

Quality Education: A Career Development and Self-Concept Approach

Abstract

This paper argues that career development is a necessary and important dimension in the quality education debate. Career development interventions in schools can be used as means to facilitate the comprehensive development of students. Selected career development theories with an emphasis in self-concept are reviewed and discussed, especially in terms of their applications for primary and secondary schools in Hong Kong. Strategies to implement career development interventions in primary and secondary schools are also examined.

Quality education has become a popular idea in the Hong Kong education circle in the 1990s. The call to improve primary and secondary education was supported in 1997 by two important documents. The first document was the Report on *Review of Nine-Year Compulsory Education* (Sub-committee on Review of School Education, 1997). This report pointed out that primary and lower secondary education suffered from a number of problems including the existence of wide individual differences in ability in the

same classrooms, ineffective classroom learning, and students with learning/behavioral difficulties. The second document was the *Education Commission Report No. 7* (1997) on quality education. This report highlighted the importance of defining and assuring quality in schools, and recommended a system in which schools would be asked to evaluate their progress toward goals they set according to their unique circumstances. Recognizing that education is a key to continual economic success in Hong Kong, the Chief Executive of the Hong Kong Special Administrative Government declared educational improvement as a policy priority.

Quality education is a high-sounding ideal, but its meaning is often vague. For years, the education system in Hong Kong has placed a strong emphasis on the acquisition of knowledge and the development of academic skills. However, in the 1990s, there have been calls to broaden the goals of education, and to view the development of the whole person as the ultimate goal of education. In 1993, a booklet entitled *School Education in Hong Kong: A statement of Aims* was published by the Hong Kong Government. This booklet argued that education should aim at facilitating the all-round development of students, in areas such as ethics, the intellect, the physique, social skills, and aesthetics. It further suggested that schools should help students realize their potentials, and to become responsible

persons and citizens. This position was echoed by the *Education Commission Report No. 7* (1997). This Report stated that education in Hong Kong should facilitate student in a number of areas, including language ability (biliteracy and trilingualism), self-learning ability, a global outlook and a sense of responsibility for one's family, country, and the world, an ability to assimilate modern technologies and ideas, an appreciation of Chinese values, a desire for continuous improvement, and a respect for law in the pursuit of personal interests. From this perspective, it seems that quality education is viewed as the effectiveness of schools in facilitating comprehensive student development.

The realities of the Hong Kong educational system, however, have caused many to doubt whether the high-sounding principles of quality education targeting the comprehensive development of students could be implemented. For example, the pressures to complete school curriculum and to excel in external examinations have left limited time for schools to engage in activities that are not directly related to academic learning. Also, many schools have to struggle with students who, because of an array of family, emotional, or behavioral problems, are not motivated to learn. Keeping these students in schools and to maintain their learning routines have already consumed a huge amount of energy from

teachers. Quality education to target the comprehensive development of students seems idealistic and unreachable.

The urgency for the Hong Kong education system to address the comprehensive development of students was recently proposed by Levin (1997a), who pioneered the Accelerated Schools Project in the United States (Levin, 1986, 1997b; Hopfenberg, Levin, & Associates, 1993). Based on data related to the economic development of the Asian region (e.g., Kim & Lau, 1994), Levin (1997a) suggested that the economic growth of Hong Kong in the past 20 years have been sustained mostly by tangible capital and labor inputs. The increase in human capital, however, did not contribute significantly to the growth of the economy. Levin argued that for Hong Kong to remain competitive internationally, the education system has to produce a workforce that could meet future economic challenges. Levin believed that upgrading the labor force requires more than increasing achievement test scores. He identified 12 competency areas that are important to workers in highly productive workforce. The 12 competency areas could be classified into three major categories. The first category is **interpersonal and collaboration skills**, including cooperation, working in groups, peer training, and multicultural skills. The second category is **planful and systematic problem solving skills**,

including evaluation, reasoning, planning, decision-making, and problem solving. The third category is **self-enhancement skills**, including initiative and learning skills. Whereas the development and refinement of these skills are likely to be a lifelong process, it is important to provide opportunities for individuals to acquire and develop confidence in the use of these skills in the childhood and adolescent years. The over-emphasis in knowledge acquisition has caused these skills to be under-developed among most primary and secondary students.

From an economic perspective, Levin's (1997a) argument suggested that education should produce individuals whose skills and competencies are consistent with the demands of the society. From a developmental perspective, Levin's argument implied that education should equip students with skills that they could use as they take on other life roles (e.g., as workers and citizens). In other words, education should not limit itself to the instruction of knowledge. Education, or rather, quality education, should take on the mission of promoting the comprehensive development of students, and preparing students to meet their future social and career responsibilities. Career development, therefore, should be one of the major components of quality education. A career development perspective offers a useful perspective to understand and operationalize student

development. Through this perspective, strategies to accelerate the comprehensive development of students, including the development of skills discussed by Levin (1997a) could be identified.

Career Development and Quality Education

Career development can generally be defined as a lifelong process of developing beliefs and values, skills and aptitudes, interests, personality characteristics, and knowledge of the world of work (Tolbert, 1974). In order to identify the interface between career development and education, it is necessary to examine three assumptions common to many career development theories. First, career development is an integral part of an individual's developmental experiences, as well as a process that encompasses the whole life span (e.g., Herr, 1996; Super, 1990; Vondracek, Lerner, & Schulenberg, 1986). Career development involves more than a single or multiple decisions in which an individual decides on which occupations to choose or jobs to apply. It involves stages of development across the life span, and the development of skills, values, and characteristics related to career attainment, advancement and satisfaction.

A second assumption is that career planning and life planning are inter-related processes. Career goals should be consistent with one's life goals, and if they are not consistent, an individual is likely to feel torn between

diverse goals, and neither set of goals might be fully realized (e.g., Super, 1990; Holland, Daiger, & Power, 1980). A related concept is life roles (e.g., Super, Sverko, & Super, 1995). This assumption implies that one has to coordinate the different life roles because they may interfere with one another (e.g., the role of being a worker may interfere with one's role as a spouse). In addition, to be successful as a person requires competence in taking on multiple roles such as worker, spouse, citizen, and learner (student).

Third, educational experiences at the primary and secondary levels play an important role in facilitating the career development of students, as well as equipping students to become effective persons as they enter the adult world (e.g., Herr & Cramer, 1992). Most career development theorists suggested that educational experiences that are designed to promote career-related attitudes and knowledge about oneself and the realities of the world of work are vital at the primary and secondary school levels (e.g., Gysbers & Henderson, 1988; Hansen, 1977; Herr & Cramer, 1992; Zunker, 1997). Counseling interventions could be designed to help students understand themselves, to develop attitudes and skills that are essential to being productive workers in the workforce (e.g., Levin, 1997a), and to strengthen their abilities in taking on multiple roles. Specific career interventions to help

students develop skills related to career choice and exploration could be established to help students develop career-related skills such as career decision-making, career information search, and job search skills, especially for students who do not want to pursue a university education.

The importance of schools to help students develop skills that are relevant to their future role as workers has been re-emphasized in the United States recently through what is now known as the school-to-work transition movement (e.g., Smith & Rojewski, 1993; Worthington & Juntunen, 1997). For decades, many secondary schools in the United States have career education programs to help students in their career exploration and development. However, these programs have been found to be inadequate in terms of preparing youth for work, especially youth who are not university-bound (e.g., Smith & Rojewski, 1993). In an effort to improve the quality and effectiveness of career development efforts in schools, the Congress of the United States passed the “School-to-Work Opportunity Act” (STWOA) in 1994 (U.S. Department of Education, 1996). The STWOA specified that the federal government should work with states and local schools to establish a framework to increase the relevance of school-related activities to skills demanded in the workplace. According to Worthington and Juntunen (1997), the goal of the STWOA is to help students develop general employability

skills (e.g., eagerness to learn, motivation, integrity), as well as specific technical and industry-recognized skills that allow students to find employment within a specific profession.

From the United States to Hong Kong, a common concern related to education is how to make education relevant. The above analysis suggests that career development is a needed dimension as we seek to define and operationalize “quality education.” Career development interventions could be used as vehicles to achieve the educational goals specified by the *Education Commission Report No. 7* (1997) and by Levin (1997a). In the next section, selected career development theories are reviewed. These theoretical models are integrated to form a guiding framework for the design of career development interventions in primary and secondary schools in Hong Kong.

Career Development of Primary and Secondary Students

Career development programs are not emphasized in most primary and secondary schools in Hong Kong. At the primary school level, career-related intervention is minimal and often stays at the information level. Information about selected occupations (e.g., policeman/policewoman) is infused into school curriculum. Most secondary schools in

Hong Kong have a career master/mistress position. The career master/mistress is expected to head a team of several teachers to provide career guidance services to students through advising them on their choices of careers and university academic majors. Even with the existence of an established career guidance team, career guidance in secondary schools remains at a superficial level. A number of factors have limited the development of career-related programs in secondary schools, including a high career guidance teacher to student ratio, a lack of training in career counseling and interventions, insufficient resources, and a limited view about the career development needs of students.

In order to establish a conceptual framework for career development programs in schools, an important area to explore is theories of career development. A number of career development theories have been proposed in the literature. These career development theories could be categorized into two major groups. The first group consists of “career choice theories” that explain how career choices are made and what constitute a “good” career choice (e.g., Brown, 1990; Dawis, 1996). An example is Holland’s (1985) theory of career interests and personality. Holland’s (1985) theory views a good career choice as one in which the personality types of an individual are congruent with the characteristics of a chosen environment. The second

group of career development theories is developmental models that conceptualize career development as a sub-component of human development (Super, 1990; Vondracek, Lerner, & Schulenberg, 1986). Similar to the process of human growth and development, career development is a process with multiple stages, and within each stage, individuals are expected to fulfil a number of inter-related career developmental tasks. In order to facilitate the career development of students, it is important to identify the vocational developmental tasks that one is expected to complete in a specific life stage.

A review and survey of all the theories of career choice and development is beyond the scope of this paper. It seems that theories that view career choice as a life-span developmental process, with an emphasis on the childhood and adolescent years, would be most relevant to the purpose of this paper. Such being the case, three theories of career development are summarized in this paper. These three theories are Super's theory of career development, Gottfredson's theory of career aspiration, and self-efficacy theory of career development. A common vein among these theories is their focus on the development of self-concept as a major developmental variable. After these theories are reviewed, their implications for primary and secondary students in Hong Kong are discussed.

Super's Self-Concept Theory of Career Development

Among the developmental theories of career development, the theory by Super has received the most attention and support from empirical research (Savickas, 1994a). Consequently, the theory by Super is summarized and discussed below. Two components of Super's theory, his stage model and his notion of life roles are examined. Super (1969, 1980, 1990) suggested that career choice and development is essentially a process of developing and implementing a person's self-concept. Thus, his theory has often been referred to as a self-concept theory (Herr & Cramer, 1992). Self-concept, according to Super (1990), is a product of an interaction between a number of factors, including physical and mental growth, personal experiences, and environmental characteristics and stimulation. Vocational self-concept is a part of a person's overall self-concept, and is most related to the parts of self that have to do with needs, values, interests, abilities, and personalities. Super (1990) suggested that self-concept is always evolving as a result of interactions between a person and his/her environment. Generally speaking, a relatively stable core self-concept should emerge during late adolescence, which becomes the basis for continuity in choice and development through adult life stages. Life and work satisfactions are dependent on whether a person is able to implement their evolving self-concepts through work and other activities.

Super (1990) proposed a life stage developmental framework. This framework consists of five developmental stages. The first stage is growth (birth to age 14). This is the age period that a child starts to develop a sense of self as someone who possesses a set of skills, attitudes, interests, and needs. Usually, these perceptions are based more on fantasy than reality, particularly for children who are at the early part of this stage (e.g., primary students). However, through different life experiences and feedback from the environment (e.g., teachers, parents), a child is able to validate some of their perceptions, leading to the formation of a core self-concept.

The second stage (Super, 1990) is called exploration stage (ages 15 to 24). This is the stage that an adolescent engages in an active process of exploring oneself and the world of work, leading a tentative decision regarding the choice of an occupation. Super outlined three developmental tasks that are salient for adolescence and young adults in this age period. The first task is crystallization (ages 14 to 18). Crystallization is a deliberate cognitive process in which a young person considers his/her interests, values, skills, and resources. The process of crystallization leads to the formation of general vocational goals and vocational preferences (e.g., to pursue occupations in the business area). The second task is specification (ages 18 to 21). The young person is

expected to make a decision regarding his/her vocational choice, and to move from having tentative vocational preferences to a more specific vocational direction (e.g., to become an accountant). The third task is implementation (ages 21 to 24). The young person is expected to engage in training activities and to enter into the chosen occupation upon completion of such training.

Stages three to five in Super's (1990) theory are less relevant for school age children, and are briefly described below. The third stage is establishment (ages 25 to 44). This stage involves two major developmental tasks, stabilization and consolidation. Stabilization is a process of confirming one's vocational choice through actual work experience. Consolidation refers to work-related performance that lead to occupational advancement and promotion. The fourth stage is called maintenance (ages 25 to 44). An individual has to engage in an active process of continual adjustment to maintain what he/she has achieved, and to seek further improvement related to one's career position. The fifth stage is called decline (ages 65 and over). This is the age period in which the person has to adjust and reduce the amount of work output, to plan and to eventually seek retirement from an occupational role.

The developmental stages proposed by Super (1990) may serve as a conceptual framework for career

development interventions in primary and secondary schools. For example, career interventions programs in both primary and secondary schools could be structured in such a way to help students develop a clear self-concept and identity, through helping students to master the developmental tasks of crystallization, specification, and implementation. The construct of “career maturity” was used to characterize the functions of career development intervention programs. Vocational maturity has been defined as the degree that an individual is able to successfully cope with the developmental tasks expected at a particular life stage or sub-stage (Betz, 1988; Savickas, 1994b; Super, 1990; Super & Overstreet, 1960). The underlying assumption is that completion of developmental tasks at an early life stage would lead to a higher degree of adaptability and satisfaction at a later stage. For example, research studies conducted by Super and his associates (e.g., Super, 1969; Super & Overstreet, 1960) showed that adolescent boys (ninth graders) who coped effectively with their expected vocational tasks (e.g., knowledge of occupations, self-awareness, planning capability) were more successful as young adults than those who were less effective in coping with those tasks. Accordingly, the goal of career development programs in school or other settings should be to enhance the career maturity of participants.

In a recent revision of his theory, Super (1980, 1990) elaborated on the interface between career development and human development. Super suggested that individuals have to play a number of roles in their life-time. Some of the major roles identified by Super are child (including as son or daughter), student, leisurite, citizen, worker, spouse, parent, and pensioner. The salience of each of these roles may vary at different life stages. For example, the role of student is more important for an adolescent or young adult who is still in school, and the role of worker is less salient. For a married adult, the roles of spouse and parent are more important than the role of a student. Super contended that these different roles are played in four contexts or “theaters,” which are home, community, school, and workplace. Super’s (1980, 1990) conception of the multiple roles that individuals play lead to two postulations regarding career development. First, whereas each role is likely to be played primarily in one theater, individuals may experience conflict and confusion when the behaviors and outcomes expected from one role interfere with that of another. Second, since each person almost has to play several roles simultaneously at the same time in different theaters, the success one plays in one role would facilitate success in other roles that one is concurrently playing. Conversely, an inability to adequately handle a life role would lead to difficulties in other life roles.

Super's (1980, 1990) framework on life roles suggested that it is imperative to help students map out the major life roles they have to play so as to increase the chance that these roles could be played in an effective and harmoniously manner, so that the self could be actualized. Essentially, Super's model points to a life-planning approach in school settings to prepare students to take on the multiple roles that they have to take in future life stages, including the role as workers, citizen, and spouse.

Gottfredson's Theory of Career Development

Another career development theory that has a focus on self-concept was proposed by Gottfredson (1981). The theory was recently revised (Gottfredson, 1996) based on the research findings that were generated by the theory (e.g., Leung, 1993; Leung & Harmon, 1990; Leung & Plake, 1990). Similar to Super's (1990) theory, Gottfredson suggested that the development of self-concept is central in the overall career development process. The images of occupations for young children are based more on fantasy and magical thoughts than reality. However, as children develop, their occupational images become more concrete, and occupational preferences become closely linked to a child's evolving self-concept. Gottfredson maintained that the career development of children are more influenced by the

public aspects of their self-concept (e.g., gender, social class) than the private aspects of their self-concept (e.g., values, interests). The private aspects of one's self-concept are likely to influence occupational preferences in the adolescent years.

Gottfredson (1981, 1996) proposed a stage model of career development during the childhood and adolescent years. Each developmental stage is characterized by the selective elimination of potential occupational alternatives based on an aspect of one's self-concept that becomes salient to children at that particular stage. The selective elimination of occupational alternatives from further consideration by a person is called *circumscription*. Consequently, the career development stages are often referred to as stages of circumscription. Gottfredson's model consists of four stages. The first is called "orientation to size and power" (ages 3–5). During this stage, children tend to perceive people and things in simple categories such as "big" or "small," and occupations as roles to be taken by big people (adults). The second stage is called "orientation to sex-roles" (ages 6–8). During this period, children are able to think more concretely than the previous stage. Their perceptions of the world, however, are rigid and dichotomous, and they often classify things, including occupations, as either good or bad. An aspect of self-concept that becomes salient at this stage is sex-role.

Children evaluate their environment in terms of what is appropriate for one's sex, and regard their own sex to be superior to the other. At this stage, children eliminate from further consideration occupations that are perceived to be gender inappropriate (i.e., the wrong sextype). For example, if a girl perceives engineering to be a "male" occupation, she may eliminate being an engineer as a possible future career choice. The third stage in Gottfredson's model is called "orientation to social valuation" (ages 9–13). In addition to what is gender appropriate and inappropriate, the young adolescents develop a sense of what is valued by their peers and the larger society. They configure occupations as symbols of power, social class, and status. Consequently, young adolescents eliminate from further consideration occupations that are perceived to be either too low (i.e., occupations that have unacceptable social standing) or too high (i.e., occupations that are high in social standing but are perceived as too difficult to achieve) in occupational prestige. The fourth stage is called "orientation to the internal, unique self" (ages 14 and above). In contrast to the previous stages in which occupational alternatives are rejected based on aspects of one's self-concept that are external, adolescents at this stage are likely to shift their attention to internal aspects of their self-concepts, such as personality, interests, skills, and values. Through comparing occupational alternatives with these aspects of the self, adolescents determine which

occupational preferences are most suitable to them. Their exploration, however, are confined to those occupational alternatives that have not been eliminated in the first three stages of career development. For example, if a girl has already eliminated engineering as a possible career choice during the second stage (orientation to sex role), this occupation will not be re-considered even if the aptitude and interests of the girl might correspond with the demands of this occupation. Many adolescents at this stage struggle to understand who they are, and in the process may become unsure and confused.

Parallel to the process of circumscription is a process of compromise (Gottfredson, 1981, 1996). Compromise is a process of modifying one's occupational preferences in response to external realities. Examples of external realities are job availability and opportunities, economic development, hiring practices and discrimination, and family obligations. When there is a gap between what is ideal and what is available in the reality of the work world, individuals have to accommodate their occupational preferences so that their eventual choice is achievable in the real world. According to Gottfredson, compromise is a complex process in which compatibility with one's interest is often compromised to achieve a greater degree of correspondence with one's preference for sex type and prestige.

The theory by Gottfredson (1981, 1996) has important implications for career interventions in primary and secondary schools. While both circumscription and compromise are natural career development processes, primary and secondary education should aim at preventing students from premature and unnecessary circumscription and compromise.

Self-Efficacy Theory of Career Development

A number of self-efficacy theories have been proposed in the literature (e.g., Betz, Borgen, & Harmon, 1996; Hackett & Betz, 1981; Lent, Brown, & Hackett, 1994). Self-efficacy theories of career development are based on Bandura's (1977) notion of self-efficacy expectations. Self-efficacy expectations could be defined as the expectations or beliefs that one can successfully perform a given task or behavior (Bandura, 1977; Hackett & Betz, 1981). The level of self-efficacy expectations influences whether an individual would initiate the target behavior, and to sustain the behavior in response to barriers and difficulties (Betz, Borgen, & Harmon, 1996). Bandura (1977) theorized that self-efficacy expectations determine whether an individual would engage in behaviors to explore a given domain (approach behavior) or avoid the exploration of such a domain (avoidance behavior). According to Bandura (1977), self-efficacy expectations (e.g., mathematics ability) are formed through evaluating

information obtained from four different sources. The first source is performance accomplishment. It refers to whether the individual is able to successfully perform the target task or behavior (e.g., solving mathematics problems). The second source is vicarious learning or modeling. It refers to whether the individual is able to watch others who could perform the target behavior successfully. The third is emotional arousal. It refers to whether the individual experiences anxiety in connection to performing the target behavior. The fourth source is verbal persuasion. It refers to whether the individual receives support and encouragement from others in the process of performing the target behavior. Experiences in these four areas would reinforce or discourage the person from performing the target behavior.

The concept of self-efficacy expectations is important for educator because students' motivation and drive to learn and achieve are influenced by the self-efficacy expectations of students (e.g., Multon, Brown, & Lent, 1991). If the academic self-efficacy of students were poor, even with the best teachers or the best curriculum, they would not be motivated to learn. Many students might have the ability and potential to learn in school, and to even excel in a career in the future, but because their low self-efficacy expectations, they are not able to engage in a process of learning that would

allow them to develop those interests, skills and potentials. Betz (1992) suggested that at least a moderate level of skill confidence is necessary for an individual to start exploring a particular educational or career area. If a person's skill confidence is below a moderate level, a student might not explore an area (e.g., mathematics) that they might be interested in and/or competent at doing if his/her confidence level is higher.

Self-efficacy theories of career development suggest that learning experience is vital to the development of a person's self-concept. If a student receive negative feedback in the schooling experience related to skills and abilities (e.g., being placed in a low ability class or in a band five secondary school), he/she is likely to have low confidence in his/her academic or intellectual abilities. The low self-efficacy expectation would in turn inhibit the student from exploring future educational or career options that might be congruent with his/her abilities and interests.

The development of self-efficacy should be a priority in the schooling process. Students with a positive view of oneself are likely to feel a sense of personal worth, which in turn would generate constructive and goal-directed behavior. With a sense of self-efficacy, a powerful process of instruction and learning would occur in the classroom.

Principles of Career Interventions in Primary Schools in Hong Kong

Preventing Pre-mature Foreclosure of Educational and Career Goals

Education should aim at encouraging students to aspire for career life goals that they could reach (e.g., Leung, 1995; Miller, 1977; National Consortium of State Career Guidance Supervisors, 1996). At the primary level, it is vital for schools to provide children with an array of experiences to help children develop their diverse interests and abilities. Primary school children should be open to pursuing a range of educational and career goals because their interests and skills are still emerging (Gottfredson, 1981, 1996). It is vital for children in primary schools to experience success through the educational process, and to develop a sense of competence through these success experiences. Success experiences are likely to create self-efficacy expectations, which would then motivate students to actively explore themselves and their environment. Without a sense of self-efficacy, children would not seek out experiences that could help them identify and develop useful skills, and might give up pursuing educational goals (e.g., university education) that could lead them to professional career opportunities.

At the primary school level, student should have the opportunities to try out different activities so that they could learn about their abilities and interests (Krumboltz & Nichols, 1990; Mitchell & Krumboltz, 1996). It is pre-mature to form definitive views about self because many aspects of the self, including interests, skills, and values, are still forming, especially among younger primary school students. However, if students are encouraged and given the opportunity to do a variety of tasks, they would develop a general sense of competence that could be carried into the adolescent years. It is also important for students to develop an appreciation of self at an early age, so positive expectations from teachers in the classroom is extremely important (e.g., Glasser, 1993). A facilitative school and classroom environment is critical for children at this stage of development. A nurturing school environment, along with professional teachers whose interactions with students convey a genuine attitude of respect and empathy, would create feelings of self-worth and self-appreciation among students. Counseling interventions are also needed for students whose self-perceptions and esteem are adversely influenced by unpleasant home and family environments (e.g., students from divorced families). Unpleasant childhood experiences in the family arena might leave permanent residuals on the self-concept of students.

Early Intervention on Gender Attitudes and Prestige Preferences

According to Gottfredson (1981, 1996), a young adolescent has already eliminated a large number of occupational preferences from further consideration based on one's notion of sextype and prestige. These occupational alternatives are eliminated before the student engages in an active process of self-exploration in the adolescent years to determine what occupational choices are congruent with one's interests, skills, and values. Early intervention in primary school settings could help students retain occupational choices before they have to make decisions to narrow their occupational paths during adolescence and early adulthood (e.g., Lapan & Jingeleski, 1992; Leung, Conoley, & Scheel, 1994). For example, educational interventions to explore sex role stereotypes and attitudes could be conducted to encourage students to consider choices that are "non-traditional" to their natural genders. In a similar vein, students should be encouraged to not give up educational and occupational goals that are deemed "too difficult" or "too low in social prestige" before they are able to have a realistic assessment of their abilities and career opportunities in the adolescent years.

Introducing Careers to Primary Students

Primary students are at the Growth stage according to Super's theory discussed earlier. Many authors have

observed that children actively consider different career options at a relatively young age, and develop a range of impressions about different types and clusters of occupations (e.g., Herr & Cramer, 1992; Staley & Mangiesi, 1984). It is important for primary students to acquire accurate and realistic knowledge about occupations, and to understand the different ways that workers from different occupations contribute to the society. Most children, especially younger primary students, may not have the cognitive complexity or ability to understand the “technical details” of occupations. However, there are many ways to help primary students learn about occupations and to develop a realistic picture about the world of work. For example, schools could use multi-media tools, field trip visits, books, speakers from different occupations, and other powerful learning activities to enhance students’ exposure and knowledge about occupations.

Principles of Career Interventions in Secondary Schools

Encourage Students to Persist in Their Pursuit of Career Goals

Beginning in junior secondary school, students are exposed to more academic subjects and extra-curricular activities than when they were in primary schools, and so there are more opportunities to test out their aptitudes and

competencies in a variety of subject areas. As a result, students are likely to be confronted with doses of realities. Failure experiences and initial difficulties might force some students to go through a process of compromise (e.g., I failed my mathematics courses, so I should not consider any occupations in which mathematics abilities are needed). Consequently, it is important to provide students with support and encouragement, and to let them understand that some abilities could emerge at later life stages (e.g., College Board Commission on Pre-college Guidance and Counseling, 1986), and that skills could be developed through hard work and dedication.

Arts or Science: Making an Informed Decision

According to the framework by Super (1980, 1990), at the beginning of the Exploration period (around age 14), the most important developmental task for student is the crystallization of career interests, and decisions regarding career choices are made toward the middle or end of this period. However, in Hong Kong, the educational system requires Secondary Three students to make a decision regarding whether they want to follow a science track or an arts track. Most Secondary Three students are likely to be around fifteen years old, and according to many developmental theories of career development (e.g., Ginzberg, 1972; Super, 1990; Vondracek, Lerner, & Schulenberg, 1986), students at this age are still exploring who they are, and may not have the maturity to make such

an important decision. In effect, Secondary Three students are forced to make a decision that would significantly narrow the ranges of their future educational and career paths. Students might make this decision based on a number of factors, such as parental desire, prestige (e.g., science track is more popular and prestigious), and sextype (e.g., arts track is more suitable for girls). Given the reality of the Hong Kong education system, junior secondary schools should prepare students to make this important educational decision so that students could make an informed and planful decision (Walsh & Osipow, 1988). Ideally, students should consider a variety of relevant factors, including their interests, competence, values and life goals in the process of making this decision.

Teach Students How to Achieve Self-Understanding

Exploration activities at the primary and junior secondary levels should result in some tentative views about one's personality, interests, skills, and values (Borchard, Kelly, & Weaver, 1988; Zunker, 1997). These perceptions, as well as the amount of esteem generated from such perceptions, would influence the students' motivation to learn, as well as the career and educational goals they set for themselves. Secondary students need a lot of assistance to weave and integrate information about self, as well as to apply them to important educational decisions that they have to make (e.g., choosing a science or arts track). Of equal importance at this stage is for

students to acquire effective strategies to further their self-understanding. Adolescents often ask the “who am I” question. If adolescents could learn the steps that one could take to understand self, they would have acquired a mechanism that could be used in a lifetime. Developmental theorists such as Super (1990) contended that the self is an evolving entity, and so the process of self-understanding would never end. Consequently, if students know what could be done to enhance their self-understanding and awareness, they could cope with difficult decisions that they have to make at later life stages. Since the identity development process usually accelerates at the adolescent period (e.g., Super, 1990), helping students to learn the strategies for self-awareness and understanding should start at junior secondary schools.

Develop Good Decision-Making Skills

In view of the variety of educational decisions that secondary students have to make, it is clear that they need to learn about how to make decisions (Walsh & Osipow, 1988). Decision-making skills could be infused into different curriculum, or taught and practiced through individual and group counseling sessions. It is important for students to learn the steps to make their education and career decisions on an “informed” and “planful” manner, rather than being unduly influenced by the environment or by significant others, such as their parents, siblings, teachers, or peers (Harren, 1984). While recognizing that

educational and career opportunities are limited by environmental factors (e.g., economic realities, family expectations, limited university places), students should be encouraged to make choices that are congruent with their personal qualities (e.g., interests and skills). At the same time, students need to understand that decision-making involves having a choice and some backup alternatives. For example, students need to have plans on what they could do if they could not gain admission into university, and what are their second and third choices for academic majors if their examination results do not qualify them for the first choice.

Acquiring Knowledge about the World of Work

For some students, junior secondary school is the end of formal education, and they have to make a transition from school to work. For other students who are moving into senior secondary schools, the end of junior secondary schools signals the end of general education. To help students cope with these transitions successfully, interventions to help junior secondary students increase their career maturity are needed. First and foremost, students should continue to expand their knowledge about the world of work (e.g., Chapman & Katz, 1983). Whereas primary students are limited in their ability to understand the “technical details” of occupations, junior secondary students should have the ability to learn and understand more specific

occupational information, so that their perceptions about the world of work are based on realistic knowledge and information. The acquisition of occupation information is important for work-bound students as well as students who are continuing into senior secondary school. For work-bound students, they need to know what their occupational options are and the different training routes that they could follow to enter these options. For students who are continuing into senior secondary schools, they need to make a connection between what they will study (e.g., arts or sciences tracks) and occupational alternatives. They have to be aware that the educational choice they make at this stage might narrow the kind of occupations they could pursue in the future.

Acquisition of Job Search Skills

Secondary students should acquire skills related to job search and interviewing (e.g., Bolles, 1993). Under the current university entrance system, a majority of senior secondary students would not be successful in gaining admission into a university in their first attempt. Secondary schools have the obligation to equip students with the skills they need to obtain vocational training and employment after graduation. It includes skills such as locating occupational information through printed and multimedia sources, writing job search correspondence, writing resume, and self-presentation and interviewing skills. These job search skills allow students to have some control of their

destiny if they could not gain admission into a university. The vocational maturity of senior secondary students could be elevated through programmatic efforts to equip students with skills to cope with these tasks. Most senior secondary schools, however, spend most of their efforts on helping students to develop their academic ability, and the career development needs of students are largely ignored. Given that a majority of senior secondary students cannot gain admission into a university in their first attempt, their needs-related career development and maturity should be placed at a higher priority.

Strategies of Career Intervention in Primary and Secondary Schools

Primary Schools

At the primary school level, a comprehensive career counseling or guidance program is not necessary. However, career-related intervention could be carried out as part of the school-based counseling programs, or what is now known as the Whole School Approach in Hong Kong. While numerous career intervention strategies for primary school children have been suggested in the literature (e.g., Herr & Cramer, 1992; Zunker, 1997), three categories of strategies that could be implemented in the Hong Kong primary school setting are discussed below.

First, information about occupations and career should be infused into the primary school curriculum creatively (Herr & Cramer, 1992). Children should learn about a variety of occupations, not just the ones that they are exposed to through their family circles (e.g., parents' occupations) or fantasy play (e.g., police, teacher, doctor). Information about occupations may not be readily available in the regular textbooks and teachers have to team together to develop materials that could be used for different grade levels. Students could be asked to do individual or group information projects about occupations, and they could present and share information through posting them in the classroom or through verbal presentations. It is important to note that a major goal of helping students to gain information about occupations is to encourage them to be open to possibilities and to be able to make a connection between education and a future occupational role. Structured classroom and homework activities should help students to become aware of the range of choices available without being restricted by stereotypic assumptions such as those (e.g., gender attitudes and prestige preference) discussed in an early section of this paper (e.g. Gottfredson, 1996).

Second, the literature (e.g., Zunker, 1997) related to career intervention in primary schools have emphasized the importance of helping students develop self-knowledge and skills that are vital as they move into the future workforce,

such as self-concept, sense of competence, interpersonal skills, and a sense of responsibility. Self-concept and character development should be a major goal of school-based counseling program in primary school. Consistent with the philosophy of the Whole School Approach, primary schools should consider having student development classes, to be jointly organized by the student guidance teacher and the class teachers. These student development classes should combine structured and unstructured activities to help students develop skills that are needed in the modern workforce (e.g., Levin, 1997a). Basic counseling skills training for student guidance teachers and class teachers is necessary to equip them to take on this counseling role competently.

Third, schools should organize field trips for students so that students are exposed to the occupational world early in their development. Visiting offices and have different professionals and workers from varying levels share their experience would enrich young children. These activities should not be regarded as a distraction from the daily learning routines. Rather, the real life experience helps students make a bridge between what they learn in the classroom and the reality of the world. As an alternative to field trips, schools could involve parents of students who are involved in different occupational roles to share their experiences (Birk & Blimline, 1984).

Secondary Schools

Comprehensive career guidance services should be offered in each secondary school in Hong Kong. A comprehensive career guidance program should be organized jointly by the career guidance team and the counseling team of a school to facilitate the career development and needs of students at different secondary levels. A comprehensive career guidance program should ideally have the following components.

First, secondary school should offer career and educational planning classes for students (Gysbers & Henderson, 1988). The content of these classes should include self-explorations to increase self-understanding and awareness. This career-planning course should also help students acquire knowledge about different occupations and careers. Ideally, career-planning courses should be offered to students in Secondary Three and Secondary Six. It is important to help students make an informed decision regarding choice of their subject track after Secondary Three (e.g., arts or science tracks) and their choice of major if they are admitted into university (Secondary Six students). For students who are not university-bound, career decision-making and job search skills should be taught in these classes.

Second, students should be encouraged to participate in activities that allow them to learn and develop the many

skills identified as important to workers in the workforce (e.g., Levin, 1997a). It is not enough to just encourage students to participate in extra-curricular activities, and teachers should be actively involved in these activities to ensure that all students have the opportunity to learn and participate. Schools should also consider setting up regular student development classes to be led by the class teachers to facilitate student development. Coordination between the class teacher and the counseling and career guidance teams are important to make these classes more meaningful and relevant to students.

Third, secondary schools should make an effort to help students acquire knowledge and skills that are work-based (e.g., U.S. Department of Education, 1996). This category of intervention strategies include activities such as on-the-job experience, practicum and internships, volunteering, mentoring, and training that help students to build a bridge between work and education. These experiences are most effective in preparing students to enter the workforce, and to help students gain practical experiences that could help them plan their future education and career paths.

Lastly, individual and group counseling services should be offered to students who have special needs (Gysbers & Henderson, 1988). Some students may

need help to deal with their special decision-making concerns (e.g., a lack of match between interests and skills, parental objection to student's educational choices). They could set up meetings with the counseling teachers or the career master/mistress. However, it is important for teachers to receive training in individual and group counseling so they could help students competently.

The success of a comprehensive career guidance program depends on the coordination between the counseling and career teams in a secondary school, which might not be easy to achieve in some schools that do not traditionally encourage such collaboration. Meanwhile, career services in secondary schools in Hong Kong are not used to taking on tasks that have a counseling focus and therefore teachers who are involved might not have the necessary training. However, as career interventions and personal counseling interventions are often conceptualized as inter-related (e.g., Spokane, 1991), it is important for schools to consider more collaborative services and staff training in this respect.

Conclusion

In our debate on what constitute quality education, many would agree that it is multi-dimensional. The needs of students and our society are multi-dimensional and we

should mold our students so that they have the versatility to fit in with the changing world (Krumboltz, 1998). Career development is undoubtedly an important aspect of quality education. From an economic perspective, education has a responsibility to produce workers who could contribute positively to the workforce. From a developmental perspective, we need to equip students so that they could play their different adult roles (e.g., workers, parents) competently. The time is ripe for schools in Hong Kong to invest more time and resources on the career development needs of students.

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從事業發展與自我觀角度看優質教育

梁湘明

事業發展是優質教育中一項不可或缺的重要元素。學校對學生事業發展的干預，可作為幫助學生全人發展之工具。本文探討一系列以學生自我觀為重點的事業發展理論，並深入討論各理論在香港中、小學應用的情況。文章末段又會提供一些在中、小學實行事業發展干預的可行策略。