

Don't Hide Our Students' Competencies: The Importance to Establish the Hidden Competence

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Abstract

By reviewing the previous literature, this study integrated two main competence models from Delamare Le Deist and Winterton (2005) and Kim and Park (2014) to analyze the perceived acquired competencies and inadequate competencies from the view of graduating students of self-financing institutions. Three focus groups with participants from three main self-financing institutions in Hong Kong were conducted. Content analysis was adopted to identify the acquired or perceived inadequate competencies. Results showed that most of the competencies acquired are categorized as observed competence, which is easily learnt and useful for job performance. However, the perceived insufficient competence lies in the hidden aspect, for example, motivation and professionalism. These are difficult to acquire but very critical to sustain one's career and job success. In view of this, some feasible recommendations were provided for the education policy makers or senior management of self-financing institutions to reform the current design of the programme curriculum.

Keywords: competence, self-financing institutions, graduating students

Introduction

As one of the six priority industries, the higher education sector in Hong Kong plays a critical role to maintain and increase the quality of human capital and competitiveness. Since 2000, the Hong Kong Special Administrative Region (HKSAR) Government has further supported the development of the self-financing post-secondary sector, evident by the booming self-financing local continuing education institutions in the city (EDB, 2006). More than a decade of hard work and enthusiasm in response to the 2000 Policy Address, it is time to consider the likely outcomes of this sector in terms of quality enhancement, learning experience, recognition, articulation opportunities and employability.

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With the focus on employability, more attention is given to key competencies as desirable outcomes of higher education. Indeed, the notion of competency-based training is becoming popular among policymakers as it fits well within the policy discourses of employability and lifelong learning (Boahin, Eggink and Hofman, 2013). This study attempts to shed light on Delamare Le Deist and Winterton (2005)'s typology of competence (in terms of cognitive competence; meta competence; functional competence; and social competence) to examine two research questions: 1) from the graduating student's perspective, what are the key competencies of self-financed students in Hong Kong? 2) what are the inadequate competencies identified from the perspectives of graduating students and previous literatures?

Hong Kong Context and Self-Financing Institutions

Hong Kong Context and Lifelong Learning

Hong Kong as a Special Administrative Region of the People's Republic of China back in 1997 has undergone rapid changes in its education system, particularly the promotion of lifelong education, the changes in regulatory framework, and the introduction of the Qualifications Framework (QF). Since 2000, the Policy Address aims to change the secondary school system to 6-year pattern to all students (i.e. 12 years of free and compulsory education), and follow by a 4-year degree, known as the 3+3+4 reforms (Lee, Cribbin and Lee, 2011). Thus, the last A-level cohort of HKAL examinations was in 2012 and there will be a double cohort in the universities in 2012-15 (Cribbin, 2011).

Lifelong learning is a modern phenomenon. It is defined as the "ongoing, voluntary, and self-motivated" pursuit of knowledge for either personal or professional reasons (Department of Education and Science, 2000). Learning can no longer be divided into a place and time to acquire knowledge (school) and a place and time to apply the knowledge acquired (the workplace) (Fischer, 2000). There are many reasons for the increased market demand for higher education courses, such as, the enhancement of social inclusion, active citizenship, personal development, as well as, self-sustainability, competitiveness and employability (Commission of the European Communities, 2006). To meet the huge market demand, many lifelong learners either go overseas to study or seek part-time study opportunities within the Hong Kong context due to the limited and restricted number of university places.

As an open, laissez-faire economy, Hong Kong government played a rather passive role before mid-1990s in the support of lifelong education (Lee et al., 2011). There was some public funding to universities for the provisions made in the Extra-Mural Departments and Vocational Training Council (VTC) to provide lifelong education opportunities (Lee et al., 2011). With the objective of enabling 60% of senior school leavers to receive post-secondary education by 2010, substantial changes have been made to the Hong Kong's post-secondary education sector with an increase in self-

financing post-secondary opportunities with the expansion of many self-financed institutions with acronyms, such as, HKU SPACE (Hong Kong University), SCOPE (City University), SPEED (Polytechnic University), SCE (Baptist University), SCS (Chinese University), LIFE (Lingnan University) and the like (Lee et al., 2011). These institutions have provided wider choices of progression pathways for school leavers.

Notwithstanding the self-financing nature of the sector, the Government has been asked to play a more proactive role like setting ground rules (Review of the Post-Secondary Education Sector, 2008). Indeed, many self-financing institutions are in partnership with overseas institutions, so there was an increasing element of government regulation in the sector. Since 1998, there was the requirement of the Non-local Higher and Professional Education (Regulation) Ordinance (CAP. 493) and the operation of the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ) and the Joint Quality Review Committee (i.e., JQRC, for the UGC funded sector), as well as the Hong Kong Qualifications Framework (CAP. 592) (QF) and the associated Qualifications Register (QR) having the impact to regulate lifelong learning in Hong Kong (Lee et al., 2011).

The lifelong education system can be categorized as a 'fourth estate', a distinct sector in addition to the primary, secondary and tertiary sectors of education. Particularly, the establishment of the QF is an important aspect in recognizing qualified programmes in response to market demand. The QF is a seven-level hierarchy of qualifications against which individual academic, vocational and continuing education programmes will be benchmarked (Review of the Post-Secondary Education Sector, 2008). The establishment of the QF helps to define any programmes by level plus credit and title. This information is available on the Qualifications Register in order to give learners and consumers a clearer picture as to the credibility, depth and breadth of the individual programmes.

The heart of benchmarking qualifications against the QF and the establishments of regulations is quality. This is an area of public interest and concern following the rapid development of the sector in the last decade. Quality is not a new concept and it is part of the academic tradition. It is the outside world that now emphasizes the need for attention to quality, and it is the relationship between higher education and society which has changed (Vroeijenstijn, 1995).

Qualifications recognized under the HKQF are outcome-based and not confined to academic attainment. The seven-level hierarchy provides benchmarks for determining the level of complexity and difficulty of individual competencies (Hong Kong Qualifications Framework, 2014). In the academic aspect, the outcome standards of qualifications are based on the knowledge and skills a person possesses, and set by scholars. As mentioned, the HKQF has seven levels where level 1 is the lowest and level 7 is the highest. A set of generic level descriptors (GLD) have been considered as the outcome characteristic of each level. There are four dimensions in the GLD to depict the generic complexity, demand and challenges at each QF level, namely,

knowledge and intellectual skills; process; application, autonomy and accountability; and communications, IT skills and numeracy (Hong Kong Qualifications Framework, 2014). In the vocational aspect, the outcome standards of qualifications are set by individual industries. Indeed, 18 Hong Kong industries have joined HKQF in order to develop specification of competency standards (SCSs), that is, the key competency requirements and outcome standards of different industries (Hong Kong Qualifications Framework, 2014). Industries should always play an active and pivotal role in developing, maintaining and updating the SCSs to keep abreast of the latest manpower requirements and to meet the full range of education and training needs of the industry (Hong Kong Qualifications Framework, 2014). The SCS consists of competency standards of different levels in relation to industry-specific knowledge, professional skills and soft skills required for performing different job functions of the industry (Hong Kong Qualifications Framework, 2014). It is aimed that SCS will be practical and competence-based to meet the industry needs, as well as to facilitate the ongoing implementation of the Qualifications Framework (Hong Kong Qualifications Framework, 2014).

Based on the GLD (academic aspect) and SCS (vocational aspect), each industry could better formulate a list of competencies for the practitioners of the industry. It is hoped that individual learners could have a clear and unified guide for drawing up their learning progress, either vertically by pursuing learning in a particular professional area with specialized skills (e.g. banking) or horizontally by learning diverse skills in their own profession (Hong Kong Qualifications Framework, 2014). It is worth noting that the academic and vocational education needs to emphasize on developing competencies and capabilities rather than qualifications in assessing the quality of programmes (Boahin et al., 2013). Developing these competencies and capabilities are believed to strengthen the link between post-secondary programmes and the labour market, and thus, assist students to acquire employable skills (Biemans, Nieuwenhuis, Poell, Mulder and Wesselink, 2004). It is believed that self-financed institutions must design programmes in a holistic manner and emphasize the knowledge base of practice to better prepare students for future employment (Boahin et.al., 2013).

Self-Financing Institutions and Competencies

As mentioned earlier, the introduction of the new '3+3+4' academic structure has provided the impetus and opportunity for tertiary institutions, especially the self-financed institutions. Indeed, the post-secondary participation rate for senior secondary graduates had increased substantially from 33% in 2001/01 to 66% in 2005/06 academic year (EDB, 2006). This participation rate was levelled off in 2006/07 academic year, and it maintains at slightly above 60% (EDB, 2006).

Based on a Hong Kong survey on opinions of employers on major aspects of performance of post-secondary programme graduates in 2010, there were nine major aspects of performance to track the quality of graduates, in terms of language proficiency, numerical competency, information technology literacy, analytical and

problem-solving abilities, work attitude, interpersonal skills, management skills, technical skills, and knowledge of current affairs and business issues, self-learning ability and self-esteem (CSG, 2010). Generally, 72% of employers were satisfied with the overall performance of 2010 graduates (CSG, 2010). However, employers commented graduates to improve on their language abilities; interpersonal and management skills. Others commented the need for graduates to be more open to criticism and advice from colleagues; have more common sense and knowledge of current affairs; and improvements in attitude in terms of more willingness to take responsibilities, make commitments and being more enthusiastic about their work, and take more initiative at work (CSG, 2010).

This study is primarily focused on self-financing local top-up degrees' students and their competencies that could impact the preparedness of these graduating students for employability in the knowledge-intensive workplace. Indeed, graduate employability becomes a core objective for government and a performance indicator for higher education institutions (Tymon, 2013). By following such an economic ideology of higher education, it is wise for self-financing institutions to consider the competencies central to the concept of employability.

Literature Review

What is "Competence"?

Competence has been defined in many different ways (e.g., Boyatzis, 1982; Kirschner, Van Vilteren, Hummel, & Wigman, 1997; Baughman, Brumm, & Mickelson, 2012; Horton, 2000), and many previous researchers have viewed this term as a fuzzy concept (Jackson & Chapman, 2012; Delamare Le Deist & Winterton, 2005). Norris (1991) also maintained that competence is a "tacit understanding" (p. 332) and "the practical has become shrouded in theoretical confusion" (p. 332). In order to provide better understanding and definition of the word "competence", we begin with the origin of this word, followed by a discussion of different definitions, and suggest an integrated framework for measuring competence of graduating students after reviewing two major competence models.

Block (1978) suggested that competence was originated from the work of White (1959) and Inkeles (1966, 1968). White's conception of competence came from two ideas. The first one is about the biological predisposition of the people to be proactive instead of reactive to the environment. Therefore, competence refers to the innate potential of the people to make changes in order to be effective in the environment. The second idea concerns with two aspects: on one hand, people will manipulate the environment successfully through one's motor and intellectual skills. On the other hand, we can effectively master the environment in the process, so we can acquire the feelings of "self-efficacy" or "self-confidence".

According to Inkeles (1966, 1968), there are also two ideas. The first idea is about

the interaction between the environment and people. In view of the different types of environment researched by Inkeles (1966), competence reflects people's capacity to interact effectively in the socially ascribed, self-selected and self-developed environments (Block, 1978). The second idea of competence is that it reflects our particular set of psychomotor, cognitive, and affective skills to effectively interact with various environments.

Generally, the conceptions of competence provided by White and Inkeles are similar. Firstly, environment is an important context in which people's competence can interact, and even interact with it effectively. Secondly, White's (1959) conception further denotes the importance of people's innate potential to change the environment we are facing.

Based on these ideas, a lot of different definitions were developed by numerous researchers. These different definitions are also reflected in the adoption from different countries. In the United Kingdom, competence refers to the functional and occupational approach. Thus, it can be defined as the actions, behaviors, and skills to perform the tasks and activities in the jobs within an occupation at the expected level of standards required by the employment (Horton, 2000; MSC, 1986). However, in the United States of America, the definition of competence focuses on the disposition or the characteristics of the people, allowing them to have superior performance and high motivation (White, 1959; McGuire & Garavan, 2001; Dubois & Rothwell, 2004). Precisely speaking, competence is defined as the underlying characteristics of people that are causally related to effective or superior performance in a job, which can generalize across situations and endure for a long period of time (Boyatzis, 1982; Spencer & Spencer, 1993). The focal point in these definitions from the two countries is different. In the UK, the focus is about superior performance or the proficiency of the tasks but not the people, whereas in the USA, the focus is on the ability or cognitive perspective of learning of the people instead of their output (Boahin & Hofman, 2014). However, both of these dimensions only look at one aspect of competence, either on the performance of the tasks or the people's disposition or ability.

In Europe, the definition of competence refers to the ability and capacity of the individuals to perform the tasks and fulfill the roles at the expected level of standards in a given situation (Biemans, Nieuwenhuis, Poell, Mulder, & Wesselink, 2004; Delamare Le Deist & Winterton, 2005; Mulder, Weigel, & Collins, 2006). This definition integrates the practical and theoretical knowledge possessed by an individual, together with the personal and social qualities within a broadly defined occupational field (Brockmann, Clarke, Mehout, & Winch, 2008; Boahin & Hofman, 2014). Thus, this can reflect the multi-dimensional aspect of competence rather than only one dimension as reflected in the UK and the USA studies.

To conclude from the foregoing definitions, we would like to adopt a more encompassing definition of competence, thus, it can be defined as "the ability to perform activities or tasks in a given occupation to the required standards...[it] is also

expressed as a function of three components namely: skills, knowledge and attitudes or behaviors that enable successful job performance" (Boahin & Hofman, 2014, pp. 82-83).

Recently, some discussions on competence focus on the demand and supply side. Demand side refers to what competencies required from the employment's point of view, thus, people need to concern the needs of the employers (Baughman, et al., 2012; Ennis, 2008). This is consistent with the conceptions from White (1959) and Inkeles (1966, 1968) in terms of the fulfillment and interaction with the environment successfully. Apart from the demand side, competency models can also be used by the supply side of the labour market, such as the students and workers, to discuss how they possess or equip with certain competencies to achieve the job requirements (Ennis, 2008). The majority of previous research has focused on these two areas, as summarized in Table 1.

Table 1. Summary of the previous literature on the focus of competencies

Demand Side	Supply Side	Both
Ryan, Spencer, & Bernhard (2012)	Baughman, Brumm, & Mickelson (2012)	Weisz (1999)
Jackson & Chapman (2012)	English, Manton, Sami, & Dubey (2012)	Andrews & Higson (2008)
Kim & Park (2014)	Schaeper (2009)	
Sandwith (1993)	Boyatzis, Stubbs, & Taylor (2002)	
Spencer & Spencer (1993)	Hornig & Lu (2006)	
Agut, Grau, & Peiro (2003)	Warn & Tranter (2001)	
Perdue, Ninemeiner, & Woods (2000, 2002)		
Zehrer & Mossenlechner (2009)		

Models of Competence

Previous researchers tried to come up with different models to analyze the competence in view of the insufficiency of one-dimensional frameworks of competence. Delamare Le Deist and Winterton (2005) provided a framework to discuss the typology of competence. From their framework, competence can be categorized into four types, namely, cognitive competence, functional competence, social competence, and meta competence under two axes, namely conceptual versus operational and occupational versus personal (See Figure 1). These categorizations reflect the different aspects focused in the UK, the USA, and the Europe, that is, combining the one-dimensional aspect of competence into a multi-dimensional framework in discussing the term.

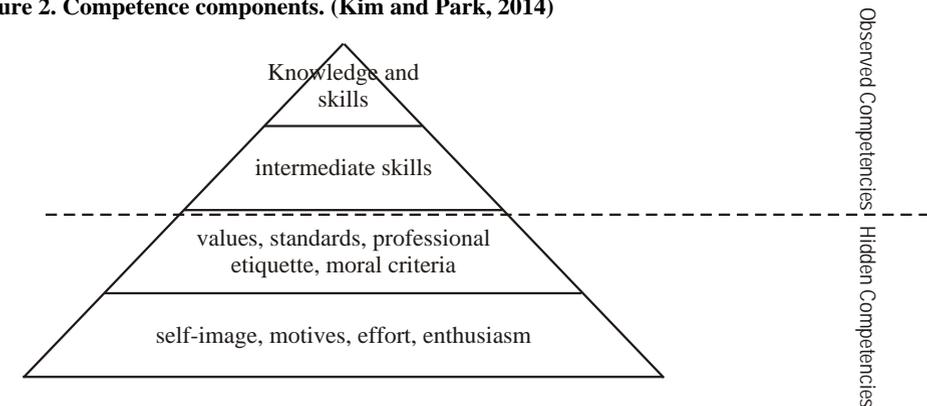
Figure 1. Typology of competence (Delamare Le Deist & Winterton, 2005)

	Occupational	Personal
Conceptual	Cognitive competence (e.g., knowledge and understanding)	Meta competence (e.g., learning to learn)
Operational	Functional competence (e.g., psychomotor and applied skills)	Social competence (e.g., behaviors and attitudes)

Delamare Le Deist and Winterton (2005) argued that cognitive, functional and social competences are universal and consistent with the multi-dimensional approach as adopted by the European countries (e.g., Biemans et al., 2004; Mulder et al., 2006). These three competences also reflected the training aspects of KSA (knowledge, skills and attitudes). It is quite different for meta competence since it is concerned with the acquisition of the other substantive competences (Delamare Le Deist & Winterton, 2005). Some examples of meta competence include self-awareness, compassion, commitment, etc. (Regehr, Anstice, Bogo, Lim, & Donovan, 2012; Nilsson & Ellstrom, 2012). Thus, these can allow students to move towards the goals and fulfill the requirements and standards of the work tasks.

Another model was discussed by Kim and Park (2014) in their discussion of the competences required of airline cabin crew members. They focused on two major distinctions, namely, hidden competencies and observed competencies, and based on these two aspects, four different categories emerged (Figure 2)

Figure 2. Competence components. (Kim and Park, 2014)



The bottom of the pyramid presents the hidden competences, describing the innate human characteristics, such as motivation, effort, values, moral criteria, etc. These personal characteristics provide the important motivational factors for the consistent superior performance of the employees (Bergenhengouwen, ten Horn, & Mooijman, 1996). Those observed competences, such as technical skills and abilities necessary to perform the job tasks (Mirabile, 1997) are situated at the top of the pyramid in Figure 2. They are important for the employees to achieve high job performance (Hoffmann, 1999; McClelland, 1973; McLegan, 1997; Mirabile, 1997).

Integrated Model for Competence

Our argument to competence is that on one hand, we cannot focus on one-dimensional aspect of competence only, so we need to adopt a multi-dimensional framework. However, on the other hand, focusing on the observed competencies is not comprehensive enough to analyze the graduating student competencies, and thus, both innate or hidden competencies and observed competencies should not be ignored. In

this regard, we try to integrate both models discussed above. Figure 3 shows our integrated model to analyze the graduating student competencies.

Figure 3. Integrated model for analyzing student competencies

	Occupational	Personal
Conceptual	<p><u>Observed competence</u> Cognitive competence (e.g., knowledge and understanding, etc.)</p>	<p><u>Hidden competence</u> Meta competence (e.g., learning to learn, motives, enthusiasm, values, etc.)</p>
Operational	<p><u>Observed competence</u> Functional competence (e.g., psychomotor and applied skills, etc.)</p>	<p><u>Observed competence</u> Social competence (e.g., behaviors and attitudes, etc.)</p>

Developing on the framework suggested by Delamare Le Deist and Winterton (2005), in order to ensure the effectiveness at the levels of occupation and individual (i.e., person), so both conceptual and operational types of competences are required. However, with reference to the framework from Kim and Park (2014), the observed competencies refer to the skills, knowledge and abilities, etc. to perform the job better. In such a case, cognitive competence, functional competence and social competence can be categorized to the observed part of competence. These competencies are easily to be trained and learned (Kim & Park, 2014). In order to sustain the successful performance and provide motivation to the people continuously in performing the job well, the hidden competence is required, which refer to the meta competence. This allows individuals to keep motivating themselves to improve and sustain the success in the jobs.

Method

Qualitative research method is adopted as it allows the researchers to have the advantage of understanding latent, underlying, or non-obvious issues (Miles & Huberman, 1994). Moreover, qualitative data emphasizes people's 'lived experience,' which is suitable for locating the meanings that people place on the events and processes. Focus groups were applied to gauge the underlying information from the respondents regarding our research questions.

Data Collection and Analysis

Based on the convenience sampling method, altogether, three focus groups were conducted in this study, consisting of four to nine participants in each focus group. The participants were the graduating students selected from three different self-financing tertiary education institutions in Hong Kong in order to examine the acquired skills and knowledge of the participants during their studies in higher education contexts. We believe that using this sampling method to select graduating students and schools is appropriate since qualitative methods are commonly described as 'purposive' (Collingridge & Gantt, 2008). Thus, as long as appropriate informants are selected

based on their personal experience or knowledge related to our research question, this would be sufficient.

During the focus groups, semi-structured interview techniques were utilized to enable all participants to respond to the same set of questions. Participants can hear the responses of others so as to make additional comments beyond their own original responses when they hear what other participants say. As Patton (2002) mentioned, the advantage of using focus group can allow participants not to agree with each other or reach any kind of consensus, nor is it necessary for people to disagree. The major objective is to get information with good quality in this situation based on participants' own world of view when facing with other's view from the other contexts.

The pre-developed questions for the focus groups were prepared and follow-up probes were asked by the first and the second authors, who acted as the facilitators for those three focus groups. All of the questions emphasized the individual's experiences of making the transition from higher education to employment, aiming for enhancing career success; and thus, two major areas are addressed to gain insights from the participants. Firstly, this study tended to examine the perceived competencies of participants that can be acquired in their tertiary education studies. Secondly, participants were asked questions about the acquisition of the competencies through current programme curriculum of the institutions, as well as suggestions on the design of programme curriculum in the development of required competences of graduating students. Examples of the focus group interviews are shown below.

1. What kind of competencies (i.e., skills, knowledge, attitudes or motivations) do you expect to acquire or develop before graduation?
2. What factors do you find important in the curriculum design in order to develop students' competencies?
3. What are the competencies can you develop and cultivate from the current curriculum of your programme of study in your institution?
4. What is your ideal curriculum design for the development of students' competencies?
5. What are the things that can be changed in the current curriculum of your institution in order to enhance employability?

Each focus group interview lasted approximately 90 minutes and was tape-recorded. The focus group interviews were conducted in Cantonese, and have then been transcribed into standard written Chinese for data analysis. Selected code transcripts are also translated into English prior to transcription. At different points in the focus groups, the two facilitators checked in with participants to ensure accurate understanding of their views (Lincoln & Guba, 1985). Each participant received HK\$70 voucher as a compensation for their time.

To analyze the data collected from the focus groups, we reviewed the transcripts and identified the competencies that the participants mentioned. After that, we gave labels and names for that competencies or descriptions mentioned by the participants. We then categorize these competencies based on the integrated model of competence (see Figure 3) concluded from the previous literature in order to show what area(s) is/are insufficient from the graduating students from the self-financing institutions.

Profile of Participants

The three focus group interviews were conducted in April 2014, consisting of four to nine participants in each group from three different self-financing tertiary education institutions in Hong Kong. Profile of participants in each focus group is shown in Table 2.

Table 2. Profile of participants

Focus Group	Participant Code	Programme of Study of Participants	Gender
Focus Group 1	Participant 1	Hospitality Management	Male
	Participant 2	Hospitality Management	Female
	Participant 3	Hospitality Management	Male
	Participant 4	Hospitality Management	Female
	Participant 5	Hospitality Management	Female
Focus Group 2	Participant 6	Travel Industry Management	Female
	Participant 7	Travel Industry Management	Female
	Participant 8	Travel Industry Management	Female
	Participant 9	Retails and Service Management	Female
	Participant 10	Retails and Service Management	Male
	Participant 11	Retails and Service Management	Male
	Participant 12	Retails and Service Management	Female
	Participant 13	Retails and Service Management	Female
Focus Group 3	Participant 14	Retails and Service Management	Female
	Participant 15	Finance	Male
	Participant 16	Finance	Male
	Participant 17	Finance	Male
	Participant 18	Management	Female

Findings

After the analysis and with the review of the integrated model of competence, the graduating student's perceived competencies and inadequate competencies were able to be identified based on two main themes (i.e., observed and hidden competence) and four sub-themes (i.e., cognitive, social, functional, and meta competence).

Observed Competence — Cognitive Competence

Participants mentioned that they have good acquisition of conceptual knowledge

and ideas from the curriculum in their institutions. They know how to explain different theories and concepts from the textbooks:

I found the course called leadership is very practical because I can apply what I have learnt in terms of theories and concepts to real world situation. (Participant 8, Focus group 2)

Observed Competence — Social Competence

From the curriculum design, many participants mentioned that they can improve their patience and teamwork. They know how to work with people, especially from group projects. Encountering with different types of teammates, they can also learn to polish their emotional intelligence. Some of the quotes from the participants were listed below:

I learnt how to manage my *EQ* and be *patient* when doing group projects with my teammates. We learnt how to work with others. (Participant 2, Focus group 1)

My *interpersonal skill* can be developed by conducting group projects and group assignments. Also, I learnt how to communicate with group members which helped to acquire high level of *communication skills*. These kinds of skills can be learned from teachers as well. (Participant 15, Focus group 3)

Observed Competence — Functional Competence

According to the results, functional competence appears to be the most mentioned aspect. Many participants responded that language used in class, critical thinking and problem solving skills can be obtained through different group projects or assessment items embedded in the curriculum. They also mentioned that time management was quite important for them to learn and they were able to develop this particular competence through the intensive study schedule and their commitment in different part-time jobs, extra-curricular activities, and normal classes. Some of the quotes are listed below:

Language is very important and speaking fluent languages, such as Mandarin and English, are of great help when finding a good job. (Participant 12, Focus group 2)

I believe that I trained myself to be more critical because I learn *critical thinking skills* in most of the classes in this institution. (Participant 1, Focus group 1)

By doing group projects with my teammates, it helped me to acquire *problem solving skills*. (Participant 14, Focus group 2)

I think the curriculum design helps me to develop *creativity*, because I can think of many different ideas when doing assignments and projects. (Participant 7, Focus group 2)

We should take *initiatives* in the workplace; we should be able to communicate with employers and other employees effectively. (Participant 17, Focus group 3)

They also mentioned that the practical experience in their own profession was not sufficient, despite of abundant knowledge in theories and concepts captured in terms of the cognitive competence. One of the quotes was shown below:

I found the programme I am studying is too high end with many theories but less practical experience which is in fact *lack of practicality* in the programme. (Participant 4, Focus group 1)

Hidden Competence — Meta Competence

According to the findings from the 3 focus groups, only two competencies, namely, independent learning and initiative were cultivated and developed from the current curriculum.

Studying in this institution helps me to train myself to be an *independent learner*. Lecturers help me to think independently during the class by raising logical and critical questions. (Participant 9, Focus group 2)

In fact, I think, we, as students *need to have initiatives!* You can't hide up yourself in the 4-year university's study, so you have to develop a sense to be more proactive. (Participant 8, Focus group 2)

Comparing with other types of competences (i.e., three types of observed competencies), hidden meta competence seems to be insufficient as mentioned by the participants. For example, some of them said that they are lacking of enthusiasm in their profession and sense of professionalism, self-confidence, etc.

I think we are kind of *lacking of enthusiasm and professionalism*, and I hope the School would develop more courses or programmes to strengthen these parts. (Participant 13, Focus group 2)

It's not easy to build up *self-confidence*; however, if you would develop your self-confidence, you can establish a sense of achievement. In fact, self-confidence can be gained by having a good teacher. (Participant 15, Focus group 3)

It is suggested that the School should deliver *more career talks* so that students would increase their self-confidence when looking for jobs after graduation. (Participant 3, Focus group 1)

Figure 4 shows the already-acquired competencies summarized from the findings above.

Figure 4. Summary of findings of already-acquired competencies

	Occupational	Personal
Conceptual	<p>Observed competence Cognitive competence (1. Theories and concepts 2. Application of theories and concepts to real world situation)</p>	<p>Hidden competence Meta competence (1. Independent learner 2. Initiative)</p>
Operational	<p>Observed competence Functional competence (1. Problem solving skills 2. Critical thinking skills 3. Time management)</p>	<p>Observed competence Social competence (1. Interpersonal skills 2. Communication skills 3. Emotional intelligence)</p>

However, there are still many inadequate competencies mentioned by the participants that they need to acquire but cannot fulfill their needs. In addition to other competencies suggested in the previous literature (e.g., Ryan et al., 2012; Schaeper, 2009; Weisz, 1999), Table 3 summarizes the competencies which the education policy makers should pay attention to.

Table 3. Summary of the inadequate competencies

	Observed		Hidden
Cognitive	Social	Functional	Meta
	Conflict Management	Practical experience Third language skills	Enthusiasm Professionalism Self-confidence Persistence Positive mindset Integrity/honesty Self-motivated Maturity Learning to learn

Discussion

By adopting the integrated model of competence suggested in the literature section, the observed competencies refer to the skills, knowledge, attitudes and behaviour which enable individuals to achieve high job performance. The observed competencies including cognitive, functional and social are found to be significant from the participants' perspectives which can be acquired in their tertiary education studies in Hong Kong so as to increase employability or help them succeed in their career. The participants also described how they were able to adapt and apply these competencies learnt in education to their employment. The hidden competence refers to the meta competence which allows people to keep motivating oneself, and improving career success. However, it appears that participants are lacking of the hidden competence, but that should be very critical to sustain career success.

Cognitive Competency

Based on the findings, participants perceived that understanding of theories and concepts is fundamental to increase their academic knowledge so as to develop their cognitive competencies. In addition, application of theories and concepts to real life situation is found to be significant, help prepare graduates to the workforce in the service-oriented industry. The findings are consistent with Ryan et al.'s (2012) findings, in which cognitive competence can help improve business unit profitability. However, participants viewed that the programme design of self-financing tertiary education institutions are short of practicality, because many subjects in the programme curriculum are 'management' based, such that students are lacking the practical knowledge before graduation. Knowing how to apply on paper is totally different from having proficiency in applying in real practices. This seems to be the insufficiency in the current curriculum of Hong Kong self-financing institutions.

Social Competence

Participants addressed that the importance of emotional intelligence, interpersonal and communication skills strengthen the development of social competence. These competencies can be gradually polished through the participants' studies in the self-financing tertiary education institutions in Hong Kong. Continuous assessments of subjects, specifically group projects and assignments, enable participants to construct their social competencies. Opportunities to participate in different extra-curricular activities also allow them to cultivate the way to interact with people. These positive behaviors and attitudes enhance employability, leading to career success of students. The findings are also confirmed by Kim and Park (2014) and Delamare Le Deist and Winterton (2005).

Functional Competence

In the focus group interviews, participants agreed that functional competence can be acquired in their studies in self-financing tertiary education institutions and can also be gained by having a good teacher. As the working environment tends to be dynamic and competitive, graduating students should be equipped to be ready in the workforce, such that skills and techniques of critical thinking, language capability, interpersonal, problem solving and time management are necessary to increase competitiveness to achieve high job performance. These are the immediate job skills which are very important for the graduating students to perform well (Kim & Park, 2014). Functional competence is categorized under occupational and operational aspects (Delamare Le Deist & Winterton, 2005), and thus, this type of competence can surely allow graduating students to achieve high quality of performance.

Meta (Hidden) Competence

As mentioned by Bergenhenegouwen et al., (1996), motivation and values are important motivational factors to increase and sustain superior performance of

employees. However, participants appeared to be lack of meta competence in this study, or they expected that the school should take an active approach in the cultivation of meta competence towards graduating students. From graduating student's perspectives, the schools seemed to "ignore" or "skip" the competencies of self-confidence, professionalism and enthusiasm. Establishing hidden competence is important for both students and employers. Litzenberg and Schneider (1987) asked the agribusiness employers to rank the relative importance competencies managers sought in new employees in a national survey. Based on the survey results, Litzenberg and Schneider (1987) concluded that educators must address the development of enthusiasm and professionalism. Fleming, Martin, Hughes, and Zinn (2009) also examined that students should develop the hidden competence in the areas of learning to learn, self-confidence, relationship building as well as teamwork and cooperation to increase the likelihood of graduate employment.

Suggestions on the Design of Programme Curriculum and Suggestions to Education Policy Makers

In order to increase graduating students' competencies, particularly in the establishment of meta competence, some suggestions are made. First of all, more career talks are suggested by the participants in order for them to learn skills and knowledge in relation to job interview so as to enhance self-confidence. Institutions should consider strengthening the function of career services to provide high quality career support to graduating students. 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. Preparation well before the interview, polished interviewing skills, and attractive resume design can allow the graduating students to succeed in getting the job offer.

Secondly, though some subjects such as management-related subjects are very much based on concepts and theories, the programme should be designed to be more vocational and practical so that students can acquire the practical knowledge through the programme curriculum of the institutions for the development of functional competence. Enhancing the use of experiential learning can help to apply knowledge and acquire the hands-on experience. For example, participants mentioned that the effectiveness of learning in the "Leadership" course can be improved through encouraging the students to participate in case competitions or organizing co-op programmes or work-integrated schemes (Weisz, 1999) so that it can help them to bridge the gap between concepts and practical experience. Moreover, these types of programmes can also help to develop their professionalism as students are already in the workplace, commit their time and knowledge to their professions.

Thirdly, reforming the teaching approaches to be more interactive can help students learn in a positive way so that they are more willing to learn. Loeb (2014) addresses the contribution of teachers' interaction to the arena outside the classroom which helps

boost students' confidence in their ability; thus, the ways to strengthen student-teacher interaction should be examined to benefit students studying at the self-financing institutions. In addition, allowing students to lead the discussion of a topic amongst their fellow classmates can also increase the hidden competence of students by means of the establishment of initiatives and enthusiasm. By inviting the executives or experienced practitioners from their field of profession can help to arouse their professionalism and let them gain a sense of the real work environment. This can also wake them up to develop the required competencies from the workplace.

Finally, the established curriculum has incorporated two basic languages, namely, English and Mandarin. It is suggested that the education policy makers can create possible opportunities to allow students from self-financing tertiary education institutions to learn more different languages to enhance their career success. It is because foreign language learning has always mirrored the ongoing economic and political development of the countries, such as China, Russia, Korea and Indonesia (Tollefson, 2012). Promoting dual languages or even more than two languages can foster students' readiness in knowledge-based economy and globalized society (Castro et al., 2011).

This study tries to provide a direct understanding for the education policy makers as to how effective is the current curriculum of self-financing institutions in developing graduating students' competencies. Some important findings, such as the inadequacy of the development of meta competence, can provide valuable implications to them in designing the programme curriculum. However, limitations are also realized and future research directions are suggested. First of all, this study mainly focuses on the supply side, that is, the competencies acquired from students' perceptions. If we do not understand what the demand is, the students will not be able to get the job offer as well. Therefore, future study should try to compare the gap between the current competencies acquired by the students and the required competencies from the employers. Then, implications will be more promising.

Secondly, three focus group interviews may not be enough to ensure that all possible themes related to competencies have been identified. Conducting additional focus groups could expand the data and potentially create more complete understanding of the competencies. Apart from conducting focus groups, applying critical incident method may also be a good way to create a more exhaustive list of themes for competence.

Conclusion

By looking at competence from a multi-dimensional perspective, this study offers a lens for the education policy makers or senior management of the self-financing institutions to evaluate whether the existing programme structure and curriculum can fit with the "knowledge economy" or globalized society. The findings of this study show that our self-financing graduating students are strong in conceptual, social and

functional competencies, which are categorized as the observed competence while their meta competencies are inadequate. This particular competence is hidden in nature but of high importance to sustain career and job success. Therefore, education policy makers should pay more attention to develop a goal-oriented curriculum in the establishment of this hidden competence in order to provide more preferred candidates for the Hong Kong society.

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