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A Conceptual Management Model of Strategic Enrolment, Graduation and Articulation (SEGA) in Self-Financing Tertiary Education in Hong Kong

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ABSTRACT

This paper is about developing a conceptual management model of strategic enrolment, graduation and articulation (SEGA) in self-financing tertiary education in Hong Kong. This research is significant as it provides information on how SEGA would be viewed as a successful conceptual management model to (1) maximize enrolment, (2) improve graduation rates and (3) enhance articulation opportunities within limited educational resources in self-financing tertiary education in Hong Kong.

The proposed conceptual model of SEGA is modified from the concept of Strategic Enrolment Management (SEM). However, as the drop-out rates are not significant in Hong Kong self-financing tertiary education in comparing with the situation in U.S., the parameter of retention will not be considered in this study. Instead, the parameter of articulation is introduced in this study.

This study seeks to establish a conceptual management model of SEGA which will be applied to the self-financing tertiary education in Hong Kong; thus, the characteristics of the SEGA conceptual model are to be discussed. Examining how SEGA would be developed successfully in the three core areas (i.e. enrolment, graduation, articulation) of self-financing tertiary education in Hong Kong will be studied in further research.

KEYWORDS: Strategic enrolment, Graduation, Articulation, Self-financing tertiary education

1 INTRODUCTION

Since 2000, the Hong Kong Special Administrative Region (HKSAR) 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 associate degree qualifications. As a result of this education policy in 2000, there has been a substantial increase in the number of self-financing local continuing education institutions in Hong Kong, providing a wide variety of full-time accredited local top-up degree programmes.

The rapid development of self-financing local top-up degree programmes provides education opportunities for secondary school leavers since 2000, the post-secondary participation rate for senior secondary graduates was doubled in five years' time, from 33% in 2001/01 academic year to 66% in the 2005/06 academic year (EDB, 2006). The rate was then leveled off in the 2006/07 academic year, and now maintains at slightly above 60%. In this aspect, a Hong Kong local continuing education institution which provides self-financing local top-up degree programmes is primarily focused in this study.

As the HKSAR Government would like to enable 60% of the secondary school leavers to participate in post-secondary education starting at 2001, provision of accredited self-financing post-secondary programmes was significantly developed (EDB, 2006). In relation to this, self- financing tertiary education faces significant challenges in maintaining student enrolment in the competitive environment of both emerging and existing higher education institutions right after the announcement of new education policy and reform in Hong Kong. In addition, improving graduation rates and enhancing articulation opportunities are also significant. There is a common perception in the local community that sub-degree, in particular associate degree, is primarily a bridging qualification for admission to degree programmes (EDB, 2006), such that, as the number of sub-degree holders increases, the demand for articulation places also increases.

As there is no evidence in the literature of prior study regarding the development of a sound conceptual foundation for investigating a comprehensive SEGA process, the aim of this paper is to fill this gap by establishing a conceptual model of SEGA which fits to self-financing tertiary education institutions in Hong Kong. The findings in this paper will be used for further research in order to evaluate the extent to which SEGA would be developed in self-financing tertiary education in Hong Kong in order to (1) maximize enrolment (2) maintain graduation, and (3) optimize articulation.

1.1 STRATEGIC ENROLMENT, GRADUATION AND ARTICULATION (SEGA)

The concept of SEGA is modified from Strategic Enrolment Management (SEM) which emphasized the need for institutions to identify optimal goals within overall enrolment management strategies. SEM is a comprehensive process designed to help an institution achieve and maintain the optimum student recruitments, retention and graduation rates of students, where optimum is defined within the academic context of the institution (Dolence, 1993; Dolence, 1996; Dolence, 1997). In fact, SEM is a proven method for increasing enrolment and graduation rates of students in United States (Taylor et al, 2008). The parameter of articulation is introduced as it was suggested that institutions providing articulation pathways for students (i.e. from an associate degree to a top-up degree or from a

top-up degree to a postgraduate degree) help maintain positive relationships and foster loyalty (Bejou, 2005; Zamani, 2001).

Due to the rapid development of self-financing associate degree and top-up degree programmes in Hong Kong, articulation becomes a pressing issue. The situation that students completing an associate degree are unable to obtain a place at a university was explained (Kember, 2010). And it was further addressed that "all the students are focusing on academic results because they are longing for entering university" (Kember, 2010, p.168). Therefore, it is necessary to develop a conceptual management model on the three dimensions of enrolment, graduation as well as articulation (See Figure 1).

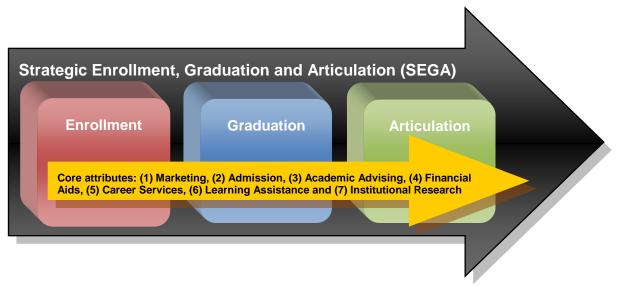


Figure 1: SEGA Conceptual Management Model

1.2 Core Attributes to SEGA Model

Based on the concept of Strategic Enrolment Management (SEM), the key functions or attributes should be included in enrolment management programmes. Similarly, the core attributes being considered in the conceptual management model of SEGA are to be determined in this study.

1.2.1 Marketing

Most institutions now recognize the need to market themselves within the competitive climate of the higher education sector (Brown and Oplatka, 2006). Marketing involves designing the institution's programmes and courses to meet the target market's needs, and using effective pricing, communication, and distribution to inform, motivate, and service the particular market segments (Kotler and Fox, 1995). Building on this, the definition of marketing is simplified to mean offering the right academic programmes and courses at the right time, and at the right price to the right student markets (Dennis, 1998).

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).

1.2.2 Admission

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 (Hossler et al., 1990). 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 enroling more students at their campuses.

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 personnel becomes a key person within the admissions office as she/he is the institution's representative to have a direct contact with prospective students. A variety of recruitment activities is conducted through admissions such that potential students may inquire, apply and enrol in their respective institutions. It is emphasized that the admissions personnel should also possess skills in market research, which help in creating the instititional marketing and enrolment plans (Lobasso, 2005).

1.2.3 Academic Advising

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). The acadmic advising plays a significant role in providing students supportive guidance and professional advice throughout their academic years. Depending on the structure of an institution, "...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" (Komives, 2003, p.112).

1.2.4 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; Hollser, 2000; DesJardin et al, 2002; Singell, 2004). 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 enrol and, once these students are enrolled, to influence their persistence in continued enrolment (Hossler et al., 1990).

Several reviews report that financial aid has significant positive effects on student enrolment decisions (Hossler, 2000; Curs, 2008; St. John, 1990). Recent reviews of the subject have analysed the effects of aid on persistence and revealed 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 institution on which particular college to attend (Dennis, 1998; Hossler, 2000).

1.2.5 Career Services

High quality career services centres aid students in making better career choice decisions by providing students with well-integrated career planning and placement services (St. John, 1990). To ensure high quality career services, it was 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 (Engelland et al., 2000).

It was 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 (Arrington, 2000).

1.2.6 Learning Assistance

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 postsecondary 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.

1.2.7 Institutional Research

Institutional research is essential in every stage of the SEGA process. There are several reasons for institutions to initiate research efforts to understand the impact of demographic trends, to assess the institution's position relative to its competitors, and to evaluate the effectiveness of programmes and services (Clement and Flannery, 1998).

Institutional research enables 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).

The use of institutional research was described as 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 (Hossler et al., 1990). The institutional research office provides data analysis and research to the institution for the purposes of better planning and quality improvement. It was commented that "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, p.69)

2 EXPLORATORY INVESTIGATION

To provide a sound conceptual foundation for investigating SEGA, an exploratory qualitative study was undertaken to investigate the concept of SEGA. In-depth interviews with senior management of self-financing tertiary education institutions of Hong Kong were conducted to develop a conceptual management model of SEGA. Senior management from three different institutions were interviewed to gain insights about the following questions:

- What are the perceptions of the three dimensions of enrolment, graduation and articulation in self-financing tertiary education in Hong Kong?
- How each core attribute and its corresponding activities are to be integrated in each dimension of enrolment, graduation and articulation so as to develop a suitable conceptual model of SEGA in self-financing tertiary education in Hong Kong?

In order to better understand the broad area of enrolment, graduation and articulation, an interview guide was prepared. Examples of the interview questions are shown below:

- Why do students come to you? Why do others choose not to?
- What kinds of students are you interested in attracting? Is this what you get?
- Where can you find these students?
- Do you know the institution's enrolment goals?
- After the literature synthesis, the strategic enrolment, graduation and articulation (SEGA) can be defined as a comprehensive process designed to achieve and maintain the optimum enrolment, graduation and articulation. The comprehensive SEGA process can comprise of a series of activities in the core attributes of (1) institutional research (2) marketing (3) admission (4) financial aid (5) academic advising (6) learning assistance (7) career services, and (8) others, integrating into different stages of SEGA. What is your understanding of the purpose of SEGA?
- What are the activities that help institutions achieve their enrolment goals? And how?
- What are the activities that help students achieve their graduation goals? And how?
- What are the activities that help students increase their articulation opportunities? And how?
- Other than the above said core attributes, do you have any more attributes you want to add? If yes, what do you think are their corresponding activities?

2.1 Insights from Exploratory Investigation

Some insights have emerged from the in-depth interviews. The commonalities from the perspectives of the senior management are impressive and encouraging that a general conceptual management model of SEGA can be developed. The most important insights obtained from analysing the responses of senior management are as follows:

2.1.1 Financial Aid

From the perspective of senior management, financial aid is not a vital factor for the enrolment decisions of students in the Hong Kong tertiary education sector. The following reflected the views of interviewees':

"Offering financial aid is not significant to students' choice of institutions. It 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."

"However, financial aid is a useful tool to retain the current students. Scholarships, grants & student loans do affect their decisions and momentum in completing their programmes."

The senior management agreed that financial aid will influence the persistence in students' continued enrolments (Hossler et al., 1990). Thus, other than retention decision, it is not critical in their enrolment, graduation and articulation dimensions.

2.1.2 Articulation Pathways

Based on the in-depth interviews, articulation is deemed to be important for students completing their associate degrees at community colleges. The interviewees further pointed that:

"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."

"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."

According to Heron as cited in Kember (2010), the HKSAR Government, through the UGC, assigned 1,680 second-year university places in 2007-2008 to the most successful associate degree graduates; however, these places only cater for a small proportion of associate degree graduates in Hong Kong. In fact, providing more articulation opportunities is necessary for associate degree graduates. The need for articulation into degree programmes has grown to the extent that top-up degrees are now being offered by PolyU SPEED and some of the community colleges to associate degree graduates (Kember, 2010). Other than the local top-up degrees offered by self-financing tertiary institutions, the top-up degrees are also offered in conjunction with an overseas university.

Faculty involvement such as academic advisor becomes significant to provide advices and opinions to help final year associate degree students about the articulation opportunities. Several studies have been conducted on the impact faculty have in the area of facilitating early transition of new students to the university (Dennis, 1998; Hossler et al., 1990; Astin, 1993; Bouman et al., 2005; Penn, 1999).

2.1.3 Programme Design

The two senior management interviewees further addressed the importance of programme design as a novel and core attribute in enrolment planning for the institution:

"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."

"The offering of sufficient modules in each semester for students' choices is very essential as they can enjoy a high flexibility when arranging the study schedule and, their part-time placements, if any. Apart from this, the provision of other learning experience such as complementary study and co-curricular activities is also a vibrant component in programme design".

The interviewees mentioned that the uniqueness of programme design influences students' decision to apply and to enrol. Therefore, institutional research is needed to examine the market trend, to assess the institution's position relative to its competitors, and to evaluate the effectiveness of programmes and services in self-financing teritary education sector (Clement and Flannery, 1998).

2.2 A Conceptual SEGA Model

Insights obtained from the senior management form the basis of a model summarizing the core attributes of SEGA as perceived by senior management level of self-financing tertiary education sector in Hong Kong (See Figure 2). The perspectives of the senior management suggest that institutional research is essential at each stage of the SEGA process. However, financial aid is not a critical attribute affecting enrolment, graduation or articulation decision; but it has significant effect on improving student retention. Marketing and admission are very effective to the enrolment process. Effective marketing strategies enable institutions to achieve the academic goals with the support of admission office. Academic advising, learning assistance and career services are the important

attributes which support students' learning in developmental education. They help improve studying outcomes pertaining to graduation goals. Programme design would have an impact on students' enrolment decision; thus, the uniqueness and the recognition of the programmes offered are crucial to increase the enrolment dimension of the institution.

Core Attributes	Enrolment	Graduation	Articulation
Institutional research	√	√	√
Marketing	√		
Admission	√		
Financial aid			
Academic advising		√	✓
Learning assistance		√	
Career services		√	
Programme design	√		

Figure 2: Integrating Core Attributes into SEGA Conceptual Management Model

3 FURTHER RESEARCH

The proposed SEGA management model provides a conceptual framework in self-financing tertiary education in Hong Kong where little prior research has been done. Collecting and analyzing interview data allowed us to reach a deeper understanding of the conceptual model of SEGA in the light of (1) student enrollment, (2) student graduation and (3) student articulation and to provide the basis for future research. In the future research, it would be interesting to see how these findings hold up from the perspective of students and other academic staff on administrative and programme levels. Thus, a quantitative questionnaire-based research will be used to collect information at a larger cross-sectional study. It is aimed at collecting information from respective academic staff as well as students from self-financing tertiary education institutions in Hong Kong.

REFERENCES

- Arendale, D. R. (2005). "Mainstreamed academic assistance and enrichment for all students: The historical origins of learning assistance centers", *Research for Education Reform*, Vol. 9 No. 4, pp.3-21.
- Arrington, K. (2000). "Middle Grades Career Planning Programs", *Journal of Career Development*, Vol. 27 No. 2, pp.103-109.
- Astin, A. W. (1993). "What matters in college? Four critical years revisited", *Research for Education Reform*, Vol. 9 No. 4, pp.3-21.
- Bejou, D. (2005, March). Treating Students Like Customers. pp. 44-47.
- Bontrager, B. (2004). Strategic enrolment management: Core strategies and best practices. *College and university journal*, 9-15.
- Bouman, P., Burcham, D., & Crains, M. (2005). "Faculty participation: Extending your student recruitment team", *AACRAS's basic guide to enrollmet management*, pp.105-112.
- Brigham, D. E. (2001). "Regents College: Converting student support services to online dielvery", *The International Reviw of Research in Open and Distance Learning*, Vol. 1 No.2, pp.1-7.
- Brown, J. H., & Oplatka, I. (2006). "Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing", *International Journal of Public Sector Management*, Vol. 19 No. 4, pp.316-338.
- Clement, L. M., & Flannery, T. M. (1998). Research. In C. C. Swann, & S. E. Henderson, *Handbook for the College Admissions Profession* (pp. 95-105). Washington, DC: The American Assoication of Collegiate Registrars and Admission Officers.
- Curs, B. R. (2008). "The effects of institutional merit-based aid on the enrolment decisions of needy students", *Enrolment Management Journal*, pp.10-30.
- Dennis, M. J. (1998). A Practical Guide to Enrolment and Retention Management in Higher Education. Westport, CT: Bergin and Garvey.
- DesJardins, S. L., Ahlburg, D. A., & McCall, B. P. (2002). "Simulating the longitudinal effects of changes in financial aid on student departure from college", *The Journal of Human Resources*, pp.653-679.
- Dolence, M. G. (1993). Strategic Enrolment Management: A primer for campus administrators. Washington, DC: American Association of Collegiate Registrar's and Admission Officers.
- Dolence, M. G. (1996). *Strategic Enrolment Management: Cases from the Field*. Washington, DC: American Association of Collegiate Registrar's and Admission Officers.
- Dolence, M. G. (1997). Strategic Enrolment Management: A primer for campus administrators. Washington, DC: American Association of Collegiate Registrar's and Admission Officers.
- EDB. (2006). Review of the Post-secondary Education Sector. Hong Kong.
- Engelland, B. T., Workman, L., & Sigh, M. (2000). "Ensuring service quality for campus career services centers: A modified SERVQUAL scale", *Journal of Marketing Education*, pp.236-245.
- Hossler, D. (2000). "The role of financial aid in enrollment management", *New Directions for Student Services* Vol. 89, pp.77-90.
- Hossler, D., Bean, J. P., & Associates. (1990). *The Strategic Management of College Enrolments*. San Franciso: Jossey-Bass.
- Huddleston, T. (2000). "Enrolment management", *New Directions for Higher Education*, Vol. 111, pp.65-73.

- Kember, D. (2010). "Opening up the road t nowhwere: problems with the path to mass higher education in Hong Kong", *High Educ*, Vol. 59, pp.167-179.
- King, M. (1993). "Academic advising, retention and transfer", *New Directions for Community Colleges*, Vol. 82, pp.21-31.
- Komives, S. R., & Woodard, D. (2003). Student services: A handbook for the profession. Wiley.
- Kotler, P., & Fox, K. (1995). *Strategic markeing for educational institutions*. Englewood Cliffs, NJ: Prentice Hall.
- Lobasso, T. (2005). An *Evaulation of Enrolment Management Models of the 28 Florida Community Colleges*. Published PhD thesis, Orlando: University of Central Florida.
- Penn, G. (1999). Enrolment Management for the 21st Century: Institutional Goals, Accountability, and Fiscal Responsibility. Washington, D.C.: The George Washington University.
- Schuh, J. H. (2003). "Interrelationship of student academic services", *Student Academic Services: An Integrated Approach*, pp.53-69.
- Singell, L. D. (2004). "Come and stay a while: does financial aid effect retention conditioned on enrolment at a large public university?", *Economics of Education Review*, Vol. 23 No. 5, pp.459-471.
- St. John, E. P. (1990). "Price response in enrolment decisions: An analysis of the high school and beyond sophomore cohort", *Research in Higher Education*, Vol. 31 No.2, pp.161-176.
- Taylor, J., B, Brites, R., Correia, F., Farhangmehr, M., Ferreira, B., & Jose Sa, M. (2008). "Strategic enrolment management: Improving student satisfaction and success in Portugal", *Higher Education Management and Policy*, pp.129-145.
- Zamani, E. M. (2001). "Institutional responses to barriers to the transfer process", *New Directions for Community Colleges*, Vol. 114, pp.15-24.