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Implementing General Education in Hong Kong: Government Policies, Institutional Responses, Opportunities and Challenges

Abstract In this paper, the authors explore the implementation of the government mandate in Hong Kong to move from three-year to four-year undergraduate degree programs which include studies in general education (GE), through an analysis of policies and activities related to the curriculum reform. While the authors are interested in the substance of these reforms, the primary objective is to explore the relationships between policy initiatives and implementation approaches at different levels. Using Scott's (2001) new institutional theory as a framework, the authors discuss the policy implementation at the governmental, institutional norms, and cultural levels. By focusing on the complex interrelationships among influences at different levels within the institution, this paper identifies challenges in the implementation of the new four-year curriculum, and using a case study of one institution, offers suggestions for facilitating that implementation.

Keywords general education (GE), curriculum reform, academic structure change, higher education, Hong Kong

Introduction

Since its reintegration into the People's Republic of China in 1997, Hong Kong, the former British colony, implemented a "one country, two system" policy in its sociopolitical system. Since then, due to the shift of governance and the forces of globalization, Hong Kong has undergone tremendous changes. The education

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reforms proposed by the Education Commission (see Education Commission 1999, 2000), the University Grants Committee (UGC; 2004), and the Education and Manpower Bureau (2005) have covered nearly every aspect of the entire education system: academic structure, curriculum, teaching and learning, assessment, and financing. The reforms are unprecedented in terms of their breadth, depth and magnitude (Hanstedt, 2010), as the Hong Kong Special Administrative Region (HKSAR) government is determined to overhaul the education system of the former British colony and “align Hong Kong’s educational pipeline with those in the Chinese mainland, the United States, and the European Union” (Finkelstein & Walker, 2009, p. 23).

One of the major initiatives of this reform is the transformation of the current three-year undergraduate program into four-years by integrating General Education (GE) programs into the undergraduate curriculum by 2012. Along with a new focus on academic advising, pedagogical reforms, and curriculum reforms within the major programs of study, GE programs are anticipated to nurture whole person development, provide students with much broader perspectives, and enable them to be more flexible in meeting today’s rapidly changing workforce demands (Education and Manpower Bureau, 2005, p. 98). Although most Hong Kong universities began to develop GE in 2007 and it is still early in its implementation, an examination of the development of GE will help to tackle the challenges and difficulties the universities encounter so as to ensure a high quality of GE, the experience of which will be valuable for other Asian universities in their GE program implementation.

This paper examines how one university has responded to the HKSAR government mandate to implement GE. First, the history leading up to educational reform and the development of GE at the tertiary level is described. Next, institutional theory as a theoretical framework for examining these educational changes is applied. Finally, the authors examine the institution’s response to the mandate for developing and integrating GE into the undergraduate curriculum, considering both the challenges and opportunities which exist and offer suggestions and implications of our analyses for other institutions facing large-scale governmental reform.

Background of Educational Reform

The rationale underpinning educational reform of Hong Kong is three fold: First, to meet the requirements of Hong Kong society for well-rounded citizens; second, to align its academic structure with the mainland and other countries; and third, to respond to educational reforms at the secondary school level.

Higher education in Hong Kong experienced massification in the early 1990s

and moved on to pursue quality and excellence (Chan & Ng, 2008). However, Hong Kong opinion leaders are not optimistic about the quality of local graduates. Only one in five surveyed opinion leaders are confident that Hong Kong's university graduates possess sufficient and relevant skills (Ko, 2008, November). Finkelstein and Walker (2009) believe that one of the driving forces for academic structure and curriculum change is to ensure the future competitiveness of Hong Kong in the global knowledge economy. "Hong Kong needs its own higher education system to provide the depth and breadth of people who can participate in making Hong Kong a vibrant, economically powerful, cultured, civilized and socially active and responsible society" (University Grants Committee, 2004, p. 4).

Education reform in Hong Kong started with an academic structure change, which has been referred as the "3 + 3 + 4" education reform. The education system of Hong Kong followed the British education model, which consisted of six years of primary education, two years of junior secondary school, two years of senior high school, and a two-year course leading to the advanced level examinations, which provided for entry into tertiary institutions offering diploma, higher diploma, two-year associate's degree and three-year bachelor's degree program (Chan, 2010, April). The new academic structure is more in line with the mainland and North American ones. Secondary school is restructured into three years of junior and three years of senior high school in 2009; undergraduate programs will be extended to four years with the introduction of GE and other curriculum reforms in 2012.

Under the colonial government, school subjects were described as "depoliticised" and "decontextualised" (Tse, 2005, p. 175), with an abstract curriculum within the context of an elitist system of secondary schooling. At the tertiary level, the three-year undergraduate degree program had been described as exclusively focused on a profession or academic field. To maintain and reinforce its ties with the U.K. after Hong Kong's transition to China in 1997, all universities were required to adopt a three-year academic structure in the late 1980s, which left limited latitude for universities to incorporate liberal arts education as a component of undergraduate programs irrespective of their academic capacity. With the return of sovereignty back to China, all eight Hong Kong universities began to provide non-major courses to broaden students' knowledge, many of which were focused exclusively on Chinese culture or civilization (Liang & Cai, 2006). Such courses were generally perceived as "easy" and to be taken when programmatic requirements were extremely challenging. The requirement for those courses ranged from four to 21 credits, depending on the university.

It was believed that a four-year program with GE studies would help to cultivate students with generic skills so that graduates would be able to cater to

the rapid pace of change of the society and enhance the global competence of Hong Kong. Aligning Hong Kong's educational pipeline with those in the Chinese mainland, the United States, and the European Union will help Hong Kong to "play a facilitating role in linking the mainland and the world at large" and to become "the education hub of the region" (University Grants Committee, 2004, p. 5).

To enable this unprecedented educational reform, the government granted its universities considerable lead time and new resources (Finkelstein & Walker, 2009). The UGC set aside 550 million HKD for the eight publicly-funded institutions for the early engagement of staff, the development of administrative systems, curriculum development under the four-year undergraduate structure, and dialogue and discussions of the 3 + 3 + 4 reform among UGC-funded institutions (University Grants Committee, 2010, p. 48). It also provided an additional 5.84 billion HKD for infrastructure expansion projects proposed by universities (University Grants Committee, 2010, p. 45). To broaden understanding of GE and raise awareness of implementation issues during the preparatory phase for the new curriculum (2008–2012), the UGC sponsored 12 system-wide symposia featuring worldwide experts on various aspects of academic structure change, including the changes of pedagogy, academic and career advising, student services, and GE curricula. Although these symposia engaged only a small portion of administrators and faculty across the higher education sector, they were important system-level efforts to raise awareness of GE and other aspects of the reform. The UGC also invited 20 American scholars of GE through the J. William Fulbright's faculty exchange program to serve as consultants on GE over a four-year period. System-wide, there was recognition of the unique challenge posed by implementing GE for the first time in Hong Kong, as many administrators and faculty had not themselves experienced an education containing GE. To ensure the quality of higher education and facilitate progress toward a four-year program, the UGC recommended the adoption of an outcome based approach (OBA) to teaching and learning. In April 2007, the Quality Assurance Council was established to audit the quality of the institutions funded by the UGC and to promote good practices (Lui & Shum, 2010). In doing so, the UGC took the academic structure reform as an excellent opportunity to integrate OBAs to assessment into tertiary education. Thus, the academic structure reform involves not only a diversification and extension of the curriculum, but also a new approach to quality assurance and student outcomes assessment.

Issues Arising at One University

Universities in Hong Kong are at different stages in the development and

implementation of GE curricula, ranging from offering such courses for less than two years to more than 20 years. To gauge the implementation, a survey was conducted in one university in 2009–2010 to examine GE teaching faculty's perceptions of GE. In response to the question, "List a maximum of five things you believe every student should learn at college or university as a result of their GE courses or programs," the data revealed that less than 40% of responses of faculty presently teaching within the GE program related to any of the approved learning outcomes of the GE program (Gano-Phillips & Wang, 2010, August).

Although this university had been developing its GE program since 2007, its faculty members who were teaching GE courses were still not very clear about the learning outcomes of GE, which indicates serious problems in GE development and implementation. Without clear definitions of the goals and purpose of a GE program or the courses which comprise it, it is difficult to imagine the successful implementation of such a university-wide program. This lack of clarity regarding the purpose and outcomes of GE may not be an individual institutional phenomenon, but may, in fact, be affecting universities across Hong Kong. Although the government allocated extra funding and provided policy guidance, it is the university that plays a key role in the development and implementation of a high quality GE program. As all the universities in Hong Kong are striving for a high quality GE program, the experience of the case study university shall provide indispensable lessons for other institutions in Hong Kong and beyond that face large-scale government reforms. A thorough analysis of the development of GE at this case study university will not only help to identify the barriers, difficulties, and challenges that exist in the case study university, but the suggestions and recommendations shall be useful for other universities in Hong Kong and beyond who begin to implement GE programs or other institution-wide curriculum reforms.

Research Method and Theoretical Framework for Examining Institutional Change

A case study has been chosen as the research methodology because it allowed the authors to depict a holistic and systematic picture of GE implementation within the context of a university history, culture, and mission. It also enabled the authors to examine GE implementation through different lens, for example, university leaders and faculty members. The case study university represents many of the features of other universities in Hong Kong with strong specialization of discipline and no tradition of liberal arts education.

Qualitative data were collected via document analysis and semi-structured interviews with three university leaders and five faculty members. A retired vice

president, a former director of GE and a current director of GE were invited for the interview so as to provide a picture of the process of GE development from an administrative perspective. To understand faculty members' perspective of GE implementation, one faculty from each of the five colleges and schools, who were engaged in GE development and teaching, were invited to participate in the interviews. There are two major research questions for this paper: First, what was the case study university's response to the government-imposed initiative of developing GE, and second, what factors underpin decision-making at the case study university? By extension, this paper also examines the implications of the case study university's response for other universities facing major government-imposed curriculum reforms.

New institutional theory describes and provides a framework for the process of changes and is utilized to examine the case study university's response to the mandate of academic structure reform and the implementation of GE. According to Scott (2008), institutions are comprised of regulative, normative, and cultural-cognitive pillars that, together with associated activities and resources, provide stability and meaning to social life. New institutional theory extends traditional institutional theories by adding cultural-cognitive elements into the analytical framework, and connects structure with the behaviors of organizations. It recognizes the implicit influence of individuals' beliefs and values in organizational functioning. Although institutions function to provide stability and order, and are relatively resistant to change, they undergo change incrementally and revolutionarily (Jepperson, 1991). Change in institutions starts with the process of the de-institutionalization of the existing institutions, followed by a period of construction, institutionalization and maintenance (Meyer & Rowan, 1977) on the basis of the interactive and competitive power dynamics (Alexander, 1995). New institutional theory (Scott, 2008) explicitly recognizes individual subcultures as one of those power bases. These processes keep on going until the new institution's structure becomes stable, and is culturally accepted in the society. The diffusion of institutional forms largely depends on the role of institutional carriers (Meyer & Rowan, 1977).

The changes in an institution are usually associated with regulative, normative and cultural-cognitive elements and can be unbalanced in the process of deinstitutionalization and re-institutionalization: regulatory pillars emphasize conformity to rules, a normative conception stresses a deeper, moral base for assessing legitimacy, and a cultural-cognitive view stresses conforming to a common definition of the situation, frame of reference, or a recognizable role or structural template (Scott, 2008, p. 61). Disputes and unbalance among the changes of the three pillars may lead to conflict or even crisis in institutions undergoing significant change.

In the context of higher education reform in Hong Kong, the HKSAR

government acts as the regulative pillar, it initiates a series of educational reforms, using Quality Assurance reviews on a rotating four-year basis, to regularize behavior across institutions. The university administration acts as the normative pillar through establishing institutional policies and organizational structure changes to construct a standard and define legitimate means of pursuing valued ends. The attitudes, activities and cognitive styles of groups of academics from particular disciplines are bound up with the characteristics and structures of the knowledge domains (Becher & Trowler, 2001) to shape the cultural-cognitive pillar and come to significantly influence institutional functioning. The regulative power exerted by governments, the institutional policies and governance processes, and the locally-derived understandings at various levels within institutions jointly influence the ways that universities design and implement their GE programs. Rountree, Tolbert, and Zerwas (2010) note that in order to implement an educational reform agenda, institutions must respond to a multitude of cultures simultaneously.

Institutional Responses: The Case Study University

Although the HKSAR government initiated the academic structure change and tried to ensure the quality of student learning and institutional performance through Quality Assurance Council audits, it delegated the responsibility for implementing the GE curriculum to universities. As one senior university administrator remarked, “The UGC has exerted very little influence on university implementation of GE and this is as it should be.”

At the case study university, a small group of faculty and administrators reviewed GE as delivered in various highly reputable research institutions such as Harvard and UC-Berkeley. Upon their recommendation, in 2005, the university senate approved the adoption of a distribution model for the GE curriculum, which emphasizes “breadth and depth” (Menand, 2010, p. 26). The distribution areas include: (1) arts and humanities, (2) study of societies, social and business organizations, and (3) science and technology. The university administration was fully aware of the necessity for the breadth of curriculum as well as the need to develop generic skills. One leader noted, “As a former polytechnic university, GE is more important [for us] than for other universities, a lack of generic skills hold well-trained graduates back from promotion in the workplace.”

A GE Committee, comprised of faculty or administrators (often deans or associate deans) from each college or school, was formed to oversee the development of GE on campus, which included developing a call for GE course proposals, as well as reviewing, evaluating and approving course proposals. The

university organized regular workshops and seminars, which were provided by visiting scholars, to help faculty members draft GE course proposals, improve syllabi, and get familiar with innovative pedagogies in GE. However, there was little continuity among these professional development opportunities. To stimulate the development of new GE courses and ensure the quality of course delivery, the university offered a 200,000 HKD grant to departments for each approved GE courses since fall 2009.

To conform to OBA approaches, every course proposal was initially expected to work toward achievement of all nine GE Program Intended Learning Outcomes (PILO's) as was approved by the senate. Given the difficulties to actualize such an expectation, GE courses were gradually allowed to work toward a selected number, rather than all of the PILO's. Thinking has thus evolved from considerations only at a "course" level, to thinking about GE as a "first of its kind," university-wide, coherent educational "program," in which courses come together to achieve programmatic institutional goals.

The case study university is still at the early stage of implementation of its GE program. According to Scott (2008), the regulatory emphasis is on conformity to rules. To conform to the academic structure change and government mandate for a GE program, the university selected a distribution model, designed to work against specialization and compartmentalization of disciplinary knowledge so as to foster students' generic skills, mapped out program intended learning outcomes to guide GE course development, hosted a series of professional development workshops to change faculty members' mindsets about curriculum design, advocated OBA to ensure the quality of teaching and learning, and offered financial incentives for new GE courses proposal to encourage more faculty members to get involved in GE development. GE courses developed at an incredible speed with only six courses offered in 2008 while 50 were offered by 2010. The GE program will be fully established with at least 100 courses by 2012, accounting for approximately 25% of the undergraduate curriculum.

The development of GE seems to be very carefully planned and implemented. However, one of the most significant issues to emerge is that faculty are not very clear about the purposes and goals of the GE program, as evidenced by the results of a 2009–2010 survey that was conducted to examine perceptions of GE, by the 67% rejection rate of GE course proposals in 2009, and by a review of the OBA-based GE course syllabi, which revealed that only 10% of the 40 syllabi that were reviewed incorporated any of the GE PILO's. Faculty members are the front-line carriers for a high quality GE program, therefore, their failure to understand and be able to articulate a common purpose for their GE program may pose the most important challenge for the delivery of a high quality GE program.

Normative Elements

According to new institutional theory, institutions are relatively resistant to change, and the diffusion of institutional forms largely depends on the role of institutional carriers, those influential university leaders and faculty members charged with program implementation. In the case study university, some leaders seemed unaware of the scope of changes implied by the implementation of the four-year curriculum, while other leaders were fully aware of the need for a fundamental structure change. One leader noted that “We need a strong administration and leadership of GE—if left to departments, they do things out of departmental interest, not student interest—we need to be able to centrally create GE courses in areas where we do not have strong GE departments [e.g., fine arts, history, music].” He went on to say, “We need capacity-building, a way to ignite a passion for a GE course among technologically and scientifically oriented faculty.”

Operating under a decentralized administrative model like British universities, deans and department chairpersons exercise a good deal of autonomy and power. In addition, the university’s relative emphasis on research has led the top administrators to delegate responsibility for the implementation of GE to other mid-level administrators who wield substantially less power and influence. One university leader said: “the upper administration hopes the GE program could develop quietly,” indicating that GE is not a top priority for the university. Therefore, establishing a strong administration of GE and centrally creating GE courses tend to be unrealistic. In fact, the GE Committee could only act as a supervisory body while decision-making regarding curriculum provision is still within the responsibility of individual departments.

The current leader of GE who received his education from the U.K. claimed that a decentralized model of administration would better serve the GE program because it would allow “the experts to be selected or appointed to GE work, not generalists.” Such a view shows that even the mid-level administrator still views the university-wide program from the perspective of narrow disciplines, emphasizing the depth of knowledge within a narrow field of study. However, GE is, by definition, designed to be “pitched to non-specialists,” so that any student can enroll in such courses with hopes of learning something and getting a decent grade (Menand, 2010, p. 23). These varying conceptions of GE which emphasizes the depth versus breadth of British or American models have yet to be resolved at the case study university.

According to Scott (2008), normative controls are much more likely to be internalized, and the incentives for conformity are hence likely to include intrinsic as well as extrinsic rewards. The grants offered to departments for each approved GE course represent one such extrinsic award, which has not been well

received by many faculty. One leader admitted: “Incentives [monetary] are not particularly effective as colleges with low participation rates already have many resources and will be unlikely to be motivated by the incentives.” Consequently, course development from the three distribution areas has been unbalanced. In 2009/2010 academic year, GE courses from the largest faculty of science and engineering, which enrolled over 30% of undergraduate students, offered only 11% of the courses. Although the relative lack of central authority is a primary contributing factor to the uneven distribution of course approvals in the three areas of GE study, the ineffectiveness of extrinsic incentives is another important factor.

The current funding formula for GE courses is the same as the non-major courses that are being phased out. Funding is based on student enrollment, credit hours, and a coefficient related to the cost of instructional delivery. For many faculty members, the lack of change in the funding formula conveys the connotation that the GE courses are not much different from the previous non-major “broadening” courses, courses which have historically not been highly valued by the institution. One assistant professor from social science said: “I will not teach GE because it is for low ranking instructors. Professors will usually teach courses in major disciplines.”

Under these standard funding procedures, course proposals have arisen predominantly out of individual faculty members’ interests. As one faculty member from School of Business noted, “I took the initiative and I proposed a course. It was my intrinsic interest and motivation.” Sometimes proposals were drafted by departments that chose to strategically “get a jump on” the competition in getting GE courses approved; this was particularly common among departments of Humanities and Social Sciences which used to generate many non-major courses which were slated for elimination under the curriculum reform. One professor from social science said that she was compelled by department leaders to propose and teach a GE course, but she did not have any genuine interest in doing so.

The actions of the case study university partially reflect the conflict of the normative pillar with regulative one in which the UGC defines the role of this university as a comprehensive one, rather than a research intensive one as was aspired by the university’s administration. The ambivalence of some key leaders toward more substantive structural reforms in response to the government mandate resulted in decisions related to administration, funding, and incentives for the GE program that did not always act to promote change.

Culture Cognitive Elements

A cultural-cognitive view points to the legitimacy of a recognizable role,

structural template, or deep layers of beliefs of an institution. The cultural dimension refers to the fact that beliefs are socially constructed symbolic representations; the cognitive dimension refers to the fact that templates are provided for framing individual perceptions and decisions (Scott, 2008). Developing a campus' "shared" vision for a GE program is a critical step toward success for each university. At the case study university, this sentiment is echoed by an administrator who said, "The institution needs to define well what GE means, what's the focus, to arrive at a common understanding." There is a lack of an historical grounding in the concept of GE as a "fundamental, required" component of the curriculum among many in the higher education community in Hong Kong. Professors, who are used to departmentalization and specialization, are likely to look at the whole institution through the lens of their own department (Clark, 1987, p. 110), which was verified by a university leader as: "Insular departmental cultures, typical in the British tradition of higher education, create natural territorial objections to university-wide programs." Faculty members may be predisposed to reject the GE program in their departments because of their specialization and lack of prior experience with GE programs themselves.

While awareness of and engagement with GE is building, it has not yet reached a critical mass at the case study university. Therefore, the first cultural factor creating resistance to change is the lack of shared vision for the GE program and academic structure change. One university leader from engineering remarked: "Different people interpret the four-year program differently, professors from engineering take the academic structure change as an extra year for students to enhance their specialized knowledge in engineering." Another university leader pointed out: "Faculty deliberately twist GE to fit their own interests; this arises from compassion for their own disciplines and because of the way admissions works. Students are admitted into specific programs." There is ample evidence from the interviews, surveys, and syllabus reviews that faculty and administrators have various understandings of GE. The current organizational structure and university culture, have, thus far, failed to enable the university to reach a shared vision of the purposes and value of GE and the academic structure change.

To achieve the desired outcomes of GE and the four-year curriculum reform, nearly all faculty and support staff must understand, support, and believe in the GE program and new curriculum structure. Presently, only a small portion of faculty has interests in or has been directly engaged in teaching in the GE program. While the goal has never been to have all faculty teaching GE courses, students will need a consistent message about the importance and value of GE to their overall academic development if the program is to be successful. Professional development opportunities at the department, college or school,

university, and systems level may be one mechanism to promote the development of shared understandings. One faculty member commented on an unmet professional development need, by saying, “We also need to guide ‘the head of the department,’ let the head of the department understand how to administer this, even about motivation, staff assignment, how to make good use of professors, and how to monitor the GE courses.”

A second cultural-cognitive factor creating resistance to change arises from the rapid expansion of higher education since the mid-1990’s which has emphasized a research-centric culture and which rewards faculty performance based on publications, not on teaching. With the current faculty evaluation and reward structure, it is difficult for experienced faculty to see how participation in the GE program could be facilitative of their career advancement. Although some faculty in arts, social sciences, and business have embraced GE and have volunteered to develop courses, faculty in the sciences and engineering have been slower and more cautious about entering into this realm of academic work. For example, one associate professor complained: “Preparing and teaching a new course will take a lot of my time from research. It is a departmental requirement and will not benefit for my promotion. I will avoid teaching GE courses in the future.” When faculty evaluation and reward become better aligned with the institutional goals of the four-year curriculum, it may become easier to engage additional faculty in the GE program.

The conflict between the regulative, normative and cultural-cognitive pillars is evidenced by the various forms of resistance outlined above. The administration’s response to the government mandate has been derived from the campus’ long-standing culture arising out of the British tradition of three-year specialized degrees, while the implementation of GE programs may require cultural change on the part of various colleges, schools, or departments that have not yet fully grasped the far-reaching implications of this curriculum reform. So far, the university has been unable to establish an authority to centrally plan for the routine delivery of the GE curriculum, and has failed to make structural changes with regard to finances of the GE curriculum, both of which reflect the cultural-cognitive pillar’s resistance to change, which is a major challenge of deinstitutionalization. Professional development activities and faculty engagement may thus play a critical role in facilitating new and shared understandings that are the underpinnings to necessary changes in the smooth transition to the new curriculum structure (Gano-Phillips & Barnett, 2010).

Analysis

Academic change and the incorporation of GE programs in undergraduate

education is a government initiated, top-down reform of higher education in Hong Kong, the purpose of which is to enhance the future competitiveness of Hong Kong in the global knowledge economy and to cultivate students with transferrable skills. Although the government acted as a regulative pillar and tried to facilitate the implementation of GE programs by providing generous funding, giving considerable lead time and autonomy, importing external expertise to higher education, and auditing the quality of the GE programs, it is the universities that play a pivotal role in overcoming the challenges and difficulties in developing and implementing a high quality GE program.

In responding to changes proposed by the government, university administrators have the capacity to initiate top-down or bottom-up modifications within their organizations that may impact the wider institutional structure (the normative pillar), while acknowledging and challenging schools and colleges, departments, and individual faculty members to become involved with the curricular reform and cope with change (the cultural cognitive pillar; Scott, 2001). At the case study university, administrators have already been able to take actions to centralize some resources and set up incentive funds, and offer professional development to administer a university-wide GE program, all of which echo the normative elements of institutional change as was described by Scott (2008). However, administrators have inadequately addressed the cultural-cognitive dimension of change as demonstrated by faculty members' inability to articulate and implement the common learning outcomes of GE. The university faces internal political challenges from the schools and colleges, and departments, widespread faculty disengagement in the reform, and various resistances to change which threaten to fragment the curriculum and undermine the success of the academic structure reform. Despite the regulative and normative successes with change, without careful attention to the cultural-cognitive dimensions of change, the university faces the reality of recreating a system of largely disconnected, "broadening" courses not that much different from the present structures which exist. Initiatives that attend to mechanisms of influence of the cognitive-cultural dimensions of change are an immediate and ongoing imperative.

Academic structure change is a systematic transformation that moves away from the British model to the Chinese mainland and American one. It requires not only the change of curriculum structure, but also the organization structure and university culture. Unfortunately, the university administration interpreted the academic structure change quite narrowly, as a curriculum reform so as to keep the normative and cognitive-culture pillar stable and in order. Without undergoing the fundamental and "revolutionary" normative and cultural change in the university community (the process of de-institutionalization as defined by Scott, 2008), the academic structure change may result in little more than a minor

tweaking of the present British undergraduate educational system with a few additional highly specialized courses, rather than fulfilling the HKSAR government's more broadly conceived views of GE.

Administrators may do well to consider a range of additional actions to facilitate large-scale institutional change such as: change the administrative roles of the GE Committee and become more visible proponents of the curriculum reform so as to build a balanced curriculum structure and high quality GE program; set up new funding formulas that are different from the discipline courses so as to nurture faculty members' concepts of GE as a university-wide program; revise reward structures and incentive systems to change the culture that overwhelmingly emphasizes publications; engage in new and more extensive professional development to achieve a "shared" sense of GE program goals while engaging larger and more diverse portions of the faculty; and recognize and empower faculty to explicitly define and change their cultural beliefs about the "entire" enterprise of undergraduate education.

There are enormous cognitive shifts and cultural belief changes related to the purposes of and best practices in undergraduate education that are required of individual faculty members, departments, and schools and colleges. Through engagement with one another in department meetings, professional development activities, and governance proceedings, faculty are able to more clearly and consistently define their four-year curricula and the role of GE programs within it. The importance of addressing this cultural-cognitive pillar of the institution may have been underestimated at the outset of these reforms by the case study university and by most of the universities in Hong Kong, but normative actions such as the introduction of new professional development activities by university administrators can be used to address this concern. As faculty members and administrators come together in various venues over time to discuss, envision, and define the meaning of the academic structure change and the GE program, the culture of the institution will gradually shift. Without question, these required changes in attitudes and beliefs also suggest that implementation of GE programs will take significant time.

Summary and Conclusion

This research paper explores the implementation of the HKSAR government mandate to create four-year undergraduate degrees that include GE, through an analysis of policies and activities related to the curriculum reform in one university. Document analysis and selected interviews were used as the main method of depicting GE implementation in the case study university. While recognizing the small interviewee sample size as a significant limitation of this

study, this study demonstrates how Scott's (2008) new institutional theory can be used to analyze the successes and challenges in implementing such an institutional change. Future research may benefit from larger samples of administrators and faculty, as well as students or community stakeholders' perspectives on institutional change.

Universities in Hong Kong are reaching the final stages of piloting their GE programs and are on the brink of implementing massive academic structure change. While the GE program has been actively resisted by some, it is the most central component of the academic structure change and will likely prove the most essential in transforming the three-year programs into high quality four-year programs. Broadening students' knowledge bases with the intention of developing cognitive flexibility and problem-solving skills are challenging learning goals for faculty members in Hong Kong universities, as most faculty have themselves been steeped in narrowly-defined, laser-focused fields of inquiry. The outcome of this educational reform depends, to a large extent, on the universities' success in harnessing the power of the cultural-cognitive dimension of institutional change. In recognition of the underlying cultural differences that exist between and among departments and faculties within each university, it is incumbent on university administrators to demonstrate strong, central leadership of university-wide GE programs and provide mechanisms for faculty members to develop a shared vision for GE in the Hong Kong context. Resistance to change due to misunderstanding the needs and purposes of GE or non-consensus on values and implementation of the curriculum reform must be addressed through both normative and cultural-cognitive dimensions of change. Should faculty and administrators within an institution be able to navigate a new equilibrium among the regulative, normative, and cultural-cognitive pillars of the university, they will be producing graduates who are flexibly prepared for the global knowledge economy, making Hong Kong's educational system a model for higher education throughout Asia and the rest of the world.

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