orientation and found that one-off orientation is sufficient for students.

4.7.2.4 Learning Assistance - Variety Types of Research workshop

Senior Management

Senior management proposed that the range of workshops is crucial for students in increasing their attachment to the institution. Students like to attend workshops, professional talk and seminars, complementary studies and extra-curricular activities so as to increase their learning experience, widening their horizons towards all round student development.

"Types of workshops such as languages, statistical techniques, etc. I would say more is better."

(Participant 1, Senior Management)

**Summary of findings** 

Senior management has much concerned on the range of workshops than programme level does.

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#### 4.7.3 Success Metrics - Graduation

The measurement of success in relation to graduation stage of SEM is to be discussed in this section. Participants of senior and programme management were asked questions about the success metrics of SEM in the graduation stage during the interview. After coding the collected interview data by Atlas.ti, the perceived success metrics of SEM has been shown in Figure 15. Graduation rate and articulation rate, number of alumnus, employability ratio, and student learning outcomes are addressed by the participants. The frequency count of success metrics in the graduation stage is shown in Table 30. The success metrics of SEM in the graduation stage are discussed accordingly based on the frequency count in Table 30.

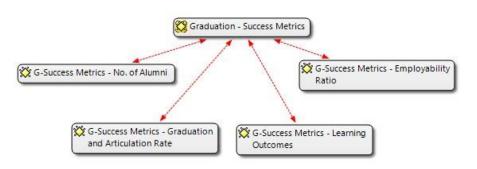


Figure 15: Success Metrics - Graduation

Table 30: The Frequency Count of Success Metrics in the Graduation Stage

Success Metrics - Graduation	Senior Management	Frequency Count per respondent	Programme Management	Frequency Count per respondent	Total Frequency Count
Graduation Rate and	4	0.7	7	0.5	11
Articulation Rate					
<b>Employability Ratio</b>	2	0.3	4	0.3	6
Learning Outcomes	1	0.2	4	0.3	5
Number of Alumni	1	0.2	1	0.1	2

#### 4.7.3.1 Graduation Rate and Articulation Rate

#### Similarities -Graduation Rate and Articulation Rate

Half of the participants (11 out of the 20 participants) mentioned that successful graduation rate and articulation rate are important measures for graduation.

"From associate degree to top-up degree, the articulation rate is about 80% which as a successful figure as well as our selling point on the associate degree programme. For those who decide to study right away, articulation rate is high."

(Participant 15, Senior Management)

"Graduation rate is definitely the importance measure of success for graduation. So far, out student's graduation rate is over 90%. Also, classification of award is important to students which show their academic achievement. Normally, students with GPA of 3.5 or above will be awarded 'Distinction'; GPA between 2.80 to 3.49 will be awarded Credit; a 'Pass' awarded will be given for those with GPA 2.0 to 2.79"

(Participant 3, Programme Management)

# **Summary of findings**

Senior management has much concern on the graduation rate and articulation rate than programme management does.

# 4.7.3.2 Career Services - Employability Ratio / Employment rate Similarities - Employability

As the function of career services is to offer job-search related strategy workshops, career talk, resume and interviewing education, career fairs, on-campus interviewing, job postings and job referrals, it would facilitate students to be recruited effectively, enhance student's employability or employment rate.

"We have conducted graduation survey every year. If I can remember correctly, the employability of our graduates is above 80% which means 80% of our fresh graduates would have one or more than one job offer in two month time. Over 90% of fresh graduates would have a job offer in three month time. This is a very good figure that we would show it to the prospective students."

(Participant 16, Senior Management)

"This is what I heard that among our programmes...Hospitality Management programme is the highest, employment rate, above more that 90 percent, graduates got the job offer in the first three months. I think we are the highest."

(Participant 13, Programme Management)

# **Summary of findings**

Both senior and programme levels agreed that employability is an important success metric in the graduation stage of SEM.

#### 4.7.3.3 Student Learning Outcomes

#### Programme Management

When students are graduating from the institution, one possible measurement of success is the student learning outcomes.

Through the learning process being experienced in a 2-year institution, student learning outcomes are achieved by engaging in teaching and learning activities of each particular subject of the programme. For each subject, teaching and learning plan is required and available to students; the primary information is the 'Student Learning Outcomes' upon successful completion of each subject. Thus, students would be assessed whether or not they have achieved their learning outcomes of each required subject upon successful completion of the programme.

"We will be assessing student learning outcomes on each subject by different assessment methods such as quiz, participation, mid-term, group project and presentation, individual assignment or final examination. It is very important to see whether student learning outcomes are achieved or not on each subject as well as on the programme as a whole upon successful completion of the programme."

(Participant 4, Programme Management)

# **Summary of findings**

Programme management considered student learning outcomes as one of the success metrics for graduation.

# 4.7.3.4 Alumni - Number of graduates joining Alumni Association Similarities — More Alumni Members

Keeping the institution in the hearts and minds of its alumni is a primary goal of an alumni association so as to create positive reputation and institutional image among graduates. Encouraging more graduates to join alumni association is crucial because this would help create the communication link between the institution and its alumni.

# **Summary of findings**

Both senior and programme management agreed that if the institution has a suitable alumni association in terms of the large number of graduates joining as alumni, it must be good for student enrolment in the long run.

The overall SEM metrics were analyzed by identifying recurring concepts of meaningful quotations from the interview transcripts via the Atlas.ti content analysis programme. After coding the collected interview data, codes of success metrics in the enrolment, retention and graduation stages of SEM were developed and generated directly from Atlas.ti .The overall SEM measurement is then constructed in Figure 16. The logical relation chosen in linking codes to overall success metrics of SEM is "a property of" to define the relations between codes. According to Figure 16, it is seen that there are 14 success metrics in the three stages of SEM (i.e. 6 metrics, 4 metrics and 4 metrics in the enrolment, retention and graduation stages, respectively).

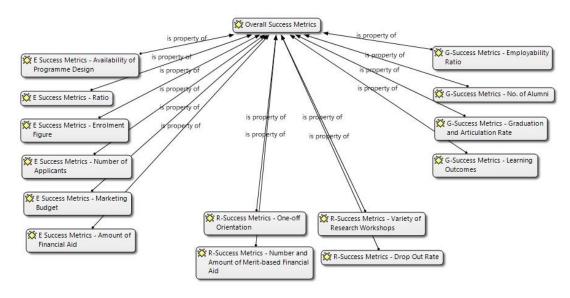


Figure 16: Overall Success Metrics of SEM

# 4.8 Concluding Remarks

In this chapter, the qualitative findings relating to the research questions were grouped under different themes and categories using Atlas.ti. The data collected from the 20 participants and documents was presented to support the substantive analytical framework, determine differences of SEM attributes at programme and institutional

levels as well as among different programmes, reveal barriers and develop success metrics of SEM from senior and programme management perspectives. Chapter 5 will provide a discussion and conclusion of the complete study through the analysis of the qualitative data in Chapter 4 and the findings in the literature review discussed in Chapter 2.

# **CHAPTER 5 - DISCUSSION AND CONCLUSION**

This provides a sequence of discussion and conclusion of this study and relates them to the research questions and the findings in the literature review discussed in Chapter 2. The findings are compared and contrasted with the evidence in the literature to arrive at some primary conclusions on the following areas: (1) the dimensions of SEM and their differences at programme level and institutional level; (2) the key SEM elements in different programmes; (3) the perceived barriers to implementing SEM; and (4) the SEM success metrics from the perspectives of senior and programme management in a continuing education institution in Hong Kong.

# 5.1 The Dimensions of SEM from and their Differences at Programme and Institutional Level from Senior and Programme Management Perspectives in a Continuing Education Institution in Hong Kong

The data provided by the participants reveals a range of attributes which they perceived would maximize enrolment, achieve retention and maintain graduation rates in a continuing education institution in Hong Kong. Some of the core attributes identified from participants support the respective views of Dolence (1993), Hossler et al. (1990), Huddleston (2000) and Dennis (1998). This section addresses research question 1 as follows:

What are the dimensions of SEM and their differences at programme level and institutional level from senior and programme management perspectives of a continuing education institution in Hong Kong?

# 5.1.1 Definition of SEM

Before going into the specific dimensions of SEM, the definition of SEM was first investigated. Most of the senior and programme management agreed with Dolence's definition that SEM is a "comprehensive process designed to achieve and maintain optimum recruitment and increase graduation rates in higher education" (Dolence, 1993:6). Moreover, programme management level raised the concept of demand management as the definition of SEM which confirms the notion of SEM suggested by

Huddleston (2000:65), as "an assertive approach to ensuring the steady supply of qualified students required to maintain institutional vitality".

In addition, senior management asserted that the SEM can be defined as a never-ending process designed to enhance the student learning experience. Since SEM is a unique approach emphasizing optimum enrolment in higher education (Kraft, 2007), the student learning experience is not primarily addressed from the views of Hossler et al (1990) and Dolence (1993). Therefore, the link between the never-ending SEM process and student learning experience is indeed crucial for achieving optimum enrolment in higher education. The insights of senior management are supportive of programme management.

#### 5.1.2 Attributes - Enrolment

Participants of both senior and programme management perceived that the attributes of marketing and admissions would enable the institution to maximize enrolment in a continuing education institution in Hong Kong. The availability of financial assistance offered by the Government is an important attribute for prospective students in their enrolment decision. Both senior and programme management agreed that word-ofmouth marketing, an online application system and needs-based financial aid are the key SEM activities in these three attributes. These three attributes support the previous research by Dennis (1998), Hossler et al. (1990), Huddleston (2000) and Bontrager (2004) who suggested that marketing the institution, efficient admission procedure and availability of financial aid have significant influence in the enrolment stage. addition, both senior and programme management reflected that conducting institutional research is a critical activity in the enrolment stage to understand the market trends and needs of the higher education sector. In order to assist in institutional and programme planning, senior and programme management agreed that an institution should have a research component that produces data and analytical support in relation to prospective student needs, current market trend and competitors analysis. This finding also supports the respective views of Bontrager (2004), Huddleston (2000) and, Hossler and Kalsbeek (2013), suggesting that SEM is highly dependent on institutional research to enable institutions to remain sensitive to the marketplace in higher education.

# 5.1.2.1 Marketing (at Programme Level)

Referring to section 4.4.1, programme management perceived that marketing specificity influences prospective student attraction to available programmes of the institution. Views of programme management were found to mediate the relationship between marketing specificity and intentions of students to apply for a particular programme. In addition, specificity of marketing activities would influence student choice of the institution under conditions of explicit programme information. In fact, a number of research studies also focused on specific strategic approaches to marketing which include competition and segmentation, targeting and positioning (Tonks and Farr, 2003). Therefore, marketing activities would also be considered specifically at programme level by means of targeting and positioning approaches. The programme management must be prepared to line up in support of the senior management's initiatives, helping to turn them into practical action by means of constructive marketing activities. The views of programme management supplement those of senior management that once the distinctiveness of each programme is established, the institutional image would also be enhanced at the same time.

# 5.1.2.2 Institutional Research (at Institutional Level)

Both senior and programme management have similar views that institutional research is important and should be conducted at institutional level. "Institutional research has responded to changing institutional needs through periodically redirecting its analytical framework, methodological focuses, activities and data source" (Peterson, 1985; Peterson and Corcoran, 1985; as cited in Chan 1993:534). Peterson (1985) and Peterson and Corcoran (1985) further emphasized that the "effectiveness of institutional research often depends on how closely the planning and institutional research functions interact" (Chan, 1993:535), and these two functions should be integrated in order to productively manage institutional changes. Thus, institutional research at institutional level would be deemed appropriate as it is essential to formal planning among institutions.

An important part of the present study was to uncover, using a formal content analysis, previously under-reported dimensions of SEM. There were several attributes revealed by the participants that they perceived as important in the enrolment stage of the SEM process that have not been discussed in detail in the reviewed literature. The uncovered

attributes are campus environment and facilities, peer and teacher influence, career opportunity, programme design as well as teaching quality in the institution, all which have impacts on a student's enrolment decision.

# 5.1.2.3 Uncovered Attribute - Campus Environment and Facilities

According to Price et al. (2003:212), a student's enrolment decision is sometimes determined by the "characteristics of the institutional environment, including the physical, academic, social and psychological variables, where facilities management has the most impact". It is necessary to consider the campus facilities as one of the uncovered attributes in the enrolment stage of the SEM process because the impact of facilities on student choice of institution is decisive. Nguyen and Le Blanc (2001:304) claimed that "facilities on campus were one of the critical factors that helped determine students' perceptions of the image or reputation of a higher education institution". Senior and programme management have similar views in providing good ranges of campus facilities so as to provide high quality learning experiences for the students.

# 5.1.2.4 Uncovered Attribute - Peer and Teacher Influence

Programme management were more concerned about peer influence as students like to "listen to and trust our ambassador's recommendation in terms of their learning and studying experience of their chosen institution". On the other hand, from senior management perspectives, if teachers at associate degree or higher diploma level recommend particular articulation programmes to their taught students, students "do trust their teachers who taught them so prospective students would have this channel to understand the recommended programme more implicitly. Recommendations of a suitable programme by peers and teachers would assist prospective students in making an adequate choice for further studies. Such positive influences are built on the reputational images of the institution by means of "word of mouth effect which is more important than any other marketing tools." As supported by Kusumawati (2013:316), "studies in Asian countries found that reference group such as siblings, friends, peers, relatives, teachers and other influential people influence a student's choice of a university". Though the views between senior and programme management are different, the insights between senior and programme levels are interrelated and their

thoughts support each other in order to reach the enrolment goals. Senior levels encourage the support from teachers whereas programme levels motivate the support from students' peers.

# 5.1.2.5 Uncovered Attribute - Career Opportunity

Prospective students are concerned about the future job prospects, and this is one of the major attributes affecting prospective students enrolling at the institution. This attribute indicates that "students believe that graduating from a certain institution will allow them to be more competitive in the labor market as compared to graduating from other institutions" (Ancheh et al., 2006:3). In fact, students are influenced by the graduates' career contributions to society, because they are interested in outcomes, and therefore, their enrolment choice is dependent on the qualification obtained from an institution where allows them to obtain a better job (Ming, 2010). Though Dolence (1993) and Huddleston (2000) addressed the importance of career services and career opportunities in the graduation stage, it appeared from the findings that both senior and programme management perceived career opportunities are also vital in the enrolment stage of the SEM.

# 5.1.2.6 Uncovered Attribute - Programme Design

Both senior and programme management agreed that the uniqueness of programme design becomes important in attracting prospective students for their enrolment decisions into the institution in section 4.4.1.2. Yusof et. al (2008; as cited in Ming, 2010) state that availability of the required programme, such as the range of programmes of study, flexibility of degree programmes and range of degree options, is a very important attribute for first year university students to choose a particular higher education institution. The link between programme design and student enrolment decisions is positive in the enrolment stage of the SEM process. One significant difference in the perceptions of programme design between senior and programme management is that the senior level emphasizes the differentiation of institutional position but programme level emphasizes student learning outcomes and experiences. In fact, if student learning outcomes can be achieved, the institutional image would be enhanced and differentiated from others. Programme management serves as a bridge between senior management and students. It is seen that senior management needs the

support of programme management in order to carry out plans effectively in enhancing institutional reputation.

#### 5.1.2.7 Uncovered Attribute - Teacher Quality and Effectiveness

"Differential teacher effectiveness is a strong determinant of differences in student learning" which is one of the consideration factors when choosing an institution for further studies (Kupermintz, 2003:288). Teacher reputation appears to have an influence on student choice of institution. According to senior management, prospective students search staff profiles of their preferred institution to evaluate the teacher quality in terms of their publications, scholarly activities and professional qualifications. The findings are supported by Cater and Yeo (2009) that the reputation of university staff is an important factor in attracting prospective students. The teacher quality is promoted through word-of-mouth. Thus, institutional image would be enhanced at the same time.

It can be seen that the findings of the uncovered attributes in the enrolment stage of the SEM process are not covered in detail in the reviewed literature in Chapter 2. This is mainly due to the fact that the literature reviewed in Chapter 2 emphasized enrolment management in higher education but ignored the influential factors on student enrolment decisions, especially for continuing education institutions in Hong Kong. The apparent emphasis of the findings on the new attributes implies that the factors in student choice of institution would also be considered in the enrolment stage of the SEM process. It can be supported by the findings that programme management takes a supportive role for senior management. The relationship between senior and programme management is constructive for developing an effective SEM.

# 5.1.3 Attributes - Retention

Nearly all senior and programme management stated that students are willing to remain at the same institution for achieving their graduation goals once they finally decide their choice of institution, thus, the dropout rate is significantly low in a continuing education institution in Hong Kong. Participants indicated that it is necessary to provide orientation, learning assistance, financial aid and student retention activities. These

attributes support the previous research by Singell (2004), Tinto (1993) and Gass et al. (2003).

The attribute of learning assistance was found to be the most important activity in the retention stage of the SEM among senior and programme management. Senior management emphasizes the types of learning assistance but programme management focuses on the need of language assistance to students. In fact, the emphasis of senior management is supportive of the emphasis of programme management so as to deliver a comprehensive range of learning assistance to students finally. Learning assistance helps retain current students by widening their horizons, broadening their intellectual outlook and developing their skills and knowledge in different areas which is also confirmed by Tinto (2006) for making a student's academic progress developmental in character.

#### 5.1.3.1 Academic Advising (at Programme Level)

Regarding the attribute of academic advising, there are both positive and negative views. Programme management mentioned that current students would like to meet their programme leaders or teachers who taught them to seek academic advice; thus, the function of academic advising to current student is not effective. Suggested by programme management, the function of academic advising should be carried out at programme level instead of institutional level.

To foster the function of academic advising, the academic advisor specialism should be more or less similar to the student specialism, such that students would turn to the academic advisor for specific academic advice, such as choosing electives, discussing study patterns, etc. The insights of programme management supplement senior management by providing an effective academic advising at programme level for students.

# 5.1.3.2 Financial Aid and Student Retention Activities (at Institutional Level)

In section 4.4.2.2, it is found that the form of financial aid at institutional level is meritbased, and the role of the financial aid is certainly to increase student retention and their sense of belongings towards the institution. Placing merit-based financial aid at institutional level would enhance the institutional image so as to "increase student retention and students' sense of belongings towards the institution" in the participants' viewpoints.

According to senior and programme management, the relationship building between academic staff and students can be established which helps enhance students' sense of belongings towards the institution through student retention activities. By designing retention activities at institutional level, it would provide benefits to the institution in the form of increased retention and student-university relationship. Bruning (2002:41) suggested "the most important prescription for effective student retention is cooperation and collaboration between the academic and student affairs areas". In order to establish the student-university relationship, Bruning (2002:41) made recommendations to institutions to focus on the "engendered community, maximize opportunities for social engagement, create opportunities for the students to develop personal relationships with university representatives".

#### 5.1.4 Attributes - Graduation

Both senior and programme management addressed the majority of the attributes of career services and alumni. These two attributes support the previous research by Arrington (2000) and Bejou (2005). In addition, senior management agreed that articulation is deemed to be more important for students at their associate degrees level than the students at their undergraduate level which also supports the views of Zamani (2001) for providing articulation pathways and transfer to students making the transition from a two-to-four-year institution.

# 5.1.4.1 Alumni and Career Services (at Institutional Level)

The findings in section 4.4.3.1 and 4.4.3.2 also revealed that alumni and general career services should be available at institutional level. As agreed by senior and programme management, graduated students from every programme of the institution are encouraged to join the alumni association so as to create strong connections between students and institution. Referring to section 4.3.3.2, "the alumni association is working for the whole institution". In addition, senior management believed general

career services such as grooming, CV writing and interviewing workshops, and career counselling services should also be placed at the school level in which resources should be effectively allocated and utilized. Students from different programmes of the institution would receive mutual benefit by positioning these two SEM attributes at institutional level.

#### 5.1.4.2 Career Services (at Programme Level)

On the other hand, the specificity of career services at programme level should be considered by programme management in assisting students in better career guidance and support by means of the organization of specific talks and training, linkage to appropriate potential employers for offering career opportunities to students concerned at programme level. The insights from both senior management (general career services) and programme management (specific career services) supplement one another.

# 5.1.5 Research Question 1: What are the dimensions of SEM and their differences at programme level and institutional level from senior and programme management perspectives of a continuing education institution in Hong Kong?

**Research Finding:** The dimensions of SEM are considered to be more significant at both enrolment and graduation stages than at the retention stage of the SEM process from senior and programme management perspectives.

Uncovered attributes were observed such as suitable campus environment and facilities, career opportunities, unique programme design, peer and teacher influence, good teacher quality and effectiveness which are critical to maximize enrolment at the enrolment stage of the SEM process from both senior and programme management perspectives. In addition, the attributes of marketing, admission and financial aid at the enrolment stage are found to be crucial in this current study which is also consistent with the findings of Hossler et al. (1990), Huddleston (2000) and Bontrager (2004). Attributes of alumni, career services and articulation are vital in the graduation stage of the SEM process. The important attributes of alumni and career services had been reported by the previous research of Heinzen and Rakes (1995) and Bejou (2005).

Surprisingly, the attributes in the retention stage of the SEM are not as important as those in the enrolment and graduation stages of the SEM in the views of senior and programme management. Senior management agreed that the retention rate of the continuing education institution in Hong Kong is relatively high, such that the effort to manage the attributes of student retention, financial aid, orientation and learning assistance at the retention stage of the SEM would be just maintainable. It is then suggested that more effort should be given to the activities at both enrolment and graduation stage of the SEM from senior and programme management perspectives for achieving the institutional mission and goals.

There are both similarities and differences between senior and programme management in SEM perceptions. As suggested by Bontrager (2004), SEM is a joint effort which needs campus-wide commitment. It is evident in this study that the insights of senior management and programme management are interrelated and their roles are supporting of one to another. Although senior management personnel are the key persons in the institution, they are not the only decision-makers in the management of the school. In fact, programme managers are important supporters of the senior levels in planning, developing, managing and leading the school.

To manage enrolment more successfully, senior and programme management who are involved in enrolment management will need to evolve into "enrolment leaders" who are necessary to transform the profession into what it will be in the future. To develop enrolment leadership, two foundational functions are needed. Firstly, enrolment leaders need to develop and embrace fully the institutional mission, vision, and values by setting the direction to lead the institutions (Ward, 2005). Secondly, the key to becoming a successful enrolment leader is that of developing others. Thus, enrolment management executives need to focus on their organisational values and devote themselves to develop others so as to become enrolment leaders (Lingrell, 2014).

# 5.2 The Key SEM Elements at Different Programmes in a Continuing Education Institution in Hong Kong

The data provided by the participants and relevant documents identifies a number of differences for shaping the SEM attributes at six different programmes of a continuing education institution in Hong Kong. This section addresses research question 2 as follows:

What are the key elements of SEM in different programmes of a continuing education institution in Hong Kong?

#### 5.2.1 Student Retention Activities

According to programme management, all six programmes have the retention activity of Student Ambassador Scheme to foster students holistically, and the selected students were groomed for advancement into the spokespersons, marketers and student leaders for the School. Five out of the six programmes were concerned about summer internship programmes as significant retention strategies. Three programmes choose 9 outstanding students joining the China internship programme and the other two programmes would choose one outstanding student from each programme joining the Dubai internship programme. The internship programmes provide opportunities and sponsorship for students to work as interns and to be exposed to the cultural way of life in Chinese Mainland and Dubai.

For the Dubai internship programme, one student from the Hospitality programme said the followings in the School Newsletter of September 2012, Issue 10. "Had I not chosen to study in this programme, I would have never had this opportunity with Jumeirah. The Dubai internship programme is truly an honour; there are students studying in great universities but did not get this opportunity. I am truly blessed to be with this School". The summer internship programme provides a valuable learning experience and the outside classroom learning opportunities which help students to achieve all-round development.

# 5.2.2 Career Services and Opportunities

Regarding career services, programme management from all six programmes would invite speakers from corporate companies to deliver career talks at school level and career guidance through career services is provided to graduating students. Other than this, one programme emphasized the importance of employment in the public and government sectors in the areas of community development work, community planning, corrective services, counselling, family and child welfare, social welfare work, youth work and so on. This programme also develops students' knowledge and skills for ethical practice as researchers, policy makers, managers and practitioners within the community, human services and public services sector. Moreover, one programme valued the assets of past graduates and invited successful graduates who were already at senior level to deliver career talks because this programme has the longest history in the School and has been run for 10 years, accumulating a certain number of graduates with good careers; thus, the effort needed to be put in the marketing function is less than other programmes.

# 5.2.3 New Areas of Key SEM Attributes

Key SEM activities in the area of enrolment, retention and graduation are (1) student retention activities and (2) career services and opportunities. Another finding is that some participants in this study addressed new areas of key SEM activities in different programmes. Areas not prominently identified by the literature as essential components of SEM were cited by participants and documents as important components for effective SEM strategies; these include programmes and curriculum development as well as teacher quality and effectiveness.

# 5.2.3.1 Programme Design

Programme management from five programmes addressed the importance of the internship component in the programme and curriculum development which provides opportunities and sponsorship for students to work as interns and be exposed to the cultural way of life in other countries. Two programmes had the component of industry practicum of 500 hours which was also stated in the School Prospectus, School website and Student Handbook as a graduation requirement such that students enrolling in the

programme have the opportunity to work with organizations to identify important issues, engage in data collection and analysis, and recommend insightful solutions for real-world business problems. One of these two programmes also included public case study competition in its comprehensive curriculum. This programme further emphasized critical thinking and real-world applications in a way that students can gain a better understanding of project management and teamwork through an intense hands-on experience.

Another two programmes adopted a scheme approach so that student would choose different award programmes to study; also, more elective subjects can be provided for them. Among the six programmes, only one programme is an ordinary degree programme and the enrolment figure was the smallest in the academic year 2013/2014 among the other five programmes. Participants from five programmes agreed that students prefer to choose an Honours degree programme rather than an ordinary degree programme; thus, the Honours degree programme is more attractive to prospective students than an ordinary degree programme.

# 5.2.3.2 Teacher Quality and Effectiveness

Programme management from all six programmes agreed that their teachers are experienced and dedicated with a caring attitude. In addition to that, one programme emphasized the reputation of the programme's academic staff which is confirmed by Carter and Yeo (2009) that one of the important factors for prospective students to choose their preferred institutions is reputation including reputation of university staff. This finding also supports senior management's insights that reputation of teachers helps them be more experienced and create synergy in teaching in order to enhance teaching effectiveness and institutional image.

# 5.2.4 Research Question 2: What are the key elements of SEM in different programmes of a continuing education institution in Hong Kong?

**Research Finding**: SEM attributes work different ways in different programmes because different programmes have different emphasis on SEM characteristics in the stages of enrolment, retention and graduation due to the nature of the programme. The relationship between a programme success, SEM, and the efforts of both senior and

programme management are interrelated. One important finding is about the availability of programme and curriculum development. Five of the six programmes were upgraded to Honours degree programme from ordinary degree programme except Applied and Media Art (AMA), leading them to be academically reputable. Thus, reputation of teaching staff together with reputation of institution is deemed to be significant for attracting prospective students in enrolling on their preferred programmes. The two new essential components of SEM would help optimize enrolment goals of a continuing education institution in Hong Kong.

# 5.3 What are the Perceived Barriers to Implementing SEM in a Continuing Education Institution in Hong Kong?

A number of potential barriers to implementing SEM have been identified in this current study in which it is considered as significant in affecting the comprehensive success in a continuing education institution in Hong Kong. This section therefore addresses research question 3 as follows:

What are the perceived barriers to implementing SEM in a continuing education institution in Hong Kong?

To establish comprehensive success of a continuing education institution in Hong Kong, the perceived barriers to implementing SEM need to be tackled and minimized in the area of (1) demand management; (2) student quality; (3) student academic performance leading to deregistration; (4) language capability; (5) articulation; and (6) graduate attitude/ mindset.

# 5.3.1 Poor Demand Management

One of the perceived barriers to implementing SEM is poor demand management from senior management perspectives. The link between demand management and comprehensive success of the institution is crucial. If the demand is not managed efficiently and effectively, it may highly affect the comprehensive success of the institution. This finding also shows that an effective SEM programme would help an institution achieving success.

## 5.3.2 Difficult to Attract Good Quality Students, Student Deregistration and Language Deficiency

Both senior and programme management expressed concerns over the quality of prospective students and student academic performance. "Academic institutions seeking excellence attract good students through reputation" (Mayer-Foulkes, 2001:482). However, it is very difficult for self-financing tertiary institutions to admit good quality student. Good quality students may consider UGC funded programmes, so it would be a barrier for the institution to admit good quality student. As mentioned by the senior and programme management in section 4.6.1.2, "our barrier is mainly our prospective students' quality...we are still thinking how to attract good quality students enrolling in our programmes."

Moreover, the issue of student deregistration due to poor academic performance and language capability are another perceived barrier from programme management perspectives. It is noted that if the institution cannot admit good quality students, it is more likely that students graduating from the institution are unable to achieve excellent academic results. The interaction between quality of newly enrolled students, their ongoing academic results and language capability is significant. The implication is that the institution should find ways to attract good quality students in terms of language competence, such that their continuing academic results at the institution would be sustained and maximized.

### 5.3.3 Articulation and Graduates' Attitude

Lack of clear articulation pathways and inappropriate graduates' attitudes are classified as the perceived barriers in the graduation stage of the SEM implementation. In section 4.6.3.2 and section 4.6.3.3, senior management expressed their views that "it is necessary to think of articulation pathways so that our graduated students would consider studying Masters degrees". Moreover, programme management found out that "the biggest problem is the attitudes and mindsets of our fresh graduates. Some graduating students think that society owes them if they do not get a good job offer. We've got to change their negative attitudes by delivering appropriate career related workshops." It is necessary to address and tackle the perceived barriers when implementing SEM in a continuing education institution in Hong Kong.

## 5.3.4 Research Question 3: What are the Perceived Barriers to Implementing SEM in a Continuing Education Institution in Hong Kong?

**Research Finding:** Poor demand management, difficulty in attracting good quality students, students' poor academic performance, language incompetence, unclear articulation, and inappropriate graduate attitude are the perceived barriers to implementing SEM in a continuing education institution in Hong Kong from senior and programme management perspectives.

To reduce barriers to the implementation of SEM, resources and senior management support, academic and administrative people involvement (Dennis, 1998), the strategic relationship with external potential employers as well as development of students' learning experience, need to be considered in moving the institution towards a SEM, resulting in reaching the same goals of the institution. There are both similarities and differences between senior and programme management in their views of barriers to implementing SEM. It is evident from the findings that senior management is acting as support for programme management or programme management is acting as support for senior management. In addition, Pirius (2014:254) explored five initial steps needed to implement SEM at a two-year college including "identifying SEM leadership, building a SEM committee, developing a common understanding of SEM, building SEM goals that recognize the institution's strengths and weaknesses, and dedicating resources for SEM".

# 5.4 What are the SEM Success Metrics in a Continuing Education Institution in Hong Kong?

A number of success metrics have been identified in the enrolment, retention and graduation stages of the SEM process which are considered as significant from the senior and programme management perspectives. This section therefore addresses research question 4 as follows:

What are the success metrics of SEM in a continuing education institution in Hong Kong?

### 5.4.1 Success Metrics - Enrolment

The metrics of marketing budget, number of marketing activities, ratio of participants to non-participants, enrolment figures of each intake, number of applicants and shortlisted applicants in each programme and the amount of needs-based merits addressed by both senior and programme management were found to be the success metrics of SEM, which are also confirmed by Bontrager (2004) and Dolence (1990). In addition, senior management addressed the importance of availability of an Honours degree programme which is considered as a new success metric in the enrolment stage of the SEM process.

### 5.4.2 Success Metrics - Retention

The metrics of drop-out rate, number and length of orientation programmes, variety and types of research workshop, and amount of merit-based financial aid are success metrics of SEM from the views of both programme and senior management. All of the success metrics are supported by the previous research of Dolence (1990) and are related to the perceived success of SEM from the participants.

#### 5.4.3 Success Metrics - Graduation

Graduation and articulation rate, and number of students joining alumni are consistent with the respective views of Huddleston and Rumbough (1997). However, the employability ratio and student learning outcomes are considered as new success metrics in the graduation stage. The employability ratio was also stated in the School Prospectus of the academic year 2012/2013.

Regarding student learning outcomes, programme management stated "it is very important to see whether student learning outcomes are achieved or not on each subject as well as on the programme as a whole upon successful completion of the programme" in section 4.7.3.3.

## 5.4.4 Research Question 4: What are the SEM Success Metrics in a Continuing Education Institution in Hong Kong?

**Research Finding:** There are no significant differences between senior and programme management in the views of SEM success metrics in this study. New success metrics (availability of an Honours degree programme, the employability ratio and student

learning outcomes) are found in both enrolment and graduation stages which are quantified as perceived SEM success in a continuing education institution in Hong Kong.

### 5.5 Overall Conclusion

According to the findings, SEM is not only defined as "a comprehensive process designed to achieve and maintain optimum recruitment and increase graduation rates in higher education" (Dolence, 1993:6), but also can be defined as a never-ending process designed to enhance the student learning experience. The success of an institution depends upon the extent of the implementation of SEM. SEM is a concept as well as a process that enables the fulfillment of the institutional mission and students' educational goals (Bontrager, 2004). In addition, the core attributes of SEM constitute performance and outcomes in the areas of enrolment, retention and graduation.

There are uncovered attributes of (1) campus environment and facilities (2) peer and teacher influence (3) career opportunity (4) programme design and (5) teacher quality and effectiveness found in this study in the enrolment stage of the SEM process from both senior and programme management perspectives. To achieve enrolment goals and the institutional mission, continuing education institutions in Hong Kong should (1) conduct all the suggested activities of SEM in enrolment, retention and graduation stages; (2) differentiate particular SEM activities at programme and institutional levels; (3) employ different SEM activities at different programmes; (4) minimize perceived barriers of implementing SEM; (5) quantify the success metrics of SEM.

These results can be useful to the management level of the Hong Kong continuing education institutions in achieving institutional goals by incorporating SEM for increasing student enrolment, retention and graduation rates, contributing to the success of the institutions. It is also evident that SEM requires campus-wide support in which both senior and programme management efforts are vital to the SEM process. The roles of senior management and programme management are important to the development and implementation of SEM. Senior management leads initiatives that allow the reputation of the institution in the community to be enhanced and provide students with wide opportunities within the institution. Programme management acts as the bridge between senior management and students by understanding students' concerns and

needs and the main responsibilities of programme management are to organize and monitor students' performance. The effort from senior management and programme management are supportive of one another in achieving institutional goals.

### 5.6 Contribution to Knowledge

The present research contributes to existing research in continuing education in two ways: filling gaps in current knowledge of SEM in the continuing education sector in Hong Kong and providing recommendations to other senior and programme management for contributing to the success of continuing education institutions in Hong Kong.

### 5.6.1 Theoretical Implications

The findings of this study support the existing literature on SEM. SEM literature addressing continuing institutions in Hong Kong is almost non-exist. In addition, an extensive literature search reveals that there is so far no in-depth study of SEM in the continuing education sector in Hong Kong. Thus, this study serves to bridge the current gap in the literature on SEM practice at continuing education institutions in Hong Kong and might provide the impetus for others in conducting further research in these areas.

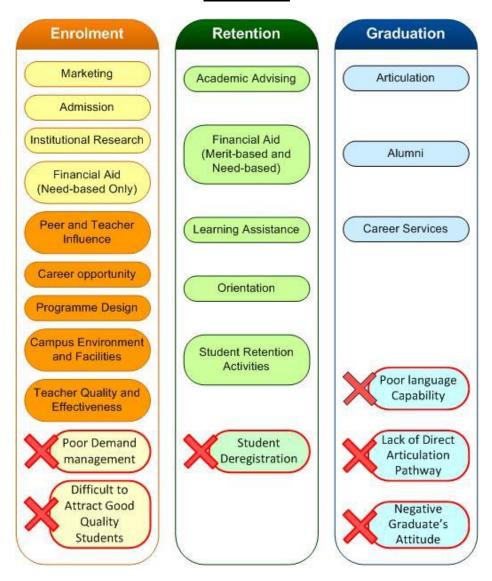
The present research has contributed to the understanding of the dimensions of SEM from two levels of management (senior and programme management) to compare and contrast perspectives of SEM and how a SEM programme can be developed, implemented and evaluated successfully in a continuing education institution in Hong Kong. The findings of the present study provide relevant contributions to knowledge and theory on SEM. In order to achieve enrolment goals and the institutional mission in a continuing education institution in Hong Kong, it is clear that there is a need for more research on SEM in Hong Kong.

This study has achieved the aim of developing an analytical framework of dimensions of SEM in a continuing education institution in Hong Kong from senior and programme management perspectives, consisting of themes, categories and sub-categories. For the participants of both senior and programme management, four themes were significant: (1) dimensions of SEM and their differences at programme and institutional level; (2)

key elements of SEM in different programmes; (3) perceived barriers to implementing SEM; and (4) success metrics of SEM. For each of these themes, contextual factors and complexities were discovered through an emerging pattern of categories and subcategories so as to contribute to the overall picture of SEM in a continuing education institution in Hong Kong. Thus, the present study expanded previous research to attempt to identify SEM dimensions, perceived barriers and success metrics to SEM in a previously unexamined context, Hong Kong.

As the vast majority of prior empirical studies have not used any formal method, the use of formal content analysis, Altas.ti, creates an opportunity to identify possible new dimensions of SEM. The substantial model of SEM should be seen as a model engaging in continuing education sector in Hong Kong so as to achieve institutional success. The following new substantial framework of SEM serves as a useful instrument for offering continuing education as alternative approaches and strategies towards institutional success in Hong Kong. After the data analysis using Atlas.ti, the proposed model of SEM in a continuing education institution in Hong Kong has been constructed in Figure 17.

Figure 17: A Proposed Substantial Model of SEM in a Continuing Education Institution in Hong Kong



<sup>\*</sup> X in Figure 17 represents perceived barriers to implementing SEM

Source: designed by present researcher

### 5.6.2 Practical Implications

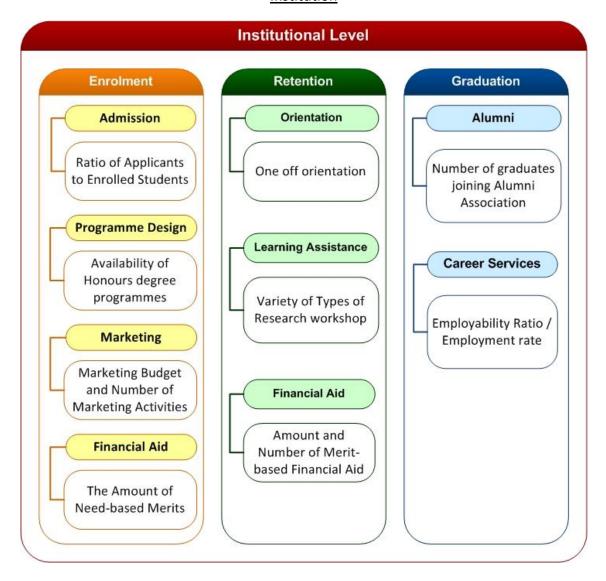
SEM has not yet been developed and implemented in the Hong Kong continuing education sector. Research indicates the core attributes of SEM are not always effectively implemented and one of the failures of implementation of SEM is lack of integration of the core attributes in enrolment, retention and graduation stages (Black, 2004; Dolence, 1990; Huddleston, 2000). By collecting the information from senior and programme management and documents, this study contributes to provide practical recommendations how SEM can be developed, implemented and evaluated in order to

achieve institutional success of the continuing education sector in Hong Kong. To avoid implementation failure of SEM in continuing education sector in Hong Kong, integration of core attributes of SEM in every stage of SEM, at programme level, at institutional level, and in different programmes should be identified to enable a more suitable SEM for Hong Kong continuing education contexts. This study also reflects that SEM relies on metrics that measure the impact of SEM components. These metrics are used to assess the achievement of enrolment, retention and graduation goals so as to provide a benchmarking of use of a viable SEM in continuing education sector in Hong Kong (See Figure 18).

The study may serve as a guide to other senior and programme management personnel of continuing education institutions in Hong Kong to understand the scope of SEM programmes from senior and programme management perspectives so as to improve the institution's overall strategic plan by addressing relevant aspects of the SEM attributes comprehensively.

Figure 18: Overall Success Metrics of SEM in a Hong Kong Continuing Education

Institution



Source: designed by present researcher

SEM requires effective participation of faculty members (Patton et al., 2009). As the participants are faculty members, such as senior and programme management who are able to understand the details and constraints of developing and implementing SEM in a continuing education institution in Hong Kong, their proposed different forms of support based on their involvement can be considered as a driving force towards institutional success. After the findings and analysis of this research study, a proposed SEM model that fits a continuing education institution in Hong Kong is presented in Figure 19. Figure 19 integrates the research questions in this study by using the formal content analysis, Atlas.ti. The proposed SEM model is comprised of the three main

domains: enrolment, retention and graduation. Core attributes in each domain are identified (See Figure 19). To understand the scope of SEM in Hong Kong continuing education context, senior and programme management personnel of continuing education institutions in Hong Kong should understand and examine the core attributes in each domain explicitly. As addressed by Black (2004), one of the implementation failures of SEM is a lack of integration of the core attributes of SEM. In order to develop and implement SEM successfully, senior and programme management personnel should integrate the core attributes of SEM in the areas of enrolment, retention and graduation comprehensively so as to achieve enrolment goals and the institutional mission.

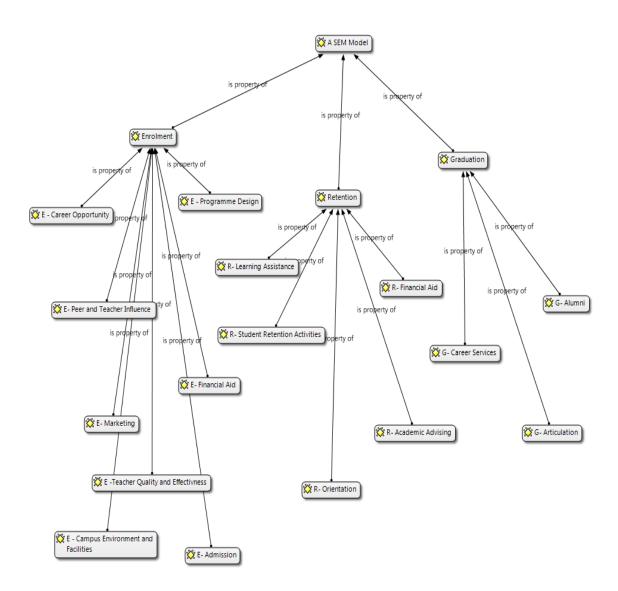


Figure 19: A Proposed SEM Model

Source: designed by present researcher

### 5.7 Reflection on Methodology

A qualitative analysis was adopted in the present study. As the focus of this research is to investigate the views and experiences of senior and programme management personnel in relation to SEM, its importance and differences at programme level and institutional level in an identified continuing education institution in Hong Kong. The use of in-depth interviews for this study has the advantage of providing the researcher with an opportunity for in-depth probing. This has enabled the researcher to better understand participants' perceptions, views, feelings and experiences in relation to the areas covered in the research question and propositions.

In addition, an in-depth case study was adopted as the strategy associated with the qualitative approach; thus, 6 top-up programmes within a single continuing education institution in Hong Kong were selected. Yin (1994) explained that the single case study approach has been used to describe the efficacy of a new approach to solve ongoing problems. SEM is considered as a new approach in enhancing the success of a continuing education institution in Hong Kong.

The present research results were generated by 20 individual in-depth interviews of a single institution under the qualitative method as well as documents. It is hoped that future studies of this research topic could employ some other qualitative research methods, such as multiple case studies so as to increase our knowledge and understanding of the complexities and interrelationships through investigations of senior and programme management experiences and perceptions among different continuing education institutions in Hong Kong.

### 5.8 Limitations of the Study

Any research design processes have limitations and shortcomings. The first limitation of this study is the sample size. The present study was confined to examining and investigating the perceptions and experiences of 20 senior and programme management personnel in the form of academic and administrative staff within an identified continuing education institution in Hong Kong who consented to participate in this research study. The 20 key individuals were selected for this study because they are the key individuals who are involved in and committed to the enrolment management

planning process in a continuing education institution in Hong Kong for achieving enrolment goals and the mission of the institution. The information provided by the research participants during the in-depth interviews may not be regarded as representative of all senior and programme management of the continuing education institutions in Hong Kong. There are no rules for sample size in a qualitative inquiry (Patton, 1990). However, the narrowness of this approach can be regarded as a strength which allows greater depth of investigation and analysis of personal experience, perception and practice.

Second, the sample size and the use of in-depth interviews and documents as a data gathering strategy does not allow broader generalization of findings to SEM models beyond the Hong Kong continuing education contexts. However, the findings obtained in this study enable the generation of useful framework to stimulate further research in SEM. One possible further research is to include students to complete a mapping of all of the processes involved in enrolment, retention and graduation.

Third, there may be potential loss of meaning in translating from Chinese to English. It is difficult to provide an exact match, word for word, in different languages when doing translation. According to Temple and Edwards (2002:3), "much of the translation literature points to the impossibility of a literal movement of meaning from one language to another and would therefore sit comfortably within social constructionist views of the world". Thus, the translator should be involved in discussing concepts rather than just words and, more importantly, understanding the context is critical in deciding equivalence or difference in meaning. In other words, determining the "cultural meaning" is pivotal to the translation process. The researcher in this study also acts in the translator role, actively involving in the interview process to understand the experiences and perceptions of the participants; also, the researcher and the participants have similar cultural background such that the researcher has better understanding about what the content and the relationship mean in the participants' culture. The researcher in fact translated the cultural meaning which the Chinese language carries into English; therefore, the potential loss of meaning during the translation process tends to be minimized.

### 5.9 Recommendations for Further Research

Studies of SEM in higher education or private institutions have been increased recently. Further research is recommended in three areas. First, the proposed SEM model developed in this study needs to be tested both quantitatively and qualitatively. An online questionnaire can be distributed to administrators in other continuing education institutions in Hong Kong to examine the efficacy of the proposed SEM model.

Second, it is recommended that further research be conducted with students. Continuing education institutions in Hong Kong should conduct a study to determine factors influencing students' decisions in enrolment, retention, graduation as well as articulation. Other than current students, institutions should also look at different groups of students such as prospects, graduated students and alumni so as to identify roadblocks and make improvement where possible. A combination of focus groups and survey can be conducted with student groups to examine their views in relation to enrolment, retention, graduation and articulation.

Third, a study to determine the cost effectiveness and cost efficiencies associated with the implementation of a SEM programme should be considered. Such research can lead to further insights into how senior management can be better supported to ensure cost effectiveness of SEM for achieving and maintaining the optimum recruitment, retention, and graduation rates.

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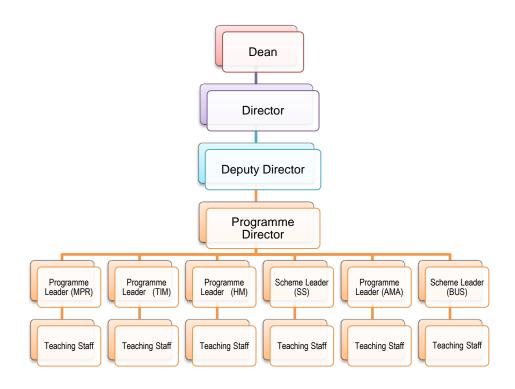
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### **APPENDICES**

# Appendix I: Organization Structure of Academic Staff of Six Programmes in SPEED



Abbreviation	Full Programme Titles
MPR	Bachelor of Arts (Honours) in Marketing and Public Relations
TIM	Bachelor of Arts (Honours) in Travel Industry Management
НМ	Bachelor of Arts (Honours) in Hospitality Management
AMA	Bachelor of Arts in Applied and Media Arts
BUS	Bachelor of Arts (Honours) Scheme in Business
SS	Bachelor of Social Science (Honours) Scheme

### **Appendix II: Informed Consent**

The interviewees are asked to sign the informed consent form before the commencement of the interview.

# Informed Consent Form for Interview The effectiveness of Strategic Enrolment Management in Hong Kong Continuing Education

### **Introduction to the Interviewees**

The objective of this study is to examine the perceptions of Strategic Enrolment Management (SEM) from senior management perspectives in order to determine how SEM can be developed, implemented and evaluated successful within an identified continuing education institution in Hong Kong.

### **Consent on Voice Recording**

The consent on voice recording is sought before starting the interview.

- The interviewees will have the right to terminate the voice recording at any time of the interview process.
- The interviewees will also have the right to get a copy of their individual voice records. But they will need to express such a request immediately after the interview, as the voice records will be destroyed after transcription.
- The transcribed records will be kept anonymous with assigned codes.
- The code sheet will be encrypted with a password in a computer and will also be destroyed one year after the completion of study.

### **Confidentiality Concerns**

- Confidentiality of the subject will be protected throughout the whole process of study.
- Anonymous quotations will be used in publications or presentations.
- Any quotation that will reflect the identity of an interviewee will be avoided.

I have read the above and consent to participate in today's interview. I have been offered a copy of this consent form that I may keep for my own reference.

Signed by Interviewee:Name:	 -		
Signed by Interviewer:Name:			
Date:			

### **Appendix III: Interview Guide**

### **Interview Questions: For Senior Management**

### **Background Information**

- 1.1 How long have you worked in this institution?
- 1.2 How long have you been involved with the enrolment planning, implementation and evaluation process?
- 1.3 What is your role in the enrolment planning, implementation and evaluation processes?
- 1.4 What are the programme(s) that you are in charge of?
- 1.5 When did you become involved with enrolment management?
- 1.6 Was your involvement based on your position?
- 1.7 Who provides the leadership for enrolment management at your institution (at the strategic level? At the academic level? At the administrative level?)
- 1.8 Have you heard of the concept of strategic enrolment management or SEM?
- 1.9 In your opinion, what is your understanding of the purpose of strategic enrolment management?

### The definition of SEM is verbal to respondent

The literature defines strategic enrolment management (SEM) a comprehensive process designed to achieve and maintain the optimum a) Enrolment of students, b) retention of students, and c) graduation of students as outcomes. The comprehensive SEM process can comprise of a series of activities in the core attributes of (1) institutional research (2) marketing (3) admission (4) financial aid (5) orientation (6) student retention (7) academic advising (8) learning assistance (9) career services, and (10) others, integrating into different stages of SEM used to achieve these three outcomes. We will use this definition to explore this concept for continuing education institution in Hong Kong.

### Dimensions of SEM in a continuing education institution in Hong Kong from the senior management point of view

- 2.1 Why do students come to us? Why do others choose not to?
- 2.2 What kinds of students are we interested in attracting? Is this what we get?
- 2.3 Where can we find these students?
- 2.4 Do you know the institution's enrolment goals?
- 2.5 <u>Regarding students outcome of **Enrolment**</u>, general literature addresses the following core SEM activities:

- Marketing (Definition: Marketing involves using effective pricing, communication, and distribution to inform, motivate, and service the particular market segments)
- Admissions (Definition: A variety of recruitment activities are conducted through admissions such that potential students may inquire, apply and enroll in their respective institutions)
- Financial aid (Definition: Financial aid is to provide various forms of scholarships and grants as the financial packages to attract and retain students at their institutions. The types of scholarships offered vary from institution to institution, but most fall within the categories of being either merit-based or need-based.
- o Institutional research (Definition: An institutional research manages and provides relevant data including retention rates, historical trends, registration statistics, student characteristics, and enrolment patterns and projections. The use of institutional research helps the positioning of the campus in the marketplace, through examination of the correlates to student persistence and the development of appropriate marketing and pricing strategies.)

We may go through one by one and see how the activities of them help increase student enrolment

- 2.7 <u>Based on students outcome of **retention**</u>, general literature addresses the following core SEM activities:
  - o Financial aid,
  - Orientation, (Definition: Orientation programme as any effort to help freshmen make the transition from their previous environment to the collegiate environment and enhance their success.)
  - Retaining student program (Definition: Any activities or courses that help to enhance student retention)
  - Learning assistance (Definition: Learning assistance as most widely adopted programmes for increasing the level of academic success of an institution's students so as to assist students in achieving success academically and reaching their educational goals
  - Academic Advising (Definition: Academic advising is to help the student create a plan of study that has a good chance to allow him or her reach a goal. This must be supportive but also academically and developmentally appropriate for a given student.
  - Institutional research

We may go through one by one and see how the activities of them help retain your students.

- 2.8 <u>About student's outcome of **graduation**</u>, general literature addresses the following core SEM activities:
  - o Institutional research

- Career services, (Definition: Career services are to provide a series of programmes and services that create opportunties for students to strengthen their confidence that they will be equipped and prepared to face the new challeges which begin after graduationWe may go through one by one and see how the activities of them help students achieving their graduation goals.
- 2.9 Other than the above said core SEM activities, do you have any more activities you want to add that are important to student Enrolment, student retention and/or student graduation?
- 2.10 The importance of activities in each core attributes of SEM Each item below describes a series of activities in the SEM. Please tell us how important this is in each core attribute of enrolment, retention and graduation.

1 – Not important at all 2 – not very important

3 – Somewhat unimportant 4 – neutral 5 – Somewhat important 6 – important

7 – Very important

Not important -----→ Very important

	Enrolment				Retention						Graduation										
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Institutional research																					
Marketing																					
Admission																					
Financial aid																					
Orientation																					
Retaining student program																					
Academic advising																					
Learning assistance																					
Career services																					
Academic commitment																					
Program design																					
Others																					

2.11 Can you define strategic enrolment management for your institution based on your understanding?

- 2.12 In what specific ways do you think that the strategic enrolment management is effective and aligned with the institution's strategic plan?
- 2.13 What elements made SEM effective? Why?
- 2.14 What are the barriers to an effective SEM? Why?

## Perceptions of tying SEM to the success metrics from the perspective of senior management in a continuing education institution in Hong Kong

From your understanding, how do you measure the components of (1) Enrolment (2) retention (3) graduation based on the core attributes as said?

### Success Metrics of SEM

	Enrolment	Retention	Graduation
Institutional research			
Marketing			
Admission			
Financial aid			
Orientation			
Retaining student program			
Academic advising			
Learning assistance			
Career services			
Academic commitment			
Program design			
Others			

### **Interview Questions: For Programme Management**

## Different SEM at institutional level of a continuing education institution in Hong Kong

- 1.1 Is your responsible programme's enrolment optimal? Why?
- 1.2 What could the institution do to better recruit students?
- 1.3 Which programme(s) is/are the most successful in terms of student enrolment? Why?
- 1.4 Have you heard of the concept of strategic enrolment management or SEM?
- 1.5 In your opinion, what is your understanding of the purpose of strategic enrolment management?

### The definition of SEM is verbal to respondents

The literature defines strategic enrolment management (SEM) a comprehensive process designed to achieve and maintain the optimum a) Enrolment of students, b) retention of students, and c) graduation of students as outcomes. The comprehensive SEM process can comprise of a series of activities in the core attributes of (1) institutional research (2) marketing (3) admission (4) financial aid (5) orientation (6) retaining student program (7) academic advising (8) learning assistance (9) career services, and (10) others, integrating into different stages of SEM used to achieve these three outcomes. We will use this definition to explore this concept for continuing education institution in Hong Kong. Definitions of each attributes are as follows:

- 1. An <u>institutional research</u> manages and provides relevant data including retention rates, historical trends, registration statistics, student characteristics, and enrolment patterns and projections. The use of institutional research helps the positioning of the campus in the marketplace, through examination of the correlates to student persistence and the development of appropriate marketing and pricing strategies
- 2. <u>Marketing</u> involves using effective pricing, communication, and distribution to inform, motivate, and service the particular market segments.
- 3. <u>Admission</u> involves a variety of recruitment activities are conducted through admissions such that potential students may inquire, apply and enrol in their respective institutions.
- 4. <u>Financial aid</u> is to provide various forms of scholarships and grants as the financial packages to attract and retain students at their institutions. The types of scholarships offered vary from institution to institution, but most fall within the categories of being either merit-based or need-based.
- 5. Orientation programme as any effort to help freshmen make the transition from their previous environment to the collegiate environment and enhance their success."
- <u>6.</u> Retaining student program is any activities or courses that help to enhance student retention
- 7. Academic advising is to help the student create a plan of study that has a good chance to allow him or her reach a goal. This must be supportive but also academically and developmentally appropriate for a given student.

- 8. <u>Learning assistance</u> as most widely adopted programmes for increasing the level of academic success of an institution's students so as to assist students in achieving success academically and reaching their educational goals
- <u>9.</u> <u>Career Service</u> is to provide a series of programmes and services that create opportunties for students to strengthen their confidence that they will be equipped and prepared to face the new challeges which begin after graduation
- 10. Others any activities other than the above

#### Enrolment

- 1.6 Which of the following SEM activities do/does the programme(s) adopted to increase Enrolment at institutional level?
  - (1) Institutional research (2) marketing (3) admission (4) financial aid (5) orientation (6) student retention (7) academic advising (8) learning assistance (9) career services and (10) others. What are the corresponding activities on the mentioned attributes?
- 1.7 Which of the following attributes do/does the programme(s) adopted to increase Enrolment at <u>programme</u> level for which you are responsible for?
  - (1) Institutional research (2) marketing (3) admission (4) financial aid (5) orientation (6) student retention (7) academic advising (8) learning assistance (9) career services, and (10) others. What are the corresponding activities on the mentioned attributes?
- 1.8 In the area of <u>institutional research</u> what are the 3 most important activities (rank each activity they mention on a 1 to 10 scale, with 10 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>marketing</u> what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>admission</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>financial aid</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>orientation</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>student retention program</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>academic advising</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>learning assistance</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>career services</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

In the area of <u>others</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the Enrolment objective for the programme

- 1.9 What is the Enrolment figure at your institution? How about at the programme(s) for which you are responsible?
- 1.10 What could the institutions do to better attract and enroll students? Why?
- 1.11 Which programme(s) is/are the most successful in terms of attracting and enrolling students? Why?

### Retention

- 1.12 What could the institution do to better retain students?
- 1.13 Which programme(s) is/are the most successful in terms of retaining students? Why?
- 1.14 Which of the following attributes do/does the programme(s) adopted to retain students at institutional level?
  - (1) Institutional research (2) marketing (3) admission (4) financial aid (5) orientation (6) student retention (7) academic advising (8) learning assistance (9) career services, and (10) others. What are the corresponding activities on the mentioned attributes?
- 1.14 Which of the following attributes do/does the programme(s) adopted to retain students at <u>programme level</u> for which you are responsible for?
  - (1) Institutional research (2) marketing (3) admission (4) financial aid (5) orientation (6) student retention (7) academic advising (8) learning assistance (9) career services, and (10) others. What are the corresponding activities on the mentioned attributes?
- In the area of <u>institutional research</u> what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>marketing</u> what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>admission</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention t objective for the programme

In the area of <u>financial aid</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>orientation</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>student retention program</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>academic advising</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>learning assistance</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>career services</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

In the area of <u>others</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the retention objective for the programme

1.16 What percentage of our students completes their degrees at your institution? How about at the programme(s) for which you are responsible? Why?

#### Graduation

- 1.17 Which programme(s) is/are the most successful in terms of student graduation? Why?
- 1.18 In the area of <u>institutional research</u> what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>marketing</u> what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>admission</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation t objective for the programme

In the area of <u>financial aid</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>orientation</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>student retention program</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>academic advising</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>learning assistance</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>career services</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

In the area of <u>others</u>, what are the 3 most important activities (rank each activity they mention on a 1 to 7 scale, with 7 being "very important") in achieving the graduation objective for the programme

- 2.11 How can we graduate a higher percentage of our students at your institution? How about at the programme(s) for which you are responsible? Why?
- 2.12 The importance of activities in each core attributes of SEM Each item below describes a series of activities in the SEM. Please tell us how <u>important</u> this is in *each core attribute of enrolment, retention and graduation*.

1 – Not important at all 2 – not very important

3 – Somewhat unimportant
5 – Somewhat important
6 – important

7 – Very important

Not important -----→ Very important

Enrolment				Retention					Graduation											
1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Institutional research										
Marketing										
Admission										
Financial aid										
Orientation										
Retaining student program										
Academic advising										
Learning assistance										
Career services										
Academic commitment										
Program design										
Others										

## The barriers to implementing SEM (programmes specific) in a continuing education institution in Hong Kong

#### **Enrolment**

- 2.1 What enrolment problems has the programme had in the past?
- 2.2 How did the institution respond to the problems?
- 2.3 What are the current pressing enrolment problems? Why?
- 2.4 What external factors will affect enrolment for your responsible programme? Why?
- 2.5 What are the barriers to implementing enrolment programmes and activities at your programme? Why?

#### Retention

- 2.6 What retention problems has the programme had in the past?
- 2.7 How did the institution respond to the problems?
- 2.8 What are the current pressing retention problems? Why?
- 2.9 What external factors will affect student retention for your responsible programme? Why?
- 2.10 What are the barriers to implementing retention programmes and activities at this programme? Why?

#### Graduation

- 2.11 What graduation issues has the programme had in the past?
- 2.12 How did the institution respond to the problems?
- 2.13 What are the current pressing graduation issues? Why?

- 2.14 What external factors will affect student graduation for your responsible programme? Why?
- 2.15 What are the barriers to implementing graduation programmes and activities at this programme? Why?
- 2.16 What role does the senior academic management play in enrolment management?
- 2.17 What role do the senior administrative personnel play in enrolment management?
- 2.18 Are there sufficient research and data analyses to support enrolment management initiatives?
- 2.19 Is there understanding and support for the enrolment management programme by senior management personnel?

## Appendix IV: Code Trees of (1) Enrolment, (2) Retention and (3) Graduation Stages of SEM Using Atlas.ti

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Name
🎇 E- Barriers (0-4)
💢 E- Academic Advising (0-1)
💢 E- Differences at Institutional and Programme Levels {0-3}
E- Success Metrics (0-7)
🂢 E- Retention Activities {1-1}
E- Articulation (1-1)
🎇 E- Learning Assistance {2-1}
E Success Metrics - Marketing Budget {2-1}
XX E Success Metrics - Ratio (2-1)
💢 E Success Metrics - Amount of Financial Aid (3-1)
💢 E Success Metrics - Availability of Programme Design {4-1}
E Success Metrics - Number of Applicants (6-1)
🂢 E Success Metrics - Enrolment Figure (6-1)
💢 E-Barriers- Tight Resources {6-1}
🎇 E- Career Services (8-1)
💢 E- Teacher Quality and Effectiveness {10-1}
🂢 E-Barriers- Difficult to Attract Good Students {11-1}
💢 E- Employability/ Career Opportunity {11-1}
E- Campus Facilities and Support {13-1}~
🎇 E-Differences - Specific Marketing Strategy at Programme Level {13-1}
🎇 E-Differences - Centralized Institutional Research at Institutional Level {17-1}
💢 E- Peer and Teacher's Influence {19-1}
E- Financial Aid {21-1}~
E- Admission (43-1)
E- Institutional Research (45-1)
🂢 E-Barriers- Poor Demand Management (53-1)
💢 E- Programme Design {59-1}
E- Marketing (68-1)
```

### 🎇 R- Academic Advising {48-1} R- Financial Aid (46-1)~ XR - Learning Assistance {44-1} X R - Retention Activities (34-1) 🎏 R-Barriers - Deregistration due to Poor Academic Results {23-1}~ X R - Orientation (17-1) R-Success Metrics - Drop Out Rate {16-1} K-Differences - Student Retention Activities at Institutional Level (10-1) 🎇 R-Differences - Academic Advising at Programme Level (8-1) XR- Career Services (7-1) 🎇 R-Success Metrics - Number and Amount of Merit-based Financial Aid (6-1) 🎇 R-Differences - Financial Aid at Institutional Level {5-1} 🎇 R- Institutional Research (4-1) R-Success Metrics - One-off Orientation (4-1) XR - Student Affairs (4-1) K-Success Metrics - Variety of Research Workshops (3-1) XR- Admission {2-1} 🎇 R - Marketing {2-1} 🎇 R - Peer Influence {1-1} 🎇 R - Programme Design {1-1} 🂢 R - Others {1-1} R- Articulation (0-1) X R- Differences at Institutional and Programme Levels {0-4} X R- Barriers (0-2) R- Success Metrics (0-5)

### 💢 G- Career Serivces (60-1) G- Alumni {31-1} G- Articulation {22-1} 💢 G-Success Metrics - Graduation and Articulation Rate {11-1} 🎇 G- good quality student {9-1} 💢 G-Differences - Career Services at Institutional Level {9-1} G- Academic Advising (8-1) G-Barriers - Language Capabilities {8-1} 💢 G-Barriers - Negative Graduate's Mindset (6-1) C-1} K G- Others (6-1) G- Peer influence (5-1) 🂢 G-Barriers - Lack of Articulation Pathway (5-1) 💢 G-Success Metrics - Learning Outcomes (5-1) G-Differences - Specific Career Services at Programme Level {4-1} 💢 G-Differences - Alumni at Institutional Level (4-1) 💢 G-Barriers - Teacher's Availablity {3-1} G- Institutional Research (3-1) G- Financial Aid (3-1)~ 🧱 G- Professional Recognition {3-1} G- Learning Assistance {2-1} 🂢 G-Success Metrics - No. of Alumni {2-1} G- Marketing (2-1) 🎇 G- Orientation {2-1} 🎇 G- Programme Design {2-1} G- Retention Activities {1-1} 🎏 G- Differences at Institutional and Programme Levels {0-4}~ G- Barriers (0-5) 🎇 G- Success Metrics (0-5) G- Admission (0-1)

### **Appendix V: Data Analysis Process**

## <u>Themes and categories with sample quotations showing definitions of</u> SEM from senior management and programme management perspectives

Themes and categories were analyzed in response to the following question in relation to the definition of SEM:

Q.2.11 (Interview question for senior management): Can you define strategic enrolment management for your institution based on your understanding?

Q.1.5 Interview question for programme management): In your opinion, what is your understanding of the purpose of strategic enrolment management?

Meaningful quotations were identified from the transcripts. When recurring concepts were identified that represented the definition of SEM, codes and the subthemes were developed. Three subthemes emerged in relation to the definition of SEM (1) student learning experience (2) lifelong process, and (3) demand management. Sample quotations of each subtheme are shown in the following table.

### Themes and categories with sample quotations showing definitions of SEM from senior management perspectives

Themes	<u>Categories</u>	Sample quotations (English)	Sample quotations (Chinese)
Definition of SEM	Student Learning Experience	"I think [Strategic Enrolment Management] is an iterative process. The first step of this process is about marketing and promotion which mean you have to think of a proper channel to reach the potential candidates. Potential candidates would then know more about their preferred programmes by means of marketing. The second step is the learning process of the students when they get admitted to our institution. Student would enjoy the learning experience which is not only the academic knowledge learnt from the lecturer but also the practical knowledge off the book in a particular industry. The third step is the post learning stage which is about the employability of the students after graduation as well as the recognition of their degree qualification." (Participant 3, 9 years, Academic Staff)	P 3: SEM Interview B1 20130606.pdf - 3:4 [????????????????????????????????????
		"Enrolment is just the first step in strategic Enrolment management. Once students are admitted to our institution, their learning experiences are becoming very important. The word "strategic" implies long term planning in which the school has to plan how students would experience the whole learning process properly through the 1.5 years stay in our school. After students are graduated with productive learning experience, they may find a good job and work for the society."  (Participant 17, 4 years, Administrative Staff)	P17: SEM Interview B11 20130808.pdf - 17:41 [????,????? step ?????? enro] (15:148-15:579) (Super) Codes: [definition of SEM] Memos: [learning experience] 我會覺得,都係唔係話一個 step 就可以完成呢個 Enrolment,即係所謂 Enrolment 只係 first step 我自己覺得,之後佢入到嚟,吸引左佢入

		嚟,其實佢入到嚟嗰個 learning experience 係好緊要,特別我會 compare 我地同其他嘅 top-up degree嘅 institution 啦,同埋一般正常大學,即係三年或者四年啦而家,個分別喺邊嘅,咁當然我認為最特別之處就一定係個 duration 少左兩年,或者少左年半,咁嘅情況,咁至於就係因為咁樣樣,所以我覺得呢個 strategic 呢個字好緊要,即係 imply 左一 D long term planning嘅野,咁因為其實你話年半係咪long-term 呢,對於學生嚟講其實係 long-term,因為佢入左嚟呢年半,就賣左年半嘅時光比你,佢希望出到嚟係,可能係投入社會,可能係搵到份好工啦,有 D 同學話人工高啦.
Lifelong Process	"In fact, there is not an end on student's learning experience. Why I say that? Students may join alumni association as the alumni member. So, they will get involved into it, such as experience sharing among alumni members and current students during some alumni activities. It is a lifelong process I believe" (Participant 16, 20 years, Senior Management)	P16: SEM Interview B11 20130808.pdf - 17:42 [????? strategic Enrolment man] (15:605-15:961) (Super) Codes: [definition of SEM] 其實佢 learn 到 D 乜野,同埋出到嚟佢同返 D,基本上唔係完嘅,出到嚟所謂頭先講我會 係好 appreciate 我地而家嘅 alumni association 啦,咁其實係嗰度好緊要,因為嗰度佢一 join 左或者係佢第日會 involve 左喺入面呢,其實佢同學校嗰個 linkage 其實無斷過嘅基本上,咁 我會覺得 strategic Enrolment 呢,唔係剩係單指 Enrolment 啦,其實我會覺得係一個 strategic ,我未說到個 term 啦,但其實係一個 lifelong 嘅野嚟嘅我自己覺得係
Demand Management	"I think it [strategic Enrolment management] is a matching which aligns the institutional resources with student demand. It is about how to cope with student demand based on the available resources provided by the institution."  (Participant 4, 8 years, Academic Staff)	P 4: SEM Interview B2 20130614.pdf - 4:10 [?????????? MATCHING???? RESO] (5:687-5:746) (Super) Codes: [definition of SEM] No memos 如果收生管理。我唸係一個 MATCHING。係將個 RESOURCES 同埋學生嘅 DEMAND 兩方面去互相配合啦

"I think strategic Enrolment management is about the matching of programme design and industrial/community needs. When designing a new programme, it has to consider whether there is an evidence of community needs as well as the likely employment prospects. If there is a new demand for a particular industry, a new programme may be developed to meet the community needs." (Participant 10, 8 years, Academic Staff)

## P10: SEM Interview B6 20130620.pdf - 10:5 [?????,?????? strategic enroll..] (2:191-2:415) (Super)

Codes: [definition of SEM]

No memos

我個人認為,正如頭先所講係 strategic Enrolment management,咁當然嗰個

策略嗰個收生係針對兩方面囉,第一就係喺嗰個課程本 身嗰個嘅 objectives

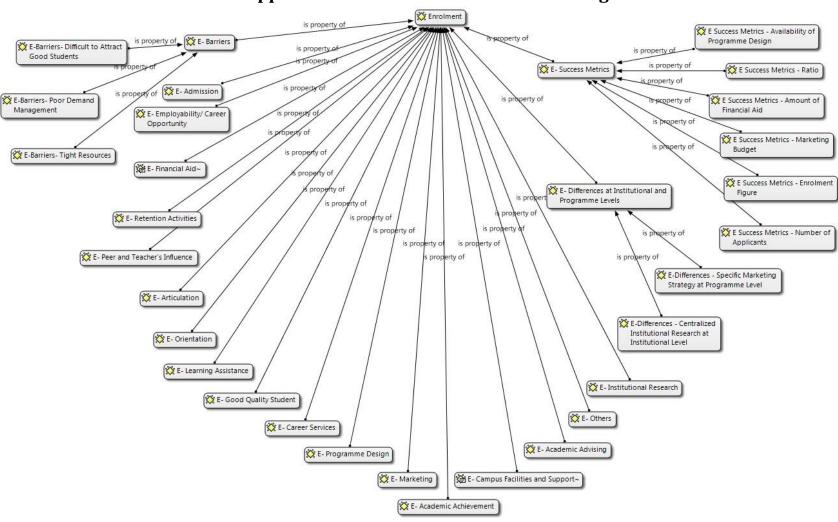
同埋 purpose 啦。第二方面亦都睇番嗰個嘅課程對於 各個行業上面嘅需要,

特別如嗰係講緊我哋嘅課程,可能比較 focus 喺某一啲行業嘅或者商業嘅,

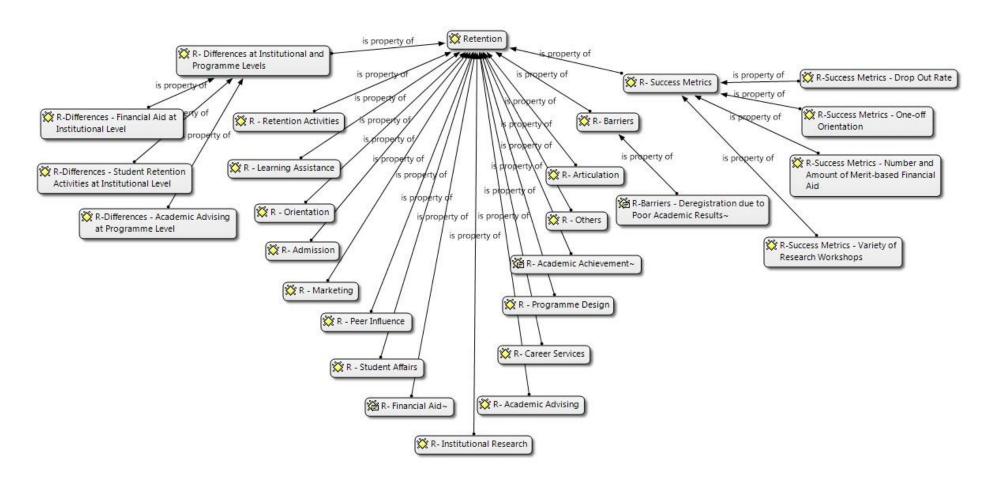
咁所以我自己認為嘅策略性收生應該都係針對係喺商業 方面囉,如嗰有商業

方面嘅課程, 咁同埋學生嘅需要囉。

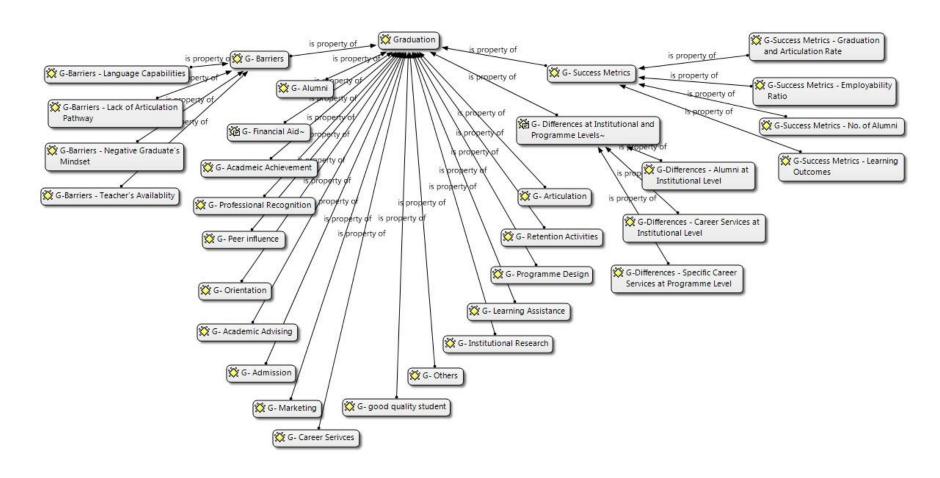
### **Appendix VI: Attributes in Enrolment Stage of SEM**



### **Appendix VII: Attributes in Retention Stage of SEM**



### **Appendix VIII: Attributes in Graduation Stage of SEM**



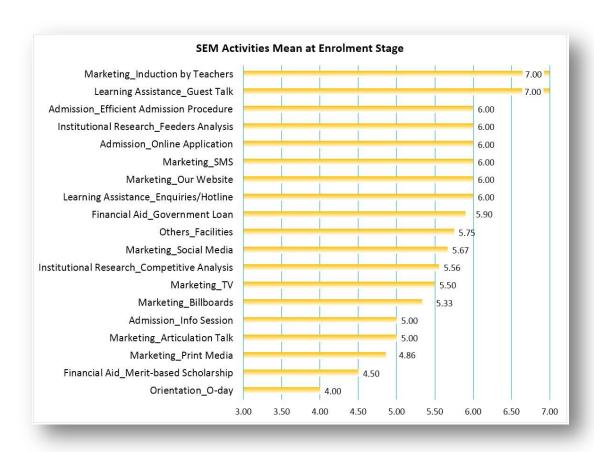
## Appendix IX: Specific SEM Activities in Enrolment, Retention and Graduation Stages

<u>The Importance of Specific SEM Activities in Enrolment, Retention and Graduation Stages</u>

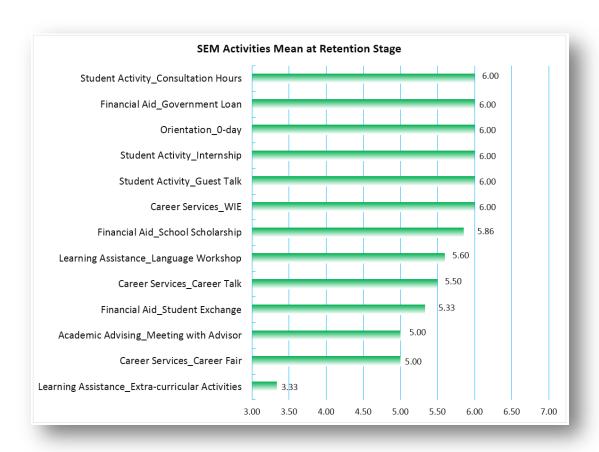
Enrolmen	ıt		
Biii Onice.	N	Mean	Std. Deviation
Learning Assistance_Guest Talk	1	7.00	Nil
Marketing_Induction Programme by Teachers	2	7.00	0.000
Admission_Efficient Admission Procedure	5	6.00	.707
Admission_Online Application	3	6.00	1.000
Institutional Research_Feeders Analysis	3	6.00	1.000
Learning Assistance_Enquiries/Hotline	1	6.00	Nil
Marketing_Our Website	1	6.00	Nil
Marketing_SMS	1	6.00	Nil
Financial Aid_Government Loan	10	5.90	.994
Others_Facilities	4	5.75	.500
Marketing_Social Media	6	5.67	1.033
Institutional Research_Competitive Analysis	9	5.56	.882
Marketing_TV	2	5.50	.707
Marketing_Billboards	3	5.33	1.528
Admission_Info Session	6	5.00	.894
Marketing_Articulation Talk	1	5.00	Nil
Marketing_Print Media	7	4.86	.690
Financial Aid_Merit-based Scholarship	4	4.50	1.291
Orientation_O-day	2	4.00	1.414
Retention	n	•	•
	N	Mean	Std.
			Deviation
Career Services_WIE	2	6.00	0.000
Financial Aid_Government Loan	3	6.00	1.000
Orientation_0-day	3	6.00	1.000
Student activity_Consultation Hours	4	6.00	.816
Student activity_Guest Talk	2	6.00	0.000
Student activity_Internship	2	6.00	1.414
Financial Aid_School Scholarship	7	5.86	.690

Learning Assistance_Language Workshop	5	5.60	1.949
Career Services_Career Talk	2	5.50	.707
Financial Aid_Student Exchange	6	5.33	.516
Academic Advising_Meeting with Advisor	4	5.00	1.414
Career Services_Career Fair	1	5.00	Nil
Learning Assistance_Extra-curricular Activities	3	3.33	1.528
Graduation	n		
			Std.
	N	Mean	Deviation
Academic Advising_Meeting	4	6.75	.500
Career Services_Career Talk	4	6.00	.816
Learning Assistance_Consultation Hours	1	6.00	Nil
Others_Articulation Talk	3	6.00	0.000
Career Services_Interviewing, Grooming Workshops	8	5.50	1.069
Others_Facilities	2	5.50	.707
Others_Alumni	5	5.20	.837
Career Services_Career Fair	1	5.00	Nil
Career Services_WIE	1	5.00	Nil

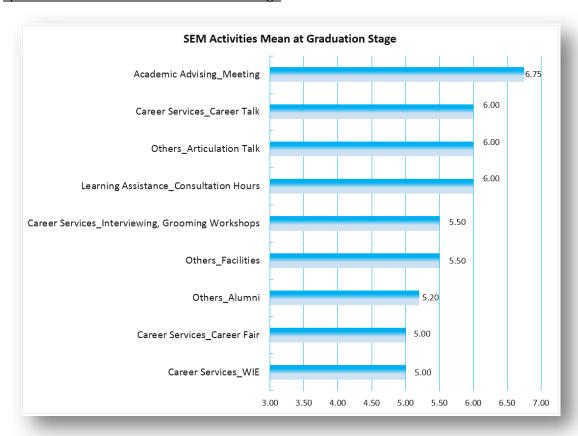
#### Specific SEM Activities in the Enrolment Stage



#### Specific SEM Activities in the Retention Stage



#### Specific SEM Activities in the Graduation Stage



## Appendix X: Summary of Activities Carried Out by Senior and Programme Management in Connection with Students

The following table clearly summarizes the activities carried out by programme leaders, marketing managers and deputy directors/ directors in connection with student's communication in each stage of the SEM process

SEM stage	Key stakeholders	Activities to understand students' concern (Formal and informal)
Enrolment	Marketing Manager /Programme/Award Leader	<ul> <li>Admission survey (a survey for every freshman about why they choose this institution, what are their expectation of the institution and the programme they study)</li> <li>Orientation programme (a casual meeting/gathering with fresh students)</li> <li>Info Day/ Exhibition (set up booth allow prospective students and their parents asking questions)</li> </ul>
Retention	Programme/ Award Leader and Programme Director/ Deputy Director	<ul> <li>Consultation hour (2 hours every week to welcome programme's students to address their concerns</li> <li>Programme Committee Management (a meeting with students each semester to provide a communication platform for students to raise their concerns with programme leaders and teachers)</li> <li>Student feedback questionnaire (a survey for current student commenting their teacher performance, teaching facilities and support, etc)</li> <li>Newsletter published regularly and the activities to be published include information about scholarship, retention activities, career opportunities. The marketing team would interview students from time to time, establishing very close relationship between the school and the students.</li> </ul>
Graduation	Marketing Manager/ Programme Leader/Deputy Director	<ul> <li>Graduation survey (a survey for graduated student to understand their employability and career path.</li> <li>Alumni gathering is organized regularly and programme leaders and deputy directors are invited to meet our graduating students and graduates.</li> </ul>

# Appendix XI: Summary of Key Elements of SEM among Six Programmes of a Continuing Education Institution in Hong Kong

SEM Dimensions	Marketing and Public Relations	Travel Industry Management (TIM)	Hospitality Management (HM)	Business Scheme (BUS)	Social Science Scheme (SS)	Applied and Media Art (AMA)
	(MPR)					
Student Size	252	116	125	248	154	48
in Sept 2013						
intake (FT						
students)						
Marketing	Print media such as	Print media such as	Print media such as	Print media such as	Print media such as	Print media such as
	Prospectus,	Prospectus, Newsletter	Prospectus, Newsletter and	Prospectus, Newsletter	Prospectus, Newsletter	Prospectus, Newsletter and
	Newsletter and Websites	and Websites	Websites	and Websites	and Websites	Websites
		Emphasis of Dubai	Emphasis of Dubai	This programme was	The sharing from best	
		Internship Programme as	Internship Programme as	interviewed by a TV	graduates who worked	
		marketing strategy	marketing strategy	programme of Asia	in government sector	
				Television Limited to	would make it as	
		This programme was	This programme was	share the success of the	testimonials and posted	
		interviewed by a TV	interviewed by a TV	programme and posted	them in School website	
		programme of Asia	programme of Asia	it on the Newsletter		
		Television Limited to	Television Limited to share	and School website.		
		share the success of the	the success of the			
		programme and posted it	programme and posted it			
		on the Newletter and	on the Newsletter and			
		School website	School website.			
Student	Student Ambassador	Student Ambassador	Student Ambassador	Student Ambassador	Student Ambassador	Student Ambassador
Retention	Scheme	Scheme	Scheme	Scheme	Scheme	Scheme
Activities						
	The China Internship	Outstanding students	Outstanding students	The China Internship	The China Internship	
	programme provides	would join the Dubai	would join the Dubai	programme provides	programme provides	
	opportunities and	internship programme	internship programme and	opportunities and	opportunities and	
	sponsorship for	and be assigned to the	be assigned to the	sponsorship for	sponsorship for	
	students to work as	international renowned	international renowned	students to work as	students to work as	
	interns and to be	hotel Burj Al Arab in	hotel Burj Al Arab in	interns and to be	interns and to be	

	exposed to the cultural way of life in the Chinese mainland	summer time	summer time.	exposed to the cultural way of life in the Chinese mainland	exposed to the cultural way of life in the Chinese mainland	
Admission	Online application since April 2013	Online application since April 2013	Online application since April 2013  Candidates with good language and communication skills in the School admission exercise are given a preference	Online application since April 2013	Online application since April 2013	Online application since April 2013
Teacher Quality and Effectiveness (Uncovered Attribute)	Dedicated teaching staff  Good quality teaching demonstrated by the reputation of programme academic staff	Programme leader and teachers are dedicated to provide insightful advice and support with caring attitude	Dedicated teaching staff	Dedicated teaching staff	Dedicated teaching staff	Dedicated teaching staff
Programme and curriculum development (Uncovered Attribute)	Graduates who have successfully completed certain subjects and fulfil the working experience requirements of The Chartered Institute of Marketing (CIM) may be eligible for entry to CIM's Chartered Postgraduate Diploma in Marketing or Professional Diploma	Comprehensive curriculum and students would join a public case study competition organized by HSMAI.  Company visit was arranged for students at Cathay Pacific City to gain more in-depth understanding of airline service operations  500 hours of industry practicum as retention strategy to retain current	500 hours of industry practicum as retention strategy to retain current students	Adopting scheme approach – The Bachelor of Arts (Honours) Scheme in Business, comprising five programmes namely: 1. Bachelor of Arts (Honours) in Business; 2. Bachelor of Arts (Honours) in Business (Finance); 3. Bachelor of Arts (Honours) in Business (International Business);	Adopting scheme approach – The Bachelor of Social Sciences (Honours) Scheme, comprising three programmes namely: 4. Bachelor of Social Sciences (Honours) in Psychology 5. Bachelor of Social Sciences (Honours) in Public Administration 6. Bachelor of Social Sciences (Honours)	This programme is offered in collaboration with the Hong Kong Art School (HKAS) of the Hong Kong Arts Centre. Most of the classes, studios and workshops will be delivered at HKAS premises. This programme is very unique in Hong Kong and the only programme collaborated with Hong Kong Art Centre.

	in Marketing.  Graduates of the programme are also considered to have met the education requirement for full membership of the Hong Kong Institute of Marketing (HKIM).	students		4. Bachelor of Arts (Honours) in Business (Human Resource Management); 5. Bachelor of Arts (Honours) in Business (Operations and Supply Chain Management)		
Career Services/ Opportunities	Invite speakers from corporate companies to deliver career talks at school level  Invite successful graduates (senior management level) for delivering career talks because this programme has been run for 10 years.	Invite speakers from corporate companies to deliver career talks at school level	Invite speakers from corporate companies to deliver career talks at school level  77% of HM graduates received job offers within 3 months upon graduation	Invite speakers from corporate companies to deliver career talks at school level	Invite speakers from corporate companies to deliver career talks at school level  Students would apply for government related jobs upon graduations of social science programme  Invite best graduates who worked in government sector to have a sharing session	Invite speakers from corporate companies to deliver career talks at school level  Graduates are capable of pursuing careers as professional designers, corporate image creators and media artists

## Appendix XII: List of Documents Reviewed for Data Collection and Analysis

- SPEED Bachelor's Degree Programme Prospectus 2013/2014
- SPEED Newsletter January 2010, Issue 09
- SPEED Newsletter September 2012, Issue 10
- SPEED Newsletter April 2013, Issue 11
- SPEED Newsletter October 2013, Issue 12
- Connect November 2010, Volume 2
- Connect July 2012, Volume 3
- Connect July 2013, Volume 4
- SPEED Website accessed at <a href="http://www.speed-polyu.edu.hk">http://www.speed-polyu.edu.hk</a>
- SPEED Student Handbook 2013/2014