

**New Teacher Education In Hong Kong:
Innovative Implementations in Support of Paradigm Shift**

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New Teacher Education Paradigm

Teacher education is being challenged in the last two decades on every front by fundamental changes in the concepts about the nature of knowledge, the phenomenal speed at which knowledge is created, the emerging knowledge-driven economy, paradigm shifts in the theories of learning, rapid developments in information technology and globalization (Cheng, 2001). The impacts of these changes have been exacerbated first by the publication of the 1983 report *A Nation At Risk* in the United States which alleged schools failed to educate students, and second, by the crash of major economy systems in the Asia-Pacific Region in 1997, which shattered such myths as the Asian four dragons. Trust in the effectiveness of major education systems in the Region, including Australia, Hong Kong, Japan, Korea, Malaysia, Singapore, Taiwan, Thailand, and New Zealand has been seriously undermined. Outcries for education reform can be heard loud and clear from these and other countries, echoing their counterparts of the United States (Cheng & Townsend, 2000).

In the turmoil, teachers are being held accountable for the failure of schooling and teacher education held accountable for the quality of teachers (Cheng, Chow, & Tsui, 2001). From a positive perspective, teachers are being regarded as the key change agent in education reform and reform of teacher education is seen by policymakers and educators as

mandatory for the nation or region to face up the many challenges in the new century. Reports on teacher education reform from around the world provide insights, perspectives, approaches and outcomes which are essential for building up a rich knowledge base on new teacher education.

This report reviews the innovative implementation strategies in support of teacher education reform in Hong Kong Special Administrative Region (SAR) in the theoretical context of Cheng's Triplization framework (Cheng, 2001; 2000). It is hoped that through analyzing the Hong Kong reform efforts, learning can be shared about the theory and strategies of quality teacher education, and contributions can be made ultimately to our collaborative construction of knowledge on education and teacher education.

Theoretical Background

The cornerstone of Cheng's Triplization theory of effective education is three interconnected processes, globalization, localization and individualization for achieving long-term relevance, environmental strength and human initiative in education reform (Cheng, 2001; 2000). Globalization refers to the transfer of values and knowledge across geographical boundaries of nations and regions. Globalization is often articulated in education in the form of global relevance of knowledge. Globalization can manifest itself as web-based learning and international partnership in education whereby students of one country/region glean the benefits of intellectual assets, discoveries, resources and initiatives of another country/region through collaborative effort. Globalization also means that synergy across countries/regions can be eventuated in the sense that joint effort

by the community of learners is more than additive (Cheng, 2001; p. 42).

Localization refers to the “transfer, adaptation, and development” of values and knowledge to and from the local context (Cheng, 2001; p. 42). Localization is often articulated in education as making meaning to the local community of knowledge and initiatives, assimilation of external values and practices, and the enhancement of local values and norms. Localization can manifest itself in the form of school-based management, home-school collaboration, maximizing community support, and the adaptation of new curriculum materials to the local contexts (Cheng, 2001).

Individualization refers to the “transfer, adaptation and development” of values and knowledge to meeting individual needs (Cheng, 2001; pp. 42-43). Individualization is often articulated as self actualization, self learning, self management, and meeting individual special needs. In learning, it is the accommodation, adaptation, assimilation and integration of external knowledge into the individual’s existing knowledge structure so that the resultant is new knowledge which has meaning to the individual. Individualization can manifest itself in the form of emphasis of human potentials, student-centred learning, and concern for special needs (Cheng, 2001).

Cheng (2001, p. 60) proposed that quality assurance of teacher education should be based on this new paradigm of Triplization. Specifically, in this report, new teacher education In Hong Kong is evaluated in terms of the extent to which opportunities are optimized for student-teachers’ globalization, localization and individualization through innovative teacher education programmes.

Contextual Background

Teacher education reform in Hong Kong has to be contextualized within the series of local reforms in education, particularly those formulated in 1997 or after. These reforms have been catalyzed politically by the hand-over of sovereignty of Hong Kong in 1997, economically by the crash of the stock market in the same year, demographically by the aging population, and externally by the unprecedented changes overseas including the rapid developments of information technology, the paradigm shift in school effectiveness and improvement from unilevel-unidimensional to multilevel-multidimensional (Cheng, 1993), the development in the conception and technology of assessment, the emphasis on whole-person education, and the emergence of the philosophy of lifelong learning worldwide.

To face up these challenges, quality education was targeted by the Chief Executive as a priority area in his 1997 Inaugural Policy Address and again in the 1999 Address. A series of reform has been introduced systematically since 1997, with its conceptualization grounded on international experiences. The overarching principle of these reforms is expressed in the following terms (Education Commission, 2000; p. 6):

- Student-focused
- “No-loser”
- Quality
- Life-wide learning
- Society-wide mobilization

The theme of the series of reform is best summarized in this statement, “*Students*” are the focal point of this entire reform, “*life-long learning*” and “*all-round development*” the spirit” (Education Commission, 2000; ‘Foreword’). Enhancing the professionalism of teachers is one of the foci of the education reform, along with “reforming the curricula and improving teaching methods”, “improving the assessment mechanism to supplement teaching and learning”, “providing more diverse opportunities for lifelong learning at senior secondary level and beyond”, “implementing measures to support frontline educators”, “formulating an effective resource strategy and reforming the admission system” (Education Commission, 2000; p. 43).

Within this framework, the blueprint of the reforms include changes, some of which are fundamental, to the academic structure at all levels, the curriculum, assessment mechanism, and interface of different education stages. Derived from the blueprint is a series of interconnected reforms, including: Information Technology in Education reform, curriculum reform, and assessment reform. In all of these reforms, information technology is visualized as an enabling factor. Teacher educators are to “continuously update the content of their programmes and enhance their relevance”, “participate in the design and development of curriculum”, and “conduct research on new pedagogical methods and carry out pilot schemes on key curriculum reform items” (Education Commission, 2000; p. 153).

Innovative Implementations in support of paradigm shift

Innovative Implementations To Facilitate Globalization

21st century education must have strong international relevance (Altbach, 2002). To create opportunities for globalization, The Hong

Kong Institute of Education (HKIEd), the major provider of teachers for Hong Kong schools, has a number of innovative implementation strategies including:

- Formulation of strategic policies to develop visionary international outlook of teachers and teacher educators, notably the institutional Information Technology Competency in Education (ITCE) policy (Lee, 2001) and language policy;

- Establishment of enabling infrastructure for connectivity, notably building an advanced and sophisticated IT infrastructure (Lee, 2001), developing and sustaining student exchange, and language immersion programmes (Bodycott & Crew, 2000) with overseas institutes;

- Building capacity for a new teacher workforce through building a rich repertoire of IT knowledge and skills; developing competency in using new approaches to teaching and learning; developing strong language competencies; and engendering positive commitment to the integration of IT in learning, student-centred learning and lifelong learning (Lee, 2001).

IT provides vital access to knowledge and the world. The ITCE policy aims to empower teachers with the knowledge, skills, and positive commitment toward IT as well as competency in creating and maintaining conducive learning environments where use of IT is an integral part. In accord with government policy, IT competence at the Upper Intermediate level (Au, Kong, Leung, Ng, & Pun, 1999) is now a graduation requirement. The ITCE policy stipulates that all pre-service modules, and to a certain extent in-service modules, have to explicitly integrate IT in the curriculum across all subject areas.

The implementation of the ITCE is supported with a sophisticated IT infrastructure at the Institute. Resources include powerful, fully integrated, multimedia ready, bilingual, networked IT system in all teaching rooms at the main campus; connection of the campus network to the Hongkong Academic and Research NETWORK (HARNET), through which the Institute is connected to the United States and other tertiary education institutes; free high-speed (10 MBps) network, internet, intranet and email services to student hostel residents and dial-up lines for non-residential students for connect from their home personal computers.

The language policy at HKIEd is grounded on a vision that Hong Kong is an international city and an integral part of China. In recognition of the language needs of this cosmopolitan city, which is rich in tradition but culturally diverse, the HKIEd has a very clear policy direction in preparing teacher to be trilingual, biliterate competent in order to meet their current and future needs as teachers of Hong Kong schools. The language policy stipulates that all 4-year BEd students have to complete satisfactorily a certain proportion of their programme studies through the medium of Chinese (including Putonghua) and English (between 15% and 25%). In support of the language policy, staff development courses are offered to lecturers on instructional strategies, students are provided with language enhancement courses and resources.

Whereas IT and English/Putonghua language proficiencies are enabling factors, the teacher education of Hong Kong can benefit tremendously from inputs of other cultures. To glean from the

knowledge, good practices, perspective and new developments at these other cultures, teacher education institutes must have in place explicit policy direction to maintain a staff with a balance of its members who are locally and overseas trained, otherwise the demand of contextualizing education to the local culture together with the pressure to use the mother tongue as the medium of instruction would present a compelling temptation to recruit only teacher educators with no overseas experiences to the detriment of globalization. China's joining the WTO presents new opportunities and challenges to Hong Kong as a regional center of trade and education. Hong Kong must maintain a competent workforce that has an international outlook and remains open-minded. This cannot be achieved unless the teachers have a global perspective and an awareness of new developments outside of Hong Kong. Strategic and systematic international collaborations supported by the government, such as exchange of international students, transnational networking of teachers, teacher exchange programmes, short- or long-term recruitment of overseas teachers, visiting teacher educator attachment programmes, international collaborative projects on teacher education are means to maintain globalization of the Hong Kong teacher education programmes.

Innovative Implementations To Facilitate Localization:

Local relevance of teacher education in Hong Kong is ensured through building strong and collaborative partnership with local schools and universities, contributions to building knowledge platform use by local teachers and students, and providing professional service to local schools. A number of innovative strategies have been

implemented to facilitate localization of teacher education in Hong Kong, including:

- Collaborative construction of teacher education knowledge-base with local partners at the Institute level: Lecturer Attachment Scheme, Progressive and Innovative Primary Schools (PIPS) Project, and Tripartite Interflow;
- New models of collaborative teacher education degree programmes: At the Institute level, collaborative four-year BEd degree with the University of Science and Technology;
- Knowledge platform and knowledge network: The Hong Kong School Leadership Network and the IT Education Network (ITEN) provide professional services and teaching resources to local schools in face to face- and e-formats;
- Building strong local partnership at individual level through Quality Education Fund (QEF) innovative projects undertaken by individual staff members.

Cochran-Smith (2001) identified collaboration between prospective teachers and teacher educators to “teacher against the grain” as crucial to the future of public education. It has been the tradition of teacher education institutes in Hong Kong to maintain strong links with local schools. This tradition is further enhanced since the establishment of HKIEd in 1994 through implementing innovative projects in creating and maintaining collegial partnership with local schools. Notably, the Lecturer Attachment Scheme was established in 1997/98 and repeated annually to create opportunities for teacher educators at the Institute to update their local school teaching experiences, enhance understanding of local school teaching

environment, and build collaborative relations with local schools (He, Walker, Mok, Bodycott & Crew, 2000).

The PIPS (<http://www.ied.edu.hk/pips/indeximplementation.html>) is another innovative project where each novice teacher is paired up with a mentor teacher from the field experience school and Teacher Development Consultants from HKIEd. Lessons by the novice teacher are videotaped for analysis by the triplet using lesson-study (Stigler & Hiebert, 1999) as the conceptual foundation. It is designed to provide an environment conducive to learning for both student teachers and mentors. The Interflow project is another innovative strategy involving tripartite secondment: Education Officers from the Education Department (ED) to HKIEd, teacher educators from HKIEd to schools and schools to ED. The project aims at tripartite knowledge transfer through enhanced understanding of the vision and daily operation of the three organizations in order to foster future collaboration. All three projects share the common aim that through exchange, knowledge can be constructed collaboratively to the benefit of all parties.

Local collaboration is also implemented in the form of joint Bachelor of Education Degree programmes between HKIEd and the Hong Kong University of Science and Technology. This four-year programme ensures that future teachers are not only competent in their major teaching subjects but are also professionally strong in their pedagogical and field knowledge.

Knowledge, learning and outcomes are often identified as three fundamental keys to the future of teacher education (Cheng, 2001; Cochran-Smith, 2000). The scholarship of teaching and new knowledge on education are shared with schools and the general public with an aim to providing a tall knowledge platform on which further development by schools and teachers can be achieved. Two knowledge platforms are developed at the HKIEd. The Information Technology Education Network (ITEN) has resource of over 10 thousand pieces of teaching materials for free and easy access by teachers, students and teacher educators. Teaching and Learning Enhancement on the NET (TALENT) is a web-based project on learning and teaching via the net for use by students at the Institute in order to equip them to use IT as an auxiliary learning and teaching tool.

The Hong Kong School Leadership Network (the *Network*) developed by the Asia-Pacific Centre of Education Leadership and School Quality is a learning network with memberships from over 600 schools in Hong Kong. It was established in September 1999 with financial support from the Quality Education Fund on the premise that effective leadership at the school level was essential to successful school reform (Cheng, 1994; Cheng, 1996; Hallinger & Bridges, 1997). The *Network* has a mission to unleash the wealth of resources and knowledge base that already exist and reside in schools (Daresh & LaPlant, 1983; Allen & Lunsford, 1995). Schools in the *Network* are formed into 16 action-learning groups according to the specific needs of schools. *Network* activities are all action driven and practitioner driven, meaning “*that practitioners create and govern the networks, which are focused on them*” (Allen & Lunsford, 1995: vii) and include

seminars and focus group discussion on common issues, workshops, professional development courses, newsletter, e-dissemination of school-related research reports and news, as well as an annual conference.

In summary, innovative implementations to facilitate localization of teacher education in Hong Kong are characterized by collaboration, partnership, knowledge-oriented, and comprises learning circles of schools, Education Department and teacher education providers. With all the good will and effort, however, the sustainability of these knowledge platforms and learning networks depends on government funding, commitment of network members and consensual need felt by the key players. With the economic downturn in recent years, government funding has been more cautious. Notably, higher education institutes in Hong Kong has been precluded from applying for the Quality Education Fund (QEF) as principal investigators in the current 5th Call. This move has been detrimental to localization because the QEF has been the major source of development funding for teacher educator and school collaboration since its establishment. The avenue for direct discourse between the school and teacher education sectors has been blocked. The cross-fertilization of practical knowledge and pedagogical scholarship between teacher educators and schools is something of the past.

Innovative Implementations To Facilitate Individualisation:

Cheng (2001) coined the term triplization, highlighting the intricate relations in globalization, localization and individualization for the advancement of knowledge in teacher education. Unless the individual teachers internalize the new knowledge and identify with

the new values of education for the betterment of their own teaching and learning, all the reform efforts would have been peripheral. The core to the reform lies in the transformation of the mindset and hence the practice of teachers such that they are empowered lifelong self-learners themselves, and have the capacity to transfer the knowledge to, and cultivate the value in, their students. It is towards this end that the HKIED implemented the following innovative strategies to facilitate individualization:

- Enablement of self-learning: Self-learning of IT skills is enabled through the Institute's ELITE (<http://elite.ied.edu.hk/itce/information.htm>) (Easy Learning IT Empowerment) platform where self-accessible computer-based tutorials covering basic to intermediate IT skills for students and staff. Self-learning of teachers is further supported by the creation of information rich learning environment. The innovative project NEKAS (<http://www.ied.edu.hk/cric/new/nekas/aboutnekas.htm>) (New Education Knowledge Alert Service) is designed to provide new education knowledge to teacher educators and prospective teachers. Newly published research materials including full-text and graphics where available of journal articles, reports and news are searched and disseminated to registered users daily according to their expressed research interest. Such information are also archived for later retrieval. In this way, learning of new knowledge is entirely individualized.

- Development of social intelligence in teachers: The Personal Tutor System is an initiative since 2001 to provide a "first-contact" academic staff member at HKIED to support student teachers on general matters that concern them. Personal Tutors meet with tutees either individually or in groups so that mentoring

and collaborative learning can be facilitated. Evaluation of the pilot scheme reflected very positive feedback on the conception of the system.

Many innovative strategies have been implemented rather efficiently within the last few years notwithstanding, Hong Kong is still at its early stages of individualizing its teacher education programmes. The local teacher education system still suffers from its lack of flexibility and restriction on community users.

Currently, teacher education programmes are offered by The Hong Kong Institute of Education as the major provider and the School/Faculty of Education at several other higher education institutes including The University of Hong Kong, The Chinese University of Hong Kong, and Baptist University. Each of these programmes has its own strength and focus but none can articulate fully with the individual needs of student teachers. For instance, students have no option of spacing their length of study over a long period to cater for family or personal situations, and there is no provision for multiple entry points with credentials at each exit level to cater for students who want to combine teacher education with other work experiences. There is no established credential framework for the articulation of study credits across higher education institutes or across different departments within the same institute to enable enrichment of subject expertise from ally departments. Teachers from such a system can become restrictive in their perspectives.

In addition, the focus of teacher education of all local providers tends to be on basic and school education, rather than on the

full spectrum of education. Teacher education for non-school sectors, such as workplace, business, industry, medical, government, and social work, are largely being neglected. Despite the fact that many of our school leavers have to enter these other sectors on graduation, our teacher education system seems to be totally and exclusively for young people who are affiliated with schools. Our system seems to operate as if learning takes place in school premises only.

Of particular note is the lack of systematic and strategic provision for lifelong learning. There is no allowance, for instance, in the current system for elites from other sectors to either have formal teacher education (without leaving their own profession) or to contribute their wisdom to teacher education. The system seems to operate under a false assumption that unless one wants to be a school or kindergarten teacher, one has nothing to do with teacher education. As such, community-wide education reform and lifelong education advocated by the government is more rhetoric than action.

In order to achieve individualization of teacher education, it is recommended that reform effort should:

- Incorporate flexibility in the curriculum structure and harmonize teacher education programmes to enable credit transfer within and across higher education institutes to facilitate individualized learning in multiple pathways;
- Establish credential framework for teacher education programmes with build-in multiple entry and exit points to enable flexible planning of learners without compromising the coherence of study programmes;

- Extend teacher education beyond school education to take up multiple roles in the teacher education of other sectors, levels and age-groups in order to support Hong Kong's transforming into a learning society;
- Open the doors of teacher education to the community, for instance in the form of community college of teacher education, to participate as adult learners and/or expert instructors from other sectors, in order to fully utilize the social human resources and optimize the potential of the lifelong adult market.

Cheng (2001) explicated the meaning and importance of Contextualized Multiple Intelligence (CMI) in the triplization of teacher education. Our teacher education system has been relatively late in fostering the development of economic intelligence, political intelligence, and cultural intelligence in teachers.

Knowledge Creation, Knowledge Legitimization, and Knowledge Management in Teacher Education

It is tradition that one mission of higher education is knowledge creation through research and knowledge dissemination through publication. Kreber and Cranton (2000) identified in the literature three perspectives on the scholarship of teaching (Boyer, 1990). The first perspective is similar to traditional meaning of scholarship in that scholarship of teaching includes discovery research and the publication of research findings in visible outputs such as journal articles, conference papers and books. From this perspective, scholarship of teaching involves innovative approaches to teaching, codification and classification of teaching knowledge, and insights

into effective ways of making the subject more accessible and meaningful to students (Rice, 1991). Evidence of scholarship of teaching from the first perspective is in the form of visible research outputs. In the second perspective, scholarship of teaching means excellence in teaching. Evidence of scholarship of teaching from the second perspective includes teaching awards and student evaluations on teaching. The third perspective defines scholarship of teaching according to the application of teaching theory in practice (Menges & Weimer, 1996). Unlike the previous two perspectives, the third perspective is concerned with the process, rather than outputs and outcomes, of teaching. It is therefore more difficult to assess the scholarship of teaching from the third perspective.

In supporting the scholarship of teaching in terms of knowledge generation, codification, dissemination, management and in recognition of excellence in teaching, the following innovative strategies are implemented:

Knowledge creation:

Shulman (1986) classified teaching knowledge into (a) subject matter knowledge, (b) pedagogical knowledge, and (c) curriculum knowledge. Subject matter knowledge creation refers to reflections and research activities pertaining to transformative understanding of the contents and knowledge about the subject matter involved in teaching. To satisfy the quest for the creation of teacher education knowledge, a series of strategic Institutional research is identified and undertaken. Examples of research questions leading to creation of subject matter knowledge are:

- What are the Chinese characters that should be included in Primary students' Chinese Language competency at the end of Key Stage One (that is, Primary 3)?

Staff members have been active in discipline-based research in connection with subject matters. Instead, Institutional research targets the second and third categories of teaching knowledge, that is, pedagogical and curriculum knowledge creation. Pedagogical knowledge creation refers to the reflections and research activities aiming at facilitating understanding of how people learn and how to teach the subject contents (Shulman, 1986). Curriculum knowledge creation refers to research activities that are concerned with how to package and organize materials in a particular field organized for effective instruction and learning (Schulman, 1986). Examples of research questions for pedagogical and curriculum knowledge creation are:

- How can we identify and benchmark core/minimal professional competence for all programmes?
- How can we construct good assessment to provide effective feedback in support of students learning?
- How to develop innovative and best practices in the programme?
- How to more innovatively enhance the quality of teaching, learning, and management of study programmes?
- How can we foster student collaborative learning in large size classes?

In addition to subject, pedagogical, and curriculum knowledge creation, the Institute engages itself in reflections on the purposes and

goals of teaching programmes. Research questions of this category include:

- How can we further ensure programme relevance to the future developments of Hong Kong education?
- What are the key competencies to be required by local schools in the future?

This last kind of Institutional research leads naturally into comparative studies with example research questions like:

- What is the optimal balance of different modes of offering (e.g. B.Ed. versus PGDE; Part-time versus Full-time offerings) for Hong Kong?
- What are the feasible models of teacher education institutions in Hong Kong and among them, which is/are the optimal model(s) for Hong Kong's future development? Which path would HKIEd take and why?
- What are the characteristics of teacher education systems in different countries and how can Hong Kong learn from their experiences?

Knowledge legitimization and knowledge management

Knowledge legitimization can take a number of forms. It may take the form of structural organization of departments and curriculum subjects (Gumport & Syndman, 2002), or it may manifest itself in the form of grouping of different strands of knowledge in meaningful ways. In this second form, the new codification acknowledges the value of knowledge worth knowing. An example of the former is best illustrated by the history of the formation of HKIEd from the amalgamation in 1994 of four Teacher Colleges and a Language Institute in Hong Kong. In 1997, the Institute is under the auspices of

the Hong Kong University Grants Commission. These initiatives by the government give formal recognition to the significance of teacher education in Hong Kong.

At the meso level, the HKIEd has continuously restructured its departments and streamlined its teaching modules. For example, the Information And Technology Department is formed by the transfer of staff with expertise in IT from the Curriculum and Instruction Department to the existing IT Department which has IT, home economics, technology divisions. In addition, new teaching modules comprising education psychology, school administration, learning and assessment are formed and derived from current modules, giving an integrative approach to professional learning at the Institute. Collectively, the four new Common Core modules diminish discrepancies between full- and part-time modes and create future opportunities for the creation of pathways for flexible transfer between full- and part-time modes.

Perhaps the most notable innovation in recent years is the publication by HKIEd in collaboration with Kluwer Academic Publishers, the Korean Education Development Institute (KEDI), ONEC, and APERA of *A Knowledge Base for Teacher Education and Development: Bibliographies 1990-2000* (Cheng & Tsui, 2002) in five volumes:

Volume 1: Research Issues and Contexts of Teacher Education and Development

Volume 2: Programme and Process of Teacher Education

Volume 3: Quality Assurance, Reform and IT in Teacher Education

Volume 4: Teacher Study and Teaching Competence

Volume 5: Staff Development and Teaching Development in
Subject Areas and Higher Education

The classification of teacher education database of publications in the past ten years (1990 – 2000) into these five volumes provides a formal structure of teacher education knowledge. The publication represents a ritualization of teacher education knowledge in these five domains and defines the core of “what is worth knowing” in teacher education.

Discussions

In this paper we have shared with you our passion for knowledge in the context of a rapidly changing world which is more and more internationalized. We have shared examples of our innovative implementations in our quest to create a future for teacher education, in the context of an emerging knowledge-driven and IT defined economy. Our analysis shows that growth and prosperity of teacher education rely on the creation, codification, and management of new knowledge but these are not to be achieved on our own. International partners, local higher education institutes, local schools and teachers, and the local community are all crucial to success in our endeavor. We advocate for the empowerment of prospective teachers by providing them with adequate resources, skills and knowledge for innovation and lifelong learning. We promote connectivity through the globalization of our teaching programmes, enrichment of international experiences through foreign language immersion, recruitment of international students and IT communication. We guard our teacher education identity by ensuring that our teaching programmes are locally relevant and being informed by

local school partners. Our goal and vision is community-wide teacher education reform.

Nevertheless, in this review that we share with you, we are humbled by the extent to which much more needs to be done. In terms of globalization, after joining the WTO, China will have Normal Trade Relations (NTR) with the U. S. This will have profound impacts on China in terms of its trade, economic, social and education systems. The change will surely attract many people, particularly the young and the motivated, to move north from Hong Kong in search of emerging commercial and work opportunities. Concern for the development transcends economic implications, nevertheless. Recent statistics already indicate that the number of Hong Kong candidates sitting allied university examination for admission to China universities is on the rise each year. Another brain drain of Hong Kong is envisaged since the last wave of emmigration in the 80's for political reasons. This time, the migration will be northward-bound. Against this backdrop is the increase in the reciprocal migration of children from China for family reunion and other reasons, reported around 150 school-age children each day. The anticipated demand is that eventually, there will be requests for the articulation between the credential and curriculum framework of the two education systems. What are the likely impacts on our education system by the changing student population? What are the likely impacts by the brain-drain on the supply of trained teachers? Can teachers trained in China teach in Hong Kong and vice versa? If so, what sort of competencies and social values are we looking for in the teachers? What sort of training is required for the new teachers? These are some of the challenges facing us.

Under the pressure to have stronger links with China, there is tension on the choice of medium of instruction for Hong Kong schools. Hong Kong does not have a language policy until 1997 where trilingual and biliterate was put forward by the Education Commission as an expected outcome of our students. How should teacher education language policy be formulated to resolve the tension between globalization, which demands a strong devotion to the development of English competency, and localization, which demands on the other hand devotion to Putonghua and Cantonese for local relevance?

China is only one partner of Hong Kong. It has been said that if one uses Hong Kong as the centre and uses a radius of the length covered by a 5-hour flight to draw a circle, then one would have included in the circle about 50% of the world's population. Exaggeration perhaps, but it does point to the important fact that as a metropolitan city, Hong Kong teacher education needs to look beyond China to include our Regional partners. Within this 5-hour circle, there is a lot we share in common: the Confucius-Buddhism influence, our value on education, and the value we place on social harmony, just to name a few. The new paradigm values including learning to learn, creativity, and learning to live together have different meanings to us than to our counterparts in the west. Notwithstanding, our teacher education knowledge is still largely North American- and European-based. If we truly are to integrate new teacher education knowledge with indigenous wisdom, we have to build up a knowledge-based – through research, documentation, and dissemination – that has local and regional relevance. Whereas the U.K. contributes 5.5% of the world's research effort with only 1% of the world's population (Blackstone, 2001), the Asia-Pacific region must reconsider its research and scholarship strategies for the future. The establishment of the Asia-

Pacific Educational Research Association (APERA) is a significant first step. It is important that this effort is sustained.

On the other hand, while (APERA) promotes collaborative venture from Asia-Pacific countries/regions on the creation of knowledge in discovery through research, our analysis highlights that scholarship in teacher education also takes the form of excellence in teaching, and the application of knowledge to situations. A regional definition of excellence in teaching and the application of teacher education knowledge to the region are natural next steps of the APERA initiative. In the same way that European Union programs such as ERASMUS and SOCRATES promote international exchange and a sense of European unity, regional stability and intercultural understanding with benefit to all parties concerned can be fostered through systematically developing an Asia-Pacific teacher education credential framework.

Globalization is the trend in higher education worldwide. In renewing teacher education, implementation strategies has to capitalize on this trend, exploit the power offered by Information Technology and integrate with local knowledge in order to optimally extend the potential of individual teachers. Our experience tells us that it will not be easy, but in collaboration with our international and regional partners, we know we will make it.

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