Mentoring Students for Talent Development: Its Role in Lifelong Learning

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In the recurrent discussion on the review of the overall education system in Hong Kong, issues related to the centrality of the learner, equity, excellence, information technology, and community-wide collaboration have emerged. In view of the emphasis on lifelong learning, it is suggested that mentoring should be considered an educational option not only for the nurturing of gifts and talents in students but also for the promotion of lifelong learning. The viability of this option is supported by the description of the development of mentorship programs with three levels of mentoring: Telementoring, double mentoring, and one-to-one mentoring. The implications of the use of telementoring via telecommunications and double mentoring via expert-mentor and teacher/peer-mentors for greater dissemination and promotion of talent development and lifelong learning in Hong Kong schools are discussed.

Key words: mentoring; mentorship; talent development; lifelong learning

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As we start to enter into the 21st century, education reform rhetoric and action can be anticipated to become increasingly substantial and widespread, beginning as reactions and responses to the Education Commission's comprehensive review of the overall education system in Hong Kong (Education Commission, 1999a, 1999b). The review is conducted in three stages, starting with (1) the aims of education, then proceeding to (2) the framework for education reform (academic structure, the curricula, and the assessment mechanisms), and ending with (3) education reform proposals. Each stage will be marked by a cycle of review and public consultation before the whole review is completed and recommendations submitted to the Chief Executive of the government for future planning and implementation.

However, this daunting challenge of review for reform on the overall education system can be viewed as driven by compelling sociopolitical, economic, and technological forces. Such forces include the long-standing discontent with the current education system with its overemphasis on examinations, the political transition from a British Colony to a Special Administrative Region of China, the financial crisis in Southeast Asia, and the advances in information technology that foster new modes of teaching and learning. The technological impetus, for example, has been translated into ideals and requirements. One example that can be readily cited is the ideal that all secondary schools should be well equipped with the latest technology in information and communication science to impart the new technology and information to all students. Another example is the additional requirement of computer literacy for students to graduate from universities. Nonetheless, the pervasive sentiment is that for Hong Kong to be competitive internationally and sustain its standard of living, revolutionary reform measures need to be introduced. Specifically, the Education Commission (1999b) adopts five principles in formulating its reform proposals. These principles emphasize the centrality of the learner (student-focused), the concern with equity (no-loser) and excellence (quality), and the diversity of learning modes utilizing, for example, advances in information technology (life-wide learning), and the importance of lifelong learn-

ing made possible by collaboration among different sectors of the community (a society-wide mobilization).

Lifelong Learning

The emphasis on lifelong learning in this review exercise is particularly noteworthy. First, it helps to make clear that learning does not end when the student leaves school or the classroom. Learning needs to be recognized by all students as a lifelong endeavor. Practically, considering the fast rate at which knowledge is expanding, no individual can start a career in his or her youth, and can continue to be effective in that career for very long with the knowledge and skills that he or she acquired in school and brought to the career. Thus, students must learn to become lifelong learners. Second, the emphasis on lifelong learning also bears directly on the nurturing of gifts and talents especially in talented or high-ability students. The development of any gift or talent is a long-term endeavor, fostered by early recognition or identification, supportive and encouraging parents, and nurturant but demanding teachers (Bloom, 1985). Children who do not show any signs of giftedness (Darwin is an oft-cited example) might grow up to be eminent adults (Simonton, 1994). Conversely, early bloomers showing signs of giftedness (Fang Zhong-yong is a well-known example in Chinese history) might develop to become average adults in the absence of appropriate schooling and lifelong learning (Chan, 1998a). However, even with the provision of favorable conditions with support and training, childhood giftedness does not necessarily grow into adult eminence (Richert, 1997). Eminence requires hard work, creativity, dissatisfaction with the status quo, and a desire to change, qualities that are not necessarily reflected in high IQ or high academic achievement (Gardner, 1993), but are more likely found in lifelong learners (Winner, 1997). Further, eminence is also associated with higher rates of psychopathology (Chan, 1998b; Jamison, 1993; Ludwig, 1995; Simonton, 1994), and gifted and talented students, especially exceptionally gifted ones, may have social and emotional difficulties, leading to maladjustment and dropping out. Thus, even if the

most appropriate schooling can be provided, all these factors cited above will militate against intellectually gifted students becoming eminent adults. On the other hand, inappropriate schooling, in which teaching or instruction is not matched to students' learning needs, will certainly result in unhappy school experience as well as suboptimal intellectual development. Consequently, all students should be appropriately challenged in regular classrooms and learn to become lifelong learners. When schools cannot adequately meet such needs for talent development especially for talented or high-ability students, other educational options must be considered. Among the different educational options for talent development and lifelong learning, mentorship is a time-honored and effective option that deserves serious consideration.

Mentoring and Mentorship

Highly successful or eminent adults often report having had mentors who played a very important role in their intellectual development (Bloom, 1985; Feldman, 1986; Gardner, 1993; Pizzini, 1985; Torrance, 1984; VanTassel-Baska, 1985). The term "mentor" can be traced to Homer's epic *The Odyssey*. Before Odysseus embarked on his 10-year adventure, he chose his wise and trusted friend Mentor to guard, guide, and teach his son Telemachus to become a man. In ancient Greece, Socrates was mentor to Plato, Plato to Aristotle, and Aristotle to Alexander the Great (Cox & Daniel, 1983). In medieval England, mentoring was institutionalized into the educational system in Oxford and Cambridge, and became one of the main features of moral and intellectual education in these reputable colleges since the 16th century (Zorman, 1993). In Chinese history, mentoring for talent development and lifelong learning has been greatly valued, and anecdotes of famous people mentored by expert masters abound. Among the well-known mentoring relationships for secondary school students are those of Yue Fei and Zhou Tong, Fu Cong and Fu Lei, and Bai Xian-yong and his many mentors such as Lao-yang, Li Ya-yun and Xia Ji-an. In recent years, mentorship has been emphasized in the education of gifted and talented

students, especially when their needs, knowledge, skills and ability levels are beyond the scope of usual school resources (Nash & Treffinger, 1993; Torrance, Goff, & Satterfield, 1998).

A mentorship typically refers to the development of a mentoring relationship between a mentor (variously called in different cultures and settings as professional, expert, tutor, master, sponsor, guru, sensei, patron, coach) and a mentee (variously called as protege, intern, apprentice, assistant) over a period of several months or longer. Very often, a career exploration orientation is advocated as the goal of a mentorship (Cox, Daniel, & Boston, 1985). In this connection, the life outlook of the mentee (usually a high school student) is shaped through interacting and visiting his or her mentor's job site on a scheduled basis to learn the work activities, responsibilities, problems, and lifestyles of mentors' profession. Apart from career exploration and connecting mentees' interests and the larger world, mentees will learn from the role modeling of mentors and obtain significant gains in cognitive areas such as increased knowledge beyond book learning, and in affective areas such as confidence building, development of ethics, enhancement of creativity, and self-directed lifelong learning (Beck, 1989; Edlind & Haensley, 1985; Clasen & Clasen, 1997; Runions & Smyth, 1985). The mentors, on the other hand, may also benefit subtly from mentoring students. Their needs for "generativity" may be met through stimulation and challenge from capable students, long-term friendships, and personal satisfaction from lifelong learning (Clasen & Clasen, 1997).

Characteristics of the Mentor

Since the success of a mentorship depends very much on the mentor, the characteristics and roles of the mentor need to be carefully considered (see Davis & Rimm, 1998). During a mentorship, the mentor will assume several interlocking roles, including those of teacher, expert, guide, advisor, friend, and role model (Clasen & Clasen, 1997). While expertise and skill in a field are important and necessary, not all experts can be good mentors. Good mentors need to be high in personal integrity, have a strong interest in

teaching young people, and be willing to share their expertise with patience, understanding, enthusiasm, optimism, and an "anticipation of tomorrow." They should be sensitive to the developmental needs of mentees, and provide mentees with opportunities to use their gifts, abilities and imaginations and to see their own possibilities. Other desirable qualities include good communication and problem-solving skills, tact, flexibility, creativity, and humor, and the ability to motivate, to plan, to organize and direct activities to bring mentees to higher levels of thinking and problem solving. More importantly, mentors also offer emotional support and encouragement in crucial times of frustrations and obstacles encountered by mentees on the road to achievement. Given the important and diverse roles of mentors in a mentorship, mentors are generally recruited from university faculties, and business and community leaders. However, successful college student mentors recruited on the basis of their expertise in specific areas have also been reported in some university mentorship programs (e.g., Prillaman & Richardson, 1989).

Characteristics of the Mentee

The success of a mentorship also depends on the characteristics of the mentee. Not all gifted and talented students are ready or able to enter into a mentorship. A student should also consider taking advantage of current school opportunities before turning to a professional mentor (Reilly, 1992). Readiness assessment also involves considering whether the student possesses exceptional ability and potential to excel in a field, abiding interest and enthusiasm for an area of study, perseverance, and a willingness to commit time and energy to explore and study (Atkinson, Hanson, & Passman, 1992; Clasen & Clasen, 1997). Another readiness consideration is age. It has been assumed that most young elementary students are not developmentally mature enough to enter into a one-to-one relationship with a mentor, mostly an adult, and to learn and study autonomously. However successful mentorships for younger students have been reported, especially in areas of career exploration and skill building, and for underachieving high-ability

students and precocious mathematics students (Ellingson, Haeger, & Feldhusen, 1986; Lengel, 1989; Lupkowski, Assouline, & Stanley, 1990). Nonetheless, resources within the school or district should be first explored before arranging a mentorship for a student. Prior to arranging a mentorship, Reilly (1992) suggested a step-by-step procedure for assessing a student's need for mentorship. These steps include: (1) asking who perceives the need; (2) identifying the student's profile of needs; (3) finding out past efforts and possible future commitment of parents in helping the student; (4) compiling a list of student's accomplishments; and (5) brainstorming activities and resources for the student.

The Mentoring Relationship

The ultimate success of a mentorship finally depends on the match between the mentor and the mentee and their relationship in which the expertise of the mentor provides the mentee with appropriate challenge and continued encouragement in the development of the mentee's talent. While pairing according to gender, interests, personality, learning styles, ethnic and cultural backgrounds may help, mutual selection is more likely to ensure the fostering of a strong and enduring relationship, and a commitment to the undertaking and involvement necessary in a partnership. Zorman (1993), after reviewing the literature on mentorship, outlined five characteristics that distinguish mentoring from other relationships. These characteristics include (1) shared passion for a specific area of interest, (2) a match of teaching and learning style, (3) a special lifelong bond of trust, (4) a mutual perception of symmetry or equality in relationship as the student advances in knowledge and skills, and (5) a sharing of lifestyle as the student gradually adopts the patterns of the professional. Thus, the mentoring relationship may provide mentees with the type of experiential learning and emotional support that enhances real life skills and competencies (Ellingson et al., 1986; Pizzini, 1985; Torrance, 1984). In addition, the intense learning experiences may stimulate mentees to integrate their nascent talents and interests, and develop them into career and lifelong passions. In this manner,

such "crystallizing" experiences may help students make the transformation from potential to creative behavior and performance in the context of lifelong autonomous learning (Walters & Gardner, 1992).

Three Levels of Mentoring: Developing Mentorship Programs at the Chinese University of Hong Kong

Individual one-to-one mentoring through the conventional mentorship programs such as those described in previous sections will certainly meet the specific learning and emotional needs of talented students, fostering talent development and lifelong learning. However, such mentoring requires enormous amount of human resources that are generally not made available to all talented students, not to mention the majority of students. While not all students, including talented students, require or are ready for this educational option, the provision of this option should ideally be made available to all those who are interested in it, and who might benefit from it. In promoting talent development and lifelong learning, the Programs for the Gifted and Talented at the Chinese University of Hong Kong has formulated plans for developing mentorship programs for talented students using a broadened and comprehensive approach that encompasses three levels of mentoring.

Level 1 mentoring is an initial stage of mentoring open to a majority of students participating in the mentorship scheme. Level 1 mentoring is telementoring, similar to "telehealth" or "telemedicine" in the medical field (Nickelson, 1998), and is accomplished via telecommunications between multiple mentors from the mentor pool of the University and multiple mentees from participating schools in the mentorship scheme. The use of telecommunications and advances in information technology may help alleviate some of the perennial problems of finding time for communication, scheduling meeting times, and containing travel costs. More importantly, telecommunications may provide opportunities for enlarging the mentor pool, increasing the diversity of mentors, and providing mentoring to a wider

population of students who might otherwise be unidentified for talent development. This level of mentoring will also serve as a screening process for identifying students who might further benefit from closer mentoring and one-to-one mentoring.

Level 2 mentoring is for mentees who require more specific attention and guidance beyond telementoring, yet they do not require the specific one-to-one mentoring. Level 2 mentoring is achieved through a program of double mentoring in which expert-mentors from the University, and teacher-mentors or peer-mentors from the participating schools collaborate to provide mentoring to mentees (Clasen & Hanson, 1987). Specifically, double mentoring involves a teacher-mentor or a peer-mentor and an expert-mentor. The teacher/peer-mentor helps initiate and coordinate the mentee's relationship with the expert-mentor, and is involved both cognitively and emotionally with the mentee to meet his or her developmental needs. The expert-mentor focuses on helping the mentee to acquire specific professional knowledge and skills in the context of a more instrumental rather than an emotionally involved relationship. In this connection, both teacher/peer-mentors and mentees benefit from the mentoring relationship, as teacher-mentors are able to learn from expert-mentors for professional development, and peer-mentors are provided with an opportunity to exercise responsibility and practice leadership skills.

Level 3 mentoring is the conventional one-to-one mentoring between a mentor from the University mentor pool and a mentee who has demonstrated the need for this educational option by his or her outstanding achievement and specific talents. Thus, different levels of mentoring serve students with different needs, and mentees may progress from Level 1 telementoring to Level 2 double mentoring, and to Level 3 one-to-one mentoring if a higher level of mentoring is judged to best suit the mentees. Details of the three levels of mentoring scheme can be found in Chan (in press).

The development of mentorship programs by the Programs for the Gifted and Talented at the Chinese University of Hong Kong is currently at its

initial stages. The use of information technology in telementoring warrants careful evaluation in the development of mentorship programs that can be made available to all interested students for the promotion of talent development and lifelong learning. Along this line, it is anticipated that a network for mentoring can be established with the university as a central "hub" connected via telecommunications to participating schools or "spokes." This "hub-and-spokes" system of mentoring can be replicated with key schools and other participating schools for greater dissemination and promotion of talent development and lifelong learning in Hong Kong schools.

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