Annual Report on Knowledge Transfer Activities 2014/15

submitted to
University Grants Committee

Table of Contents

1.   Executive Summary

Looking back over the past 3 years, we can see that the Institute's journey continues on groundbreaking forward momentum built on the foundation articulated in its Strategic Plan 2009-12 and beyond. The Institute has embarked on a transformation journey with great determination to enhance and diversify its capacity building.   Our efforts have already yielded encouraging results.   In the 2014/15 Quacquarelli Symonds (QS) World University Rankings, HKIEd emerged as third in Asia and 15th in the world in the area of Education, as well as within the 101-150 world group in Linguistics, a newly introduced discipline.   This quantum leap in position is testimony to the Institute's significant progress in transforming its capacity on all fronts over recent years.

We are most encouraged that HKIEd has made such a meteoric rise in our ranking in the education area. This testifies to the international recognition of our increasing teaching and research capability and our sharing of research outputs through knowledge transfer (KT).

The importance that we attach to KT is exemplified by our commitment to strong leadership in this area. A KT Director has been appointed in July 2014 to assist Vice President (Research and Development) and Associate Vice President (Research and Knowledge Transfer) in enhancing the institutional policies and initiatives on KT.   A KT Task Force chaired by the Director has been formed at the same time to further review the Institute's KT strategies to encourage academic units and staff to create impacts of their research to the community through KT activities, and to promote their impacts to become more visible through various channels or media outlets.   To ensure smooth running, a KT Unit has been set up under the Research Development Office (RDO) to provide administrative support to KT Task Force as well as KT-related promotion.

The Institute has witnessed an ever-changing horizon in variety and intensity of KT initiatives and activities on our campus and beyond.   The KT activities comprise commissioned/ contract projects, partnership projects for change, improvement and innovation, and consultancies. What is being done is also being seen by a wider audience as our KT activities are exposed through a number of different new multi-media initiatives, such as Research and Knowledge Transfer (R&KT) Newsletter and R&KT Videos.   As in past years, student engagement in KT was promoted and incorporated into the learning programmes and extra-curricular activities.

Through delivering continuing professional development courses (CPD), organizing local and international professional conferences, launching professional seminars and workshops and engaging in social, community and cultural events, the Institute has embedded a strong KT culture in learning, research and services into its institutional culture and the wider community.

All these are well demonstrated by the goals achieved. We have reached our target of a 10% increase in various KT key performance indicators (KPIs) over the course of three years from 2012/13 to 2014/15 as stated in the Institute's *Initial Statement on KT* in 2012-2015. We have made significant progress, particularly in areas related to the key stakeholders of the Institute, including the "number of schools benefited" increased by 31.9%, the "number of principals benefited" increased by 43.9%, the "number of teachers benefited" increased by 24.2%, and the "number of students benefited" increased by 39.0%. A further tally of KPIs which increased notably include the "number of CPD courses" increased by 62.5%, the "number of local/international presentations" rose by 58.6%, the "number of professional workshops/ seminars" increased by 28.7%, the "number of commissioned/ contract projects" increased by 110.5%, and the "number of partnership projects" increased by 25.0%.

The Institute's campaign to transfer knowledge to the community has been a great success, considering the wide range of categories of KT activities undertaken by our staff and the remarkable percentage increase on KPIs over the past three years. In addition, it is encouraging to see that even though the profit factor from KT activities is not a priority for the Institute, we saw substantial income growth since 2011. For instance, the "income from CPD courses" increased by 196.5%, the "income from partnership projects" increased by 232.4%, and the "income from consultancies" increased by 48.0%.

2. Highlights of the Year

Thanks to the University Grants Committee (UGC)'s earmarked grants for our KT activities and the Institute's own funding for KT, our KT activities continue to surge and diversify. These financial resources have enabled the Institute to continue supporting and promoting a wide range of KT activities at both the Institute and the academic unit levels within the reporting year.

2.1 Strategies in Supporting KT

The Institute has adopted various strategies to drive KT with the mandate to encourage R&D centres and senior academics to lead research directions, formulate KT-related projects, and draw in collaborative ventures, exchanges, and publication opportunities through their own network. The following strategies were adopted in the reporting year to encourage and facilitate KT activities across the Institute:

2.1.1 **KT Director, KT Task Force and Unit of KT:** To further enhance research with impact, Dr Chow Cheuk Fai Stephen, Associate Professor of the Department of Science and Environmental Studies, has been concurrently appointed as the Director of Knowledge Transfer in July 2014 to assist Vice President (Research and Development) and Associate Vice President (Research and Knowledge Transfer) in enhancing the institutional policies and initiatives on KT.

A KT Task Force chaired by KT Director has been formed at the same time for advising the Director in relation to all areas of the development of KT at the Institute, including:

- Formulation of policies, strategies, and operational plans pertaining to continuing professional development, executive education, intellectual property management, technology licensing, professional engagement, contract research, consultancies, academic-industrial collaboration, and business incubation;
- Ensuring that KT activities across the Institute are performed in accordance with relevant, up-to-date Institute policies;
- Providing consultation to staff; and
- Other matters of importance to the effective running and performance of KT at the Institute.

Furthermore, a KT Unit has been set up under the Research Development Office to provide administrative support to KT Task Force as well as KT-related promotions.

2.1.2 **Research and Knowledge Transfer Strategy (2015-2018):** Embracing the "Education Plus" vision, research at the Institute has expanded its focus on education to include disciplinary areas complementary to Education, i.e., Humanities, Social Sciences, and Creative Arts and Culture.

In line with most universities around the world, the Institute expects its academic staff to be active in three core areas, namely, teaching, research and knowledge transfer (KT). We are

committed to applied research that creates inspiring and innovative knowledge with strong academic, professional, social and policy impacts on education and the wider community. Our research and development (R&D) work emphasises not only academic rigor and conceptual originality but also social and professional relevance.

In our ongoing efforts to meet the emerging needs of the Institute's new developments in the coming years, we have to revisit our positioning in research and KT as well as re-think our management of research and KT. We need to articulate what research and KT means in the University of Education, what we will do as a result, and how we will motivate staff to take an active part in research and KT.

With this in mind, the Institute has benchmarked against the Institute of Education (IOE), University College London (UCL) in the UK, which is a world-class centre of excellence for research, teacher training, higher degrees and consultancy in education and education-related areas of social science.

The Institute has drawn up the Research and Knowledge Transfer Strategy 2015-2018 (R&KT Strategy 15-18) by taking into account the current development of the Institute on research and KT, and making reference to the Research, Consultancy and Knowledge Transfer Strategy 2010-2015 of the IOE. It was approved by the Institute's Academic Board in late June 2015.

2.1.3 **Reviewing Human Resource Policy via Appraisal System:** To address the KT strategy as set out in the R&KT Strategy 15-18 for reviewing human resource policy via appraisal system, KT Task Force proposed to add a KT section under the category of Research and Scholarly Activities in the Institute's appraisal system. This is expected to be a primary driver to keep staff motivated and engaged in more KT activities. Relevant documents have been passed to Human Resource Office in late May 2015 for their follow-up and holistic review.

2.1.4 **New Policy for Institute's owned intellectual properties:** To address the KT strategy as set out in the R&KT Strategy 15-18 for developing and protecting Institute's owned intellectual properties and product licensing policy, KT Task force has drawn up procedures and related forms for patent application and product licensing application. They have been approved by the Institute's Academic Board in late June 2015 for implementation with immediate effect. All these applications will be processed by the KT Unit of RDO and Finance Office.

2.1.5 **Application for Extra Responsibility Payment:** Incentives including extra responsibility payment of KT Activities are available for staff to apply from January 2015 in the Human Resource Office's intranet webpage under the category of Benefits Option (Outside Activities). This form differs from that for the Outside Activities as the extra responsibility is affiliated to HKIEd as KT activities. The Institute's senior management will consider the justification put forward and approve staff claims from their corresponding project accounts. Staff are encouraged to make use of the new form and engage in more KT activities.

2.1.6 **President's Award for Outstanding Performance in Research:** The President's Award for Outstanding Performance in Research is established to honour individual academic staff members or teams who excel in research; and recognize, encourage and reward the outstanding research that has significant impact on the community, including but not confined to high-quality international refereed research outputs contributing to academic and intellectual enhancement in the relevant fields.

Starting from this academic year 2014/15, KT element has been added in the assessment criteria in order to highlight its importance and impact (e.g. impact of the research delivered; demonstrated knowledge, expertise, know-how, skills or technology transferred to the society, leading to innovative, profitable, economic or social improvements; as well as academic, professional, social and policy impact of the research on education and the community locally, regionally, or internationally).   The KT element will be kept in this scheme.

2.1.7   **KT Awards:** The KT Awards scheme has been in place since 2009 to support the transfer of Institute-owned knowledge, technology and research findings that can influence a wider community, particularly the local community.   These monetary prizes recognise, encourage and reward the best KT activities, practices, cases or projects.   All full-time staff members of the Institute in their capacity as Project Leaders are eligible to apply for this awards scheme. After vigorous selection processes comprising oral presentations by individual project leaders, the panel granted one KT Grand Award and three KT Awards to three successful projects in 2014/15.

2.1.8   **KT Matching Grant Scheme:** The Institute continued to provide a KT Matching Grant Scheme for 2014/15 as an ongoing initiative to promote ownership, creativity and innovation in academic units in terms of organizing KT activities and initiatives.   The scheme has proved to be effective and thus will be kept.   A working task group including three Faculties' Associate Dean (Research and Development) and KT Director has been established to coordinate the grant applications.

2.1.9   **KT Sharing Sessions:** Professional and staff developments on the KT area have received a boost through sharing sessions. The sharing sessions on KT continued to be organized at the Institute level in 2014/15 to share the success stories and practical experiences of KT among the staff.   All staff members were welcome to attend the sharing sessions and follow-up work was done to promote KT projects.   The number of KT sharing sessions was increased by 200% from 2013/2014 to the reporting period, and the events were well received by the participants.   In order to widen our exposure to KT development, we intend to invite not only internal staff to share their KT experience but also external speakers to future KT sharing sessions. Number of KT sharing sessions are set to be doubled in the near future.
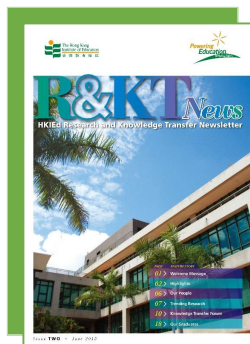
2.2   **Strategies in Dissemination of KT**

2.2.1   **KT Promotion**

2.2.1.1   **Research and Knowledge Transfer (R&KT) Newsletter:** Starting from 2014/15, a biannual Research and Knowledge Transfer Newsletter has been published to highlight research and KT achievements and showcase outstanding staff and students, as well as recent KT and R&D events in HKIEd.

Issue One – Dec 2014

Issue Two – June 2015

The first and second issues of Research and Knowledge Transfer Newsletter were published in December 2014 and June 2015 respectively.   A total of 2191 hardcopies were distributed to full-time academic staff, MPhil and EdD students, and the local education sector (e.g. kindergartens, primary schools, secondary schools and

other universities). Hardcopies of the first issue were also distributed to the Education Bureau and the University Grants Committee during their visits to HKIEd on 9 December 2014 and 9-10 February 2015 respectively. In the meantime, the softcopy was uploaded to the Knowledge Transfer Webpage (http://www.ied.edu.hk/rdo/KnowledgeTransfer/eng/ktpage.php?id=53) and the link has been included in the Alumni e-News.

2.2.1.2 **Research and Knowledge Transfer (R&KT) Videos:** In 2014/15, 8 to 12 videos were proposed to be produced each year to showcase successful KT stories on academic staff who have received a grant, for example, General Research Fund (GRF), Innovation and Technology Fund (ITF), Quality Education Fund (QEF), and Environment and Conservation Fund (ECF) etc.

Nine successful R&KT stories (Table 1) from three faculties were identified for production into multi-media version in 2014/2015. Four out of the nine were broadcast in the campus during the University Grants Committee Visit on 9-10 February 2015. As at July 2015, seven out of nine videos were uploaded onto HKIEd Homepage and HKIEd's YouTube (https://www.youtube.com/user/hkiednews/videos) via the Communication Office (CO) for public viewing. The average hit rate of seven R&KT videos at HKIEd's YouTube was recorded at around 212 in 4 months (as at 20 July 2015).

Table 1: Nine successful R&KT stories identified for production into multi-media version in 2014/2015

Video
Uncovering Lost History of Literature **Professor CHAN, Kwok Kou Leonard** Dean of Faculty of Humanities
Poverty in Hong Kong **Professor CHOU, Kee Lee** Head of Department of Asian and Policy Studies
Jockey Club SMILE Project: Catering for the Diversity **Professor SIN, Kuen Fung Kenneth** Director of Centre for Special Educational Needs and Inclusive Education
The Hong Kong Institute of Education's Research Development & Knowledge Transfer **Professor MOK, Ka Ho Joshua** Vice President (Research and Development) The Hong Kong Institute of Education
Reforming School Assessment Culture under New Academic Structure **Professor MOK, Mo Ching Magdalena** Co-Director of Assessment Research Centre
Integrated Pond Fish Farming Using Food Wastes **Professor WONG, Ming Hung** Research Chair Professor of Environmental Science
"I Act, U Act!" Education for Plastic Waste Recycling **Dr. CHOW, Cheuk Fai Stephen** Associate Professor Department of Science and Environmental Studies
Innovation in Science and Environmental Studies (ISES) **Professor SO, Wing Mui Winnie** Head/ Professor Department of Science and Environmental Studies
The Hong Kong Institute of Education's Research Development & Knowledge Transfer II **Professor CHEUNG, Yan Leung Stephen** President The Hong Kong Institute of Education

2.2.1.3 **Promotion of KT through InnoCarnival 2015:** From 2015, the Institute has started to apply for exhibition booth in the InnoCarnival to be held by Innovation and Technology Commission at Hong Kong Science Park to showcase successful research and KT projects to the wider community.

2.2.1.4 **Publicity and Media Exposure of KT Activities:** Good practices and advanced knowledge have been continuously disseminated among staff members and the community through different channels, such as the Institute's website and Annual Report, the KT website, the Research and Scholarship website, the e-magazine *Joy of Learning*, press releases, the intranet, and email.

Since 2012, the Institute's online newsletter - "HKIEd News" (http://www.hkiednews.edu.hk/en/main/index.do) has been issued quarterly in the Institute's website to disseminate the Institute's news and development in a timely manner. A section on "Research & Development" has been included with an introduction of selected R&D/KT projects. As at June 2015, 13 issues of the newsletter have been published. This newsletter helps to publicize our KT activities to the public and provides a means for easy access to the intellectual resources nurtured by the Institute.

In the reporting year, articles were submitted to the "Beijing-Hong Kong Academic Exchange Centre" for dissemination of the Institute's R&D/KT news through their quarterly journal publication – "Beijing - Hong Kong Academic Exchange" (京港學術交流) (http://www.bhkaec.org.hk/). Two articles written by HKIEd staff were selected for publication in the July 2014 and May 2015 issues respectively.

Issue 102 (July 2014)

Issue 105 (May 2015)

2.2.1.5 **KT Website** (http://www.ied.edu.hk/rdo/KnowledgeTransfer/eng/)**:**
The KT website continues to function as a channel for the visibility of KT activities within the Institute. The website demonstrates the breadth of the Institute's KT activities; publicises our KT policies, guidelines and activities; highlights excellence; and shares good practices. It also establishes networks with various internal and external stakeholders (e.g. researchers, experts, research teams, special interest groups, the school sector, the Education Bureau (EDB), funding bodies, and the business sector); and promotes interaction and exchange of new ideas on KT.

2.2.1.6 **HKIEd Research and Scholarship Website:** The website (http://www.ied.edu.hk/research_and_scholarship/) offers free and convenient services to local education practitioners as a one-stop online portal for research information and resources.   Primary and secondary schools have been invited to subscribe to the website.   As of 30 June 2015, a total of 507 schools have subscribed to the website, including 243 primary, 231 secondary schools and 33 Child Care Centres/ Kindergartens.   The website has considerably benefited local and international students, teachers and scholars by making research outputs of the Institute readily available on the Internet.   The website allows knowledge, efforts, and results of academic research conducted by the Institute's staff members to be transferred directly to potential users on the Internet, thereby becoming a communication channel between the Institute and the public in sharing knowledge and ideas.   To enhance the visibility of the HKIEd Research and Scholarship website, we have created a link from the website of Hong Kong Professional Teachers' Union (http://www.hkptu.org/links).   Hong Kong Liberal Studies Teachers' Association has also posted our link on its Facebook page (www.facebook.com/hklsta).
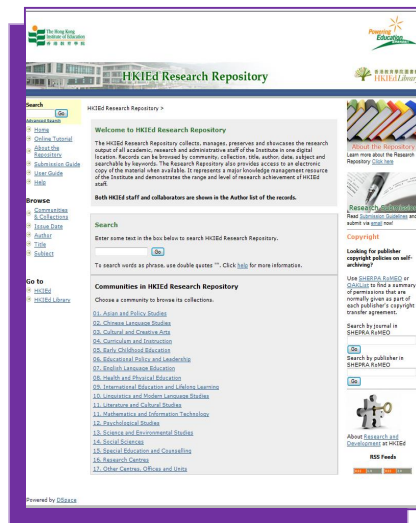
2.2.2 **KT Dissemination Plan and Survey on the Nexus between Research and Teaching:**   As in the past years, all academic staff members are required to submit a KT Dissemination Plan so they can plan ahead their dissemination activities of research findings in the stage of proposal preparation. An encouraging increase in dissemination of research was recorded in the reporting year. A survey was conducted to collect data on individual academic staff members applying research in teaching and/or using teaching activities in their research.   The percentage of academic staff using research in teaching activities increased from 72% in 2011/12 to 86% in 2014/15, while that of using teaching as research increased from 36% in 2011/12 to 53% in 2014/15 (Table 2).   This finding proves that the Institute staff members have incorporated their research into teaching, and vice versa, facilitating the development of KT in the school sector.

Table 2: Survey Findings on the Nexus between Research and Teaching

	2011/12	2014/15
Academic staff using research in teaching/ course activities	72%	86%
Academic staff using teaching as research	36%	53%

2.2.3 **Research Publications:** The Institute regularly collects from the academic staff statistics on research outputs for analysis, review and planning of KT.   Of the 591 refereed research outputs in 2014/15, 61.4% (363) were related to the various sectors of school education. These research outputs included early childhood, primary, secondary, technical and special education.   They were also disseminated across sectors, covering teacher education and education disciplines. And 38.6% (228) of the outputs were related to complementary discipline areas such as Social Sciences, Humanities and Languages, and other professional and vocational subjects.   These refereed outputs and those produced in the past years provide a substantial new knowledge base for KT to inform practical improvement, professional innovation and education development in Hong Kong and beyond.

2.2.4   **HKIEd Research Repository:** Aside from being used for extensive KT activities, the HKIEd Research Repository is a strategy for transforming education and the teaching profession through research.   The Repository collects, manages, preserves and showcases the research output of the Institute's staff in one digital location.   As of 30 June 2015, the HKIEd Research Repository has more than 16,278 citation records dating back to 1994, and more than 4,925 records are linked to full-text copies. Materials deposited in the database include scholarly books, book chapters, journal articles and conference papers.   The Repository is of great benefit to students, teachers and scholars both locally and worldwide, as it enhances the visibility of the Institute's research output on the Internet.   A total of 121,933 visits were recorded from July 2014 to June 2015. The number of users had increased from 81,581 in 2013/2014 to 93,580 in 2014/2015. Both the total number of visits and the total number of users had indicated a 15% of annual growth (http://repository.ied.edu.hk/).

2.3   **KT Outputs through Research Infrastructure**

The Institute supports and encourages its staff members in academic departments, faculties, Research Centres and Professional Development Centres to organize and conduct KT activities or projects according to their own capacity and strengths in a creative way.   We believe that the ownership, creativity and integration of KT activities into the corresponding R&D agenda of academic units and research centres are crucial to the sustainable development of KT.

2.3.1   **Key Academic Units to Implement KT:** Three Institute-level research centres and three faculties along with their constituent departments, research centres, and professional development centres continued to be key academic units in 2014/15 in providing the community with comprehensive KT activities.   The projects covered education and non-education fields. In 2014/15, a total of 13,588 schools, 70,375 teachers, 545,066 students, and 484,349 other stakeholders benefited from these activities (Table 3).

Table 3: Total Number of KT Beneficiaries in 2014/15

Schools	Teachers	Students	Other Stakeholders
13,588	70,375	545,066	484,349

2.3.2   **KT Project by the Centre for Education in Environmental Sustainability:** With external Governmental or non-Governmental support such as QEF, Language Fund, EDB, Jockey Club Charities Trust, Hong Kong Science Museum, Hong Kong Arts Development Council, National Publication Fund, numerous KT projects have been organized by academic departments or research centres for the education sector in the past years.   Some projects have generated long-term impacts on professional innovation and practical improvement of school education. For example, the Centre for Education in Environmental Sustainability (CEES) is one of the main foci for providing high-level KT activities based on their frontier research.   Its project of 'Innovation of Science and Environmental Studies (ISES)' was a good example that showed how research-based KT creates significant changes in attitudes, skills, knowledge and technology among school principals, teachers and primary students in science and environmental studies.

The ISES has been organized since 1998 and has been well received by the stakeholders in education fields. The project has eventually become a platform for sharing science and environmental inquiry outcomes among primary pupils in Hong Kong and the Pearl Delta Regions of Mainland China, with over 100 schools and 1,000 pupils participating each year. (Annex I – A)

2.4   KT Outputs through Training Professionals

Given the largely enhanced research capacity and outputs of the Institute over the years, the dissemination and transfer of new knowledge advanced from the Institute's research to the profession has been conducted by training educators or practitioners to be a new generation of professionals with new knowledge based on research.

2.4.1   Continuing Professional Development (CPD): Academic departments of the Institute continues to provide a wide range of self-funded development courses and training programmes to transfer new research findings and knowledge of its staff members to support the continual development of the education profession in early childhood, primary, secondary, technical, and special education. Through these courses, the Institute and its departments will establish closer relationships, network with schools, and lead to significant professional improvement and innovation in the school sector, as well as contribute to the development of high quality education practitioners for Hong Kong and the Region.

CPD courses were organized by HKIEd's departments and centres, and, on certain occasions, in collaboration with external parties:

➢ Department of Education Policy and Leadership organized:
   • Coordinating and Developing Teachers' Continuing Professional Development Programme; and
   • Structured Support Programme for Newly Appointed Principals of Secondary and Special Schools.
➢ Centre for Small Class Teaching, in collaboration with the Education Bureau, organized:
   • A series of "In-service Teacher Professional Development Courses on Learning and Teaching in a Small Class Environment" with different focused subjects such as Chinese, Mathematics, General Studies, English; and
   • Support Programme on Fostering Communities of Practice to Enhance Learning and Teaching in a Small Class Environment.

A total of 125 principals and 1,447 teachers benefited from the 26 courses mentioned above.

2.4.2   KT Project by Department of Curriculum and Instruction and Centre for Learning Study: 'Applying Knowledge Management Practices in School Education for Sustainable Development' was a two-year (November 2012 - October 2014) project funded by QEF.   The project was led by Department of Curriculum and Instruction (C&I) and Centre for Learning Study (CLS) at HKIEd. The project aimed to help schools implement knowledge management practices for tackling challenges from knowledge expansion, curriculum reform, and changing education policy environment.   Ten primary schools and 10 secondary schools participated in the project. Each of the participating schools had established a KM Committee (KMC) to facilitate school development in daily practices and conducted KM audits for strategic planning. (Annex I – C)

2.5   KT Outputs through Student Engagement

2.5.1   Social, Community and Cultural Engagement: Students are strongly encouraged to participate in social, community and cultural engagement, such as performances and exhibitions of creative works by staff members and students.   For example, the Department of Cultural and Creative Arts (CCA), in collaboration with Canon Hong Kong, organized the Creative Image Room project last year. The project aimed to provide a better understanding of how creativity and imagery tools are framed in the local schools in Hong Kong and applied in educational practice at primary and secondary school level. It collected and analysed the participants' new experience in producing creative outcomes (creativity product) with professional imagery equipment (technology), and the role of creativity and imagery tools in school arts education.

The project introduced students to play with the cameras and printer which could enhance students' motivation to think, understand and learn in creative ways. Students felt that it was interesting in trying different kinds of new 'things', thus, deepen their understanding on creativity and imagery making. A total of 10 schools (3 primary and 7 secondary) were invited to join the project, while 10 creative lessons, such as "Light painting", "the Lilliputian" and "Alphabets", etc. were provided by 10 student-teachers (pre-service teachers) at BEd Visual Arts programme. More than 10,000 participants (including schools teachers, students, parents and public exhibition visitors) joined and shared their creative process and products in the project.

The Creative Image Room at Kwok Tak Seng Catholic Secondary School

HKIEd Vocal Jazz Ensemble ready to deliver a vivid performance "Jingle Bell Rock" at HKIEd Christmas Showcase 2014.

In addition, CCA held the "HKIEd Christmas Showcase 2014" to celebrate the festival with various genres of music performance in the campus including Chinese music, pop, electronic, classic and folks.   Eleven performance groups from and outside the HKIEd were invited to showcase their music talents in this event, including HKIEd Chinese Orchestra and its ensemble group "Oops", HKIEd Chorus, HKIEd Jockey Primary School Handchimes Choir, HKIEd Handbell Ensemble, HKIEd i-Orchestra, HKIEd Jazz Ensemble, HKIEd Orchestra, HKIEd Recorder Ensemble, HKIEd Symphonic Band and HKIEd Vocal Jazz Ensemble.

The event was part of the MUsic Skills Enhancement Scheme (MUSES). This scheme aimed to empower music student learning through active participation and experience in music-making and learning like concerts, masterclass, performance groups and music awards.

2.5.2   **Student Internships and Placements:** Student internships have been organized by the Student Affairs Office and Faculties to encourage student engagement and services to the community. Students have gained experimental learning in their whole-person development.   The Institute has also arranged placements to local schools for all full-time students of education-related programmes.   As shown in the list of Performance Indicators (PIs) (Section 3), the number of student internship/placements has increased by 23.6% over the past three years, from 2,216 in 2011/12 to 2,739 in 2014/15.

Student Kan Kom Choi interned at the CitiPower and Powercor in Melbourne, Australia in 2014.

Student Lau Chui Ying interned at the Ching Lian Cable TV Co., Ltd. in Kaohsiung in 2014.

Student Chong Kit Yi interned at the China Central Television in Beijing in 2014.

Student Chen Hongni interned at the British Chamber of Commerce in Hong Kong in 2014.

3.   Performance Measurement and Performance Indicators (PIs)

The outcomes of KT activities conducted by different units in the Institute are closely monitored using PIs. Faculties, Institute-level research centres, and relevant academic support units are required to submit annual reports on the implementation of their KT activities, including data on a list of PIs that are specific to their key KT activities.

The Institute has been actively engaged in a wide range of KT activities and initiatives.   Hence, the number of key stakeholders who benefited from the Institute's KT activities has steadily increased.   Such progress can be seen in the PIs detailed in Annexes II and III.

Numerous schools, classes, principals, teachers, students and other beneficiaries have benefited from KT activities and projects organized by various academic units and research centres.   This evidence indicates the substantial contributions of the Institute in advancing and disseminating new knowledge to inform practical improvement, education innovation, professional development and policy making.

4. Looking Forward

The Institute will continue to attach great importance to extending our high-quality, high-impact research and innovative scholarship to the benefit of both the school sector and the wider community. In the past few years, the Institute has considered KT as a form of service to the community and as a profession, rather than a tool for generating revenue. In the next triennium, however, we are expanding the net worth of these services to the community to include income generation, and will adjust our priority in increasing the income for various KT activities while serving the community.

Looking ahead, the Institute will develop more innovative channels to engage the school sector and the community at large for promoting KT. We are confident that with our concerted efforts and a wide range of KT activities undertaken by staff members at all levels, the Institute's KT culture will further be enhanced and developed. We strongly believe that the research, teaching and knowledge transfer efforts of our staff will continue to benefit the school sector and the community at large.

Impact Case History

(i) Project Title
Innovation of Science and Environmental Studies (ISES)

(ii) Name of Principal Investigator
Prof So Wing Mui Winnie, Director of Centre for Education in Environmental Sustainability

(iii) Summary

1. Background

The development of primary science education (Primary 1–6) in Hong Kong has been guided by the Nature Study and the Syllabuses for Primary Schools (Primary Science) since the '60s. However, in 1996, a new subject named General Studies (GS) was introduced and implemented in response to the recommendations of Education Commission Report No. 4 that different subject discipline of Primary Science, Health Education, and Social Studies should be integrated. The GS curriculum was further revised in accordance with the curriculum reform in the 2000s that integrated Personal, Social and Humanities Education, Science Education, and Technology Education. Since most of the teachers of this integrated subject did not have a science background in their previous education, there was a concern of a dilution of science education at the primary level. Hence, the science educators of HKIEd has taken the lead with various government departments and educational organizations who share the concern of development of science education to organize the "innovation in Science and Environmental Studies" (ISES) to maintain and upkeep science learning at primary level in Hong Kong, for a better foundation and transition to the science education at secondary and tertiary level.

2. Purpose

The "Innovation in Science and Environmental Studies" (ISES), 「常識百搭」創新科學與環境探究, formerly coined as the "Primary Science Project Exhibition" and the "Primary Science Project Competition", has been organized since 1998 aiming to promote a habit of innovation, an understanding in science knowledge and awareness in environmental issues among primary pupils. The 18th Innovations in Science and Environmental Studies (ISES) Exhibition has over 1,000 Primary 4 to 6 pupils and teachers from local schools and schools from other cities in the Pearl Delta Region such as Zhongshan, Dongguan, Shenzhen and Macau participated this year. With a main theme of "Go Green at Home", the exhibition displayed more than 140 projects with the aim of encouraging pupils to unleash their creativity in relation to leading a green life.

3. Objectives

- To enhance the knowledge of primary pupils in science and the environment;
- To assist primary pupils in developing a habit of innovation at their tender years;
- To sharpen the investigative skills of primary pupils and to develop other generic skills such as creativity, analytical ability and independent thinking;
- To enhance the curiosity of primary pupils towards the surroundings, and the interactive relationship between science, technology, environment and the society; and
- To provide a platform for primary pupils to share their innovations in science and environmental studies.

4. Intellectual capacity and theoretical consideration for knowledge transfer
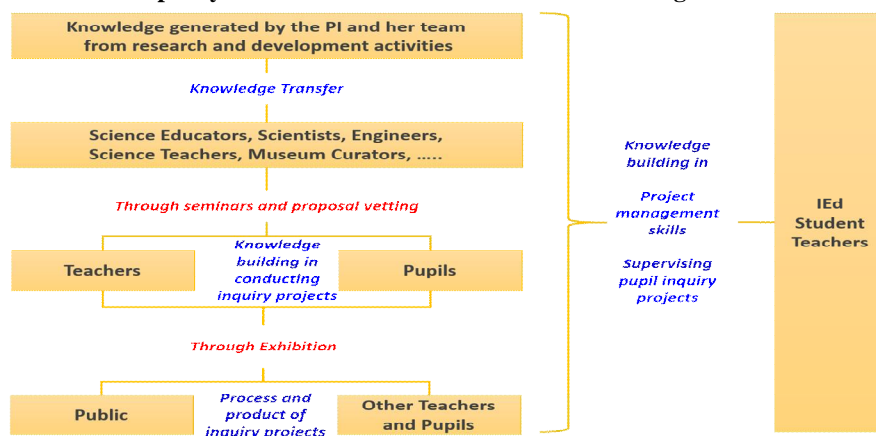
5. Detail

Teacher educators and experts in the related areas held knowledge transfer seminars for teachers and pupils prior to the start of the annual event. Talks related to the subject knowledge of science and environmental studies, ideas in developing an inquiry project, techniques in guiding pupils in carrying out inquiry projects were arranged for teachers who were interested to encourage their pupils to submit a project proposal. The pupil seminar was designed for teams of pupils whose project proposals were accepted during the vetting process. The content of the pupil seminar comprised subject knowledge of science and environmental studies, and skills in carrying out an inquiry project.

In order to help pupils polish and sharpen the ideas of inquiry, all submitted project proposals were vetted, similar to the academic conferences, by a team of professional adjudicators. The vetting was done not only to make sure that the proposed projects were safe and feasible, but more importantly, there were professional comments for pupils to improve their design accordingly so that pupils could learn from the process.

Pupils had around three months to work with their inquiry projects under the guidance and support of their teachers before the exhibition. On the exhibition day, each team was assigned a space where pupils could present the processes and products of their inquiry projects. The processes included demonstrations of the different tests and experiments and/or the products including the use of multiple representations of photos, drawings, charts and texts on a display board and the details in a written report. Pupils were arranged to explain their work to the audience, which included pupils from other teams, parents, the public, and the adjudicators. The pupils' 10 minute oral presentations and written reports were assessed by the team of adjudicators who are experts in science and environmental studies, including university professors, scientists, science museum curators, scientific officers, engineers, school principals, secondary science teachers, etc.

The scoring rubrics used covered the following criteria: (1) the use of scientific inquiry method; (2) the use of scientific ideas/principles; (3) creativity of the inquiry; and (4) the practicality of the inquiry. The descriptors for each criterion guided the adjudicators to judge each of the projects into 3 levels of Outstanding, Merit and Consolation performance. The adjudication process also facilitated knowledge transfer to the participants for better understanding of what quality science and environmental inquiry is all about.

Reports collected from the outstanding teams were published. Videos showing their outstanding presentations were uploaded to the event website for the sharing of learning outcomes and further knowledge transfer to the public. Since 1998, a total of 17 books have been published, each with professional articles written by the editor, guest speakers in the teacher and pupil seminars, and edited reports from the outstanding teams.

Besides, pupils' projects and process of science and environmental learning have also been analyzed from various perspectives and submitted to academic articles (Appendix 7) to support pupils and teachers with sound knowledge and skills for their future participation. These included a discussion of representational practices in science inquiry projects; integrating mathematics in science inquiry; myths of science; and learning science through investigations.

Open ceremoney of the 18th Innovations in Science and Environmental Studies (ISES) Exhibition

Group photo of adjudicators

Explanation of work to audience including pupils from other teams, parents, the public and the adjudicators.

Demonstrations of the tests, experiments and the products

(iv) Underpinning research

Enquiry-based learning, project learning and STEM (Science, Technology, Engineering, and Mathematics) these teaching and learning approaches for science education are being promoted in recent years, aiming to equip pupils with scientific knowledge, skill, attitudes and values for their personal development and developing their problem solving skill. With the curriculum development, research studies will be conducted to evaluate and review the scientific literacy and handling scientific evidence of the pupils who are participating ISES.

Research 1) Scientific competencies of Hong Kong primary pupils in scientific inquiries

To evaluate the scientific competencies of ISES participated pupils used PISA 2015 draft framework. The competencies refer to (a) explain phenomena scientifically, (b) evaluate and design scientific enquiry and (c) interpret data and evidence scientifically.

Research 2) Hong Kong primary school pupils' understanding and use of the concepts of evidence (CofEv) in scientific enquiry

To explore Hong Kong primary school pupils' understanding and application of the different aspects of the concepts of evidence (CofEv) i.e. (a) identifying variables and types, (b) planning a fair test, (c) choosing instruments and values, (d) repeated measurements, (e) presenting data with graphical representations and (f) interpreting results through analyzing their inquiry reports and interviews.

Research 3) Implementation of integrated STEM in ISES

To investigate the ISES participated pupils' STEM ability and application by analyzing their science works.

(v) References to Research

So, W. W. M. (2014, August). Representational practices in extra-curricular science inquiry projects: A study with Asian primary pupils. *International Journal of Science and Mathematics Education.* Retrieved November 11, 2014, from http://0-dx.doi.org.edlis.ied.edu.hk/10.1007/s10763-014-9566-5

So, W. M. W. (2013). Connecting Mathematics and Science in Primary Science Inquiry**.** *International Journal of Science and Mathematics Education*. *11*(2), 385-406. http://link.springer.com/journal/10763/11/2/page/1\

So, W. M. W. & Zhong. M. (2009). Myths of science: How children know about science in inquiry projects. *The International Journal of Science in Society*, *1*(2), 31–34.

So, W. M. W. (2003). Learning science through investigations: An experience with Hong Kong primary school children. *International Journal of Science and Mathematics Education*, *1*(1), 175–200.

蘇詠梅、鍾媚 (2010)。《科學探究中的"不科學"》,亞太科學教育論壇,第十一期,第一冊,文章三。

蘇詠梅 (2007)。《建構教學設計:讓學生發展專題研習書面報告技能》,《基礎教育學報》,第 15 卷第 2 期,頁 121-140。

蘇詠梅(2006). 小學科學探究學習的探討,《亞太科學教育論壇》,第七期,第一冊,文章三。

蘇詠梅、鍾媚 (2006)。《小學科學探究活動:促進兒童科學思維的發展》,《基礎教育學報》,第 15 卷第 1 期,頁 59-75。

(vi) Details of the Impact or Benefit

The popularity of the event is well illustrated by having 100 schools, 1000 pupils and teachers participating the event every year. In 2015, there were 140 teams from 105 primary schools, with 1000 participants. The impact of the event is cascaded five-fold to the participating pupils and teachers, schools, Student teachers as well as the public.

1) School Pupils:

The event encourages pupils to think "out of the box" and work innovatively with science and environmental problems they encounter in everyday life, and to better understand the interactive relationship between science, technology, environment and the society. The event provided precious opportunities for them to use more sophisticated technology and to operate complicated equipment.

2) School Teachers:

With the experience gained in teacher seminar, professional comments provided on the project proposal and project reports, the teachers become more knowledgably, competent and confident in conducting inquiry activities.

3) Schools:

The similar event of smaller scale is organized to promote science learning to all pupils in their own schools. A similar event "科學小星星"專題探究活動 making reference to our event has been held in Guangzhou.

4) Student teachers:

Student teachers can transfer skills of project planning, organization, execution and management with real life projects related to education; engage with on-the-job training to develop a variety of practical skills as well as develop knowledge in supervising primary pupils in inquiry project.

5) The public:

The event arouses public awareness of the importance of science and environmental studies in daily life and science knowledge extended from higher education sector to the community.

(vii) References to the Cooboration of Impact or Benefit

Media

1) Newspaper

Mingpao newspaper (22 May 2015)

創意環保展覽
展學生百作品

教院可持續發展教育中心與多個機構合辦「常識百搭」創新科學與環境探究專題展覽，昨於中央圖書館舉行，展出香港、內地和澳門高小生的逾140份作品。

今年探究專題為「家居環保大發現」，鼓勵學生從家居生活中發掘創意環保法。圖中為一批小學生向評審介紹其作品，他們分別利用咖啡渣、茶葉渣、蛋殼及花生殼作為肥料，並比較不同廚餘對植物生長的影響。

（教院提供）

2) Magazine
Yellow Bus Magazine (June 2015)

3) Broadcasting

ISES organizing committee member and ISES participated students were invited for a live broadcast interview programme《非常班房》on Digital Broadcasting Corporation on 22nd June 2015, to share their feeling and feedback. http://www.dbc.hk/radio4/programme/Id/78

Impact Case History

(i) Project Title
Compendium of Hong Kong Literature 1919–1949

(ii) Name of Principal Investigator
Professor Chan Kwok Kou Leonard, Dean, Faculty of Humanities

(iii) Summary
a) Background
This large-scale project is a collaborative work of a number of Chinese literature scholars from the Hong Kong Institute of Education, Chinese University of Hong Kong, Baptist University and other academic institutions. The project, first launched in 2011, was initiated in response to the lack of a representative and comprehensive anthology of Hong Kong literature in society. The project is nearing its completion. Six volumes came out in 2014, and the remaining six books are scheduled to be published in summer 2015.

b) Aims
The project has the following aims:
- Contribute to Hong Kong culture by preserving dated texts with significant literary value and/or with special relevance to Hong Kong's literary/cultural history;

- Raise awareness of the value and significance of Hong Kong literature and stimulate interest in the area;

- Promote literary education at local schools by providing a reliable and wide-ranging source of literary texts and information and

- Enhance local people's interest and knowledge in literature and literary culture.

c) Content
The Compendium, which has 12 volumes, covers all major literary genres.
  ○ 1 新詩卷 Modern Poetry (1919–1949）陳智德 Chan Chi Tak

  ○ 2 散文卷一 Prose I (1919–1941) 樊善標 Fan Sin Piu

  ○ 3 散文卷二 Prose II (1942–1949) 危令敦 Ngai Ling Tun

  ○ 4 小說卷一 Fiction I (1919–1941) 謝曉虹 Tse Hiu Hung

  ○ 5 小說卷二 Fiction II (1942–1949) 黃念欣 Wong Nim Yan

  ○ 6 評論卷一 Literary Criticism (1919–1941) 陳國球 Chan Kwok Kou Leonard

  ○ 7 評論卷二 Literary Criticism II (1942–1949) 林曼叔 Lin Manshu

  ○ 8 舊體文學卷 Classical-Style Literature (1919–1949) 程中山 Ching Chung Shan

  ○ 9 戲劇卷 Drama (1919–1949) 盧偉力 Lo Wai Luk

  ○ 10 通俗文學卷 Popular Literature (1919–1949) 黃仲鳴 Wong Chung Ming

  ○ 11 兒童文學卷 Children Literature (1919–1949) 霍玉英 Fok Yuk Ying

  ○ 12 史料及索引卷 Reference Materials (1919–1949) 陳智德 Chan Chi Tak

d) Editorial Committee
危令敦 Ngai Ling Tun (Associate Professor, The Chinese University of Hong Kong)

陳國球 Chan Kwok Kou Leonard (Chair Professor, Hong Kong Institute of Education)

陳智德 Chan Chi Tak (Assistant Professor, Hong Kong Institute of Education)

黃子平 Huang Ziping (Honorary Professor, Hong Kong Baptist University)

黃仲鳴 Wong Chung Ming (Associate Professor, Hong Kong Shue Yan University)

樊善標 Fan Sin Piu (Associate Professor, The Chinese University of Hong Kong)

(iv) Underpinning research

The Compendium follows the format of the *Compendium of Chinese New Literature* (中國新文學大系), a pioneering ten-volume literature anthology published in the 1930s. The editorial committee and editors of the current version are all experts in Hong Kong literature. The following are specific publications on the area by Chief Editor Leonard Chan Kwok Kou and Associate Chief Editor Chan Chi Tak, which exemplify the works that have provided a solid foundation for the project:

陳國球 (2013) ：〈抒情在彌敦道上：香港文學的地方感〉,《文學評論》,第 25 期,頁 84-90。

陳國球 (2010) ：〈收編香港──中國文學史裏的香港文學〉,香港中文大學中國語言及文學系、香港教育學院中國文學文化研究中心合編,《都市蜃樓：香港文學論集》,香港,牛津大學出版社,頁 3-21。

陳國球 (2010) ：〈「放逐抒情」?：從發生在香港的一場文學論爭說起〉,國立成功大學中文系主編,《感官素材與人性辯證國際學術研討會論文集》,台南,國立臺灣文學館,頁 31-141。

陳國球 (2010) ：〈論徐遲的放逐抒情：「抒情精神」與香港文學初探之一〉,輯於王德威、陳思和、許子東編,《一九四九以後》,香港,牛津大學出版社,頁 290-300。

梁秉鈞、陳智德、鄭政恆編 (2011) ：《香港文學的傳承與轉化》, 香港,匯智出版有限公司。

陳智德 (2011) ：〈今日香港文學研究引介：史料、選本與評論〉, 輯於梁秉鈞、陳智德、鄭政恆編,《香港文學的傳承與轉化》,香港,匯智出版有限公司,頁 291-307。

陳智德 (2011) ：〈純詩的探求：論四十年代的戴望舒與柳木下〉, 輯於梁秉鈞、陳智德、鄭政恆編,《香港文學的傳承與轉化》,香港,匯智出版有限公司,頁 43-56。

(v) References to Research

The project has received a substantial grant from the Hong Kong Arts Development Council and a private donation from a local literature enthusiast. It has caught wide public attention since the first three volumes appeared in the Hong Kong Book Exhibition in July 2014.

- Project funding from the Hong Kong Arts Development Council amounts to HK$680,000.

- A fund of HK$200,000 has been received from a private donor.

- The Compendium has been selected as an item to commemorate the centennial anniversary of renowned local publisher The Commercial Press.

- The Compendium has been awarded the National Publication Fund (國家出版基金) by the National Publication Foundation of the Chinese government. This Collection is one of 346 publications funded in 2015 and one of 27 publications selected in the area of literature. (http://www.npf.org.cn/NewNewDetailed.aspx?id=14&nid=1732)

- One of the volumes (*Modern Poetry*) won the Eighth Hong Kong Book Prize (2015).

(vi) Details of the Impact or Benefit

The Compendium aims to collect and preserve dated literary works and related materials, stimulate interest in literature and increase Hong Kong people's understanding of local literary development. It provides useful information for research on literature and Hong Kong studies, specifically Hong Kong history and culture.

In addition, the Compendium can be used by the educational sector. The comprehensive volumes provide a diversity of materials that can be used for literary education and promotion in local schools and in teaching subjects, such as Chinese language, Hong Kong history and society.

Following the project's completion, we aim to work with local publishers to produce suitable reading materials for students of different levels. A seminar will be held to gather ideas from educators on how the Compendium can be most effectively used in promoting literature education in primary and secondary schools.

With the support of the Hong Kong Public Library and other organisations, we offered a series of public lectures on the Compendium in winter 2014. The topics included classical-style literature, children literature and literary criticism. The lectures were well-received and attracted many attendees.

(vii) References to the Corroboration of Impact or Benefit

The Compendium received wide media attention and coverage. Articles on the Collection have been run on various Chinese and English newspapers, including *Ming Pao* 明報, *Takungpao* 大公報, *Sing Tao Daily* 星島日報, *The China Daily*, *South China Morning Post*, *Shenzhen Economic Daily* 深圳商報 and so on, as well as magazines such as *U Magazine*, *Mingpao Weekly* 明報周刊 and *Hong Kong Literature* 香港文學.

The Collection has also been introduced in radio and television programmes (*Free as the Wind* 講東講西, RTHK; *Eight Minutes Reading* 開卷八分鐘, Phoenix Television) and has been discussed in numerous blog articles and websites, such as *House News* 主場新聞, *Pentoy* 評台 and Chinawriter.com 中國作家網.

Media Coverage

《明報‧世紀》
香港有文學（陳國球）
2014.06.24

《蘋果日報》動新聞
《香港指南》復刻版書展上架
重溫 30 年代花樣年華 2014.07.04

《明報・明藝》
為香港觀點的文學史書寫開路（陳國球）
2014.08.02

《星島日報・文化廊》
香港舊體文學（陳智德）
2014.12.22

SCMP - Shelf preservation
2014.09.01

北京《文藝報》
香港有文學　大系傳統與香港文學大系（陳國球）
2015.01.09

《南方都市報・閱讀周刊》
香港舊體文學總覽
2015.03.08

U Magazine – Book
舊時香港　復刻再現
2015.03.27

《香港文學》366 期
香港文學的「曾經」與「可能」
2015.06

Impact Case History

(i)   Project Title
Applying Knowledge Management Practices in School Education for Sustainable Development

(ii)   Name of Principal Investigator
Dr. Cheng Chi Keung Eric, Associate Professor, of Department of Curriculum and Instruction and
Co-director, Centre for Learning Study

(iii) Summary
Applying Knowledge Management Practices in School Education for Sustainable Development is a Quality Education Fund (QEF) project with the following objectives:
- To help schools institutionalise knowledge management (KM) systems for sustainable development;
- To help schools understand the concept of KM and acquire skills and tools for KM practices;
- To foster a culture of knowledge sharing and innovation in schools;
- To develop and validate a set of performance indicators for KM audit and assist schools in conducting KM audit for strategic planning;
- To strengthen school capacity in management, teaching and learning and student support through KM; and
- To enhance schools' KM capacity to cope with the challenges resulting from recent educational reforms.

The idea behind establishing this school-development project is based on the findings of an IRG project entitled 'Knowledge Strategies for Enhancing School Learning Capacity'. The IRG project discovered that Hong Kong schools had been facing challenges brought about by knowledge expansion, curriculum reform and a changing education policy environment. A school-improvement project that helps schools cultivate a knowledge-sharing culture, support teachers in establishing professional identities as knowledge workers and capitalise on existing knowledge recourse to address the issues would be helpful. Based on these findings, this QEF project aims to help schools implement KM practices so that they can adapt to these challenges.

A total of 10 primary schools and 10 secondary schools participated in the project. Each participating school established a KM Committee (KMC) to facilitate school development in daily practices and conducted KM audits for strategic planning. In each school, the principal (or a nominee) and a group of three senior teachers (i.e. KM managers) form the KMC. The KM managers are responsible for conducting KM audits, data mining and facilitating knowledge sharing to formulate school strategic plans. Professional training programmes and workshops were provided to KM managers and teachers to help them with these tasks. Each participating school practiced at least one to two focused areas from four different domains, namely, 'Management and Organisation', 'Learning and Teaching', 'Student Support and School Ethos' and 'Student Performance'. Subsequently, the project supported the KM managers in conducting data mining and knowledge sharing for school strategic planning in all of the four domains (see Figure 1).
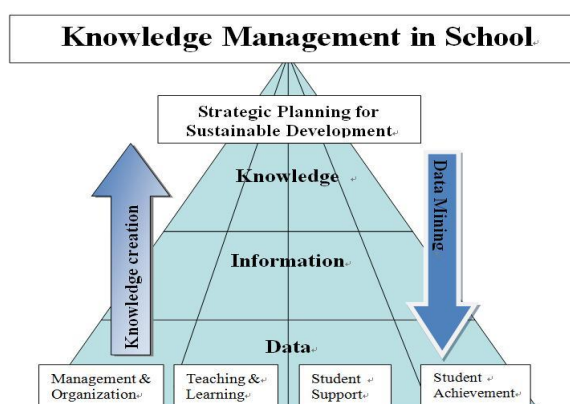

Figure 1 Conceptual diagram for KM application in school education

(iv) Underpinning research

This project also integrates the subject of KM into school management research. The subject helps examine whether the implementation of KM in schools and the development of teachers' competencies in personal knowledge management (PKM) can improve their strategic planning capacity. Strategic planning plays an important role in directing the sustainable development of a school, particularly in scanning organisational environment and reviewing internal strengths and weaknesses to determine which areas to prioritise in action planning. Without effective planning, targets of schools cannot be achieved, and the quality of education cannot improve, thus causing a high risk of failure of education reforms, which can then lead to wastage of government resources. Facilitating knowledge transfer within schools and strengthening competency of staff in PKM for planning has become a significant research agenda. KM is a management strategy that uses information and knowledge to enhance organisational performance, management and operation. It aims to support organisations and create a capable structure that retains, creates and applies knowledge not only for problem solving but also for ensuring the sustainable development of organisations. Thus, applying KM in schools may help them improve their planning capabilities.

Knowledge Management is a management system and approach that can help schools cope with the challenges posed by the recent educational reforms; it also aids schools in providing quality education for their students and quality services for concerned stakeholders. Numerous KM projects have already been conducted in business and commercial organisations, but few are done in schools, especially in Hong Kong. The project deserves consideration in its own right; at the same time, it should be prioritised due to its immediate- and long-term significance amidst the turbulent educational environment in Hong Kong.

The study is important for several reasons. First, this research determines whether the application of KM in schools can improve the effectiveness of their management. Specifically, the knowledge strategies for managing knowledge resource and personal knowledge competencies of teachers can strengthen or reduce the capacity of a school in formulating goals, implementing solutions and assessing outcomes. Second, the research can provide school leaders with information on new and effective management approaches that can aid in the retention and creation of knowledge for sustainable development. Third, the project determines the critical success factors for the application of KM in schools, which can be useful for stakeholders and the community. Finally, this study creates a new area of research related to the embedding of KM in the field of school leadership and management.

(v) References to Research

Cheng, E. C. K. (2013). Management Strategies for Developing Teachers' Emotional Competency. *International Journal of Management in Education, 7*(4), 393-405.

Cheng, E. C. K. (2013). Enhancing school learning capacity by conducting knowledge management. *Procedia Social and Behavioral Sciences, 93*, 281-285.

Cheng, E. C. K (2012). Knowledge Strategies for Enhancing School Learning Capacity. *International Journal of Education Management, 26*(6), 557-592.

These publications have been used in PDP courses Knowledge Management for school development.

Cheng, E. C. K. (2011). An examination of the predictive relationships of self-evaluation capacity and staff competency on strategic planning in Hong Kong aided secondary schools. *Education Research for Policy and Practice, 10*(3), 211-223.

鄭志強（2010）：《發展教師領導的管理策略》，優質學校教育學報，6，21-30。

鄭志強（2010）：《完善學校策略發展規劃》，*教育曙光 – 香港教師會教育學報*，*58*(1)，16-21

Cheng, E. C. K. (2009). Revitalizing Teacher Leadership via Bureaucratic-professional Practices: A Structural Equation Model. *The Asia-Pacific Education Researcher, 18*(2), 283-295.

Cheng, E. C. K. (2008). Management practices for promoting shared decision-making in school organization. *KEDI Journal of Educational Policy, 5* (2), 63-88.

Cheng, E. C. K. (2008). The effect of shared decision-making on the improvement in teachers' job development. *New Horizons in Education, 56* (3), 31-46.

(vi) Details of the Impact or Benefit

KMC Training Programme

Over 80 KMC members were required to attend the 10 trainings sessions for acquiring and enhancing KM knowledge in different aspects (see Appendix). The skills and techniques of the principals, middle (KM) managers and teachers in practicing KM were improved through a series of KM training courses. Their professional competence, confidence and performance were also enhanced by attending these training courses. Through the advanced training series, their KM knowledge was strengthened in different aspects. For example, their innovative problem solving and teaching strategies were developed through the sharing of pedagogical knowledge among teachers of the communities of practices (CoP) facilitated by KM managers and retrieved from the training course.

In the module evaluation, participants commented that a considerable insight of learning was gained; most of them appreciated the contents regarding 'the philosophy of KM of course', 'how to implement KMS in a school-based situation' and 'sharing from guests from other schools about KM related to teaching strategy, (which was) very good'. They also commented that the knowledge of intellectual capital was very useful in drafting their respective school's annual plans and strategic plans at work, which were significantly related to their teaching and learning. In addition, they were grateful for learning about operation and data analysis using the Rasch Model. Moreover, they enjoyed the 'Storytelling' and 'Knowledge Cafe' activities, which gave room for teachers to exchange ideas through brainstorming.

Teachers learning knowledge sharing through creative games at KM Training

School Workshops

Team members visited all of 20 project schools to conduct four workshops for all of the teachers. The workshops aimed to deepen teachers' understanding of the KM concepts (in terms of linking KM with PKM) and to inspire schools in designing creative curriculum and practice teaching using KM elements learnt from useful tools/activities, such as 'Taxonomy Games' and 'Storytelling'. All the teachers of project schools learnt how to exercise KM practice and planning in daily administrative and teaching practices; in addition, a culture of knowledge sharing was cultivated in the schools as a whole.

Teachers commented in the workshop evaluation that they improved their knowledge of KM, gained an 'awareness of tacit and explicit knowledge' and gained 'many new ideas'. They also expressed that the training 'provided (us) knowledge on making our school a more systematic one', and 'KM is a very good recommendation, and the detailed explanation of different KM knowledge can facilitate our daily administrative practice'. In the second year, numerous teachers appreciated the 'learning by doing and experience' through Taxonomy Games. This method allowed them to further understand the management of filing system to improve information flow within the school. They also learnt about tacit and explicit knowledge. Aside from enhancing their KM knowledge, workshops that fostered a culture of knowledge sharing were encouraging. Several teachers mentioned that, 'it (the workshop) allowed us time to discuss and collaborate our ideas for setting plans/goals for improvement' and 'the competition (crossroad game) tested our planning (and) cooperating skill'.

School workshops for teachers

KM Audit for Assessing Schools' KM Capacities

Various inventories were developed to assess schools' KM capacities. Sets of questionnaires covering different KM topics were distributed to teachers and students around February of each year. After analysing the data, a data workshop was conducted for each project school around May to August. During the workshop, each school was provided a school-based KM audit report revealing the school's performance on different KM domains, with interpretation by our team of experts. Teachers were also divided into groups to discuss the school's situation regarding different domains. With in-depth analysis and discussion of the results, together with professional consultation by our team, schools were provided a platform to formulate and apply a strategic plan regarding KM.

The instrument helped project schools conduct knowledge audit for formulating strategic plans for sustainable development. Teachers commented at the workshop evaluation that 'data analysis session allows teachers to understand more about the school's situation', 'having real data, we know what our school is like and where we stand compared to other schools', 'let us know the result of report (which helps us) understand our strength and weakness'. In addition, the 'teamwork present' allowed them to collect data, analyse information and apply knowledge effectively, which in turn, considerably improved their teaching skills. They further agreed that sharing and inheriting teaching experience would help in enhancing teaching effectiveness.

School-based KM projects submitted by Project Schools

To help schools develop a tailor-made KM system, schools were required to submit a KM assignment outlining their KM plans, implementation and/or results of the plan. In between, they were requested to submit a proposal, mid-term report and final report to us. In line with this, schools were also invited to seek our onsite face-to-face consultation for their KM plan and development. Through this school-based assignment, numerous schools began to institutionalise the KM system and exercise the KM practices they learnt which enhanced their schools' capacity in management, teaching and learning, and student support. The assignments submitted by schools indicated that they already began using different KM systems to manage knowledge of schools that help enhancing the teaching and learning, intellectual capital and student support work. For example, certain schools started using the Rasch Model (that they learnt in our trainings) to analyse students' performance in mathematics and the quality of their exam papers; their practice was also shared to the whole school. Moreover, a school enhanced their student support work by setting up a CoP to share their disciplinary and counselling experience.

Aside from the aforementioned major activities, our project provides other platforms for project schools to engage in KM. For example, in February 2013, we arranged all project schools to visit the Mass Transit Railway Corporation, which was given the Asian and Hong Kong Most Admired Knowledge Enterprise Award, a renowned award in the KM field. During the visit, project schools were introduced to the processes by which the company fostered the culture of continuous learning, innovation, people development and knowledge sharing, all of which are closely with KM. Furthermore, our team provided face-to-face consultations to participants from project schools to discuss their respective KM-strategic development plans.

A visit to MTR for a KM seminar

Dr Eric Cheng was invited by Education Bureau to conduct a talk on knowledge management

In view of the success of the current project, a new PDP five-week course (five credits) entitled 'Applying Knowledge Management for School Development' was also successfully developed and implemented in December 2013, with two cohorts, one primary and one secondary cohorts. The course is designed to link the application of KM theories learnt in class with the participants' leadership and management roles by developing and piloting a KM project proposal. A paper entitled 'Applying knowledge management for school strategic planning' was published in the *KEDI Journal of Educational Policy, 10*(2), 339–356. The research findings of the project have been complied as the first book, '*Knowledge Management for School Education*' in the Asia Pacific region. The book was published by Springer in 2015.

(vii)   References to the Corroboration of Impact or Benefit

<u>**Award**</u>
Dr. Cheng is one of the recipients of KT Award. Result of Knowledge Transfer Awards Scheme 2014/15: http://www.ied.edu.hk/rdo/KnowledgeTransfer/eng/news2.php?news_id=30

<u>**Output**</u>
Cheng, E. C. K. (2015). *Knowledge Management for School Education*. London: Springer.
Cheng, E. C. K. (2014). Learning Study - Nurturing the instructional design and teaching competency of pre-service teachers. *Asia-Pacific Journal of Teacher Education*, 42(1), 51-66.
Cheng, E. C. K. & Lo, M. L. (2013). *Learning Study: Its Origin, Operationalisations, and Implications.* Paris: OECD Education Working Papers, No. 94, OECD Publishing.
Cheng, E. C. K. (2013). Applying knowledge management for school strategic planning. *KEDI Journal of Educational Policy*, 10(2), 339-356.
Cheng, E. C. K. (2012). A Personal Knowledge Management Model of Pre-service Teachers for Effective Knowledge Acquisition. The Asia-Pacific Education Researcher, 21(2), 368-373.
鄭志強（2011）：《課堂學習研究與教師專業發展》，中國，安徽教育出版社。

KMC Training Programme
Module 1 Introduction to Knowledge Management
Module 2: Introduction to Creativity and Creative Thinking
Module 3: Action Research for School Development
Module 4: Introduction of Data Mining and Basic Statistics
Module 5 (Part I): KM System in Practice: Site Visit at the MTR Corporation Limited
Module 5 (Part II): KM System in Practice: Part II
Module 6: KM Strategies and Managing School Intellectual Capitals
Module 7: Teaching Strategies for Creative Thinking
Module 8: Teaching Strategies for Critical Thinking and Problem Solving
Module 9: Advanced Statistics for Data Mining
Module 10: Managing Strategies for Developing a Knowledge Creation School (Education Visit/Seminar)

<u>Inventories Developed for KM Audit</u>
1. School Knowledge Management
2. School Intellectual Capital
3. Personal Knowledge Management
4. Study Process of Students
5. Attitude of Students and Teachers towards Assessment
6. Student Engagement
7. Collaborative Lesson Preparation
8. Knowledge Transfer: SECI model
9. Student's Self-Regulated Learning
10. Teachers Belief and Instruction on SRL

<u>School-based KM Projects</u>
1. Evaluation of Maths Paper II: The Application of Rasch Model
2. The Inheritance of Disciplinary and Counselling Experience using KM
3. Enhancing Effectiveness of Collaborative Lesson Preparation using KM
4. Cultivating CoP for School-based Project Assessment in Enhancing Teaching
5. Teaching and Learning Enhancement through CoP

(viii) Conclusion

When the KM system is institutionalised in schools, they can be more competitive and proactive to the requirements created from educational reforms, environmental changes and expectations of different school stakeholders. These schools are now empowered to provide quality education, which can further benefit the students and parents who are the recipients of their educational services. In conclusion, the endeavours of these 20 schools and the project team can contribute to the overall improvement of the quality of Hong Kong education.

Impact Case History

(i)   Project Title
Educational Experiences, Self-Identity and Spirituality: A Study on the Well-being among Students from Diverse Cultures in Hong Kong

(ii)   Name of Principal Investigator
Dr. Yuen, Yuet Mui Celeste, Associate Professor and Associate Head, Department of Education Policy and Leadership

(iii) Summary
The study appraised and determined the role of educational experiences, self-identity, spirituality and the well-being of the groups of students in Hong Kong, namely, ethnic minority students (Indians, Pakistani and Nepalese) (SAS), cross-boundary students (CBS) and Chinese immigrant students (CIS) from mainland China, and compared them with those of the Hong Kong mainstream students (HKMS).

A mixed method design was employed. The research team conducted a quantitative study using data obtained from 15,428 students aged 12–19 years, from 28 secondary schools in Hong Kong during 2012–2013. Among the samples, 73% were HKMS, 16% were CIS, 4% were CBS and 7% were SAS. Statistical analyses [ANOVA, regression and structural equation modeling (SEM)] were conducted to examine the relationships among individual information (age, gender), religious practices (religious affiliation, religious activities), life satisfaction (LS) and spiritual well-being (SpWB) across the student groups. In addition, 60 individual interviews were conducted with students from five schools, including 15 CBS, 15 SAS, 15 CIS and 15 HKMS. Focus group interviews were conducted with 22 teachers, the vice principal, discipline and guidance master, and the religious studies panel head.

Through the quantitative and qualitative data, the research team noted that LS and SpWB vary across the four student groups. Contrary to the media and common understanding, SAS scored highest in both LS and SpWB. Religious belief was significant for their LS, in general, and their SpWB, in particular. Findings in international studies confirmed that adolescents varied in terms of LS and SpWB across gender, level of study, religious affiliation and family background. Spiritual well-being was identified as both a mediator and moderator on students' self-rated LS. Hence, the integration of life, spiritual and value education should be implemented in the curriculum to promote the holistic development of students in Hong Kong.

(iv) Underpinning research
The study employed an integrative method through questionnaires and interviews, and adapted two instruments: the Multidimensional Students' Life Satisfaction Scales (MSLSS) (Huebner, 2001) and Spiritual Health and Life-Orientation Measure (SHALOM) (Fisher 1999). Data collected from the different student groups were compared and analysed to examine the interrelationships among educational experiences, ethnic identity and spirituality, and the responsiveness of the student groups to support services.

<u>**Objectives:**</u>
<u>The study was conducted with the following objectives:</u>
- Critically examine the self-appraised well-being of the three student groups and HKMS;
- Identify the contributing factors to the well-being of these student groups through educational experiences, self-identity and spirituality;
- Evaluate and compare the interrelationships among educational experiences, ethnic identity and spirituality of student groups with HKMS;
- Analyse the responsiveness of the provision of connected support services to the well-being of these student groups; and
- Build a theory to promote the well-being of immigrant and minority student groups in Hong Kong and share our findings with the international educational community.

(v)   References to Research
Yuen, Y. M. C. (2015). Gender difference in life satisfaction and spiritual health among the junior immigrant and local Hong Kong secondary students. *International Journal of Children's Spirituality*. doi: 10.1080/1364436X.2015.1061485.

Yuen, Y. M. C. (2014). School Engagement and Civic Engagement as Predictors for the Future Political Participation of Ethnic Chinese and South Asian Adolescents in Hong Kong. *Migration and Ethnic Themes*. 29(3), 317-342.

Yuen, Y. M. C. (2013). Ethnicity, level of study, gender, religious affiliation and life satisfaction of adolescents from diverse cultures in Hong Kong. *Journal of Youth* Studies, 16(6), 695-711.

Yuen, Y. M. C. (2011). Cross-Boundary Students in Hong Kong Schools: Education Provisions and School Experiences. In J. Phillion, M. T. Hue & Y. Wang (Eds.), *Minority Students in East Asia: Government Policies, School Practices and Teacher Responses* (174-194). New York: Routledge Press.

Fisher, J. W. (2008). Impacting teachers' and students' spiritual well-being. *Journal of Beliefs & Values-Studies in Religion & Education*, 29(3), 253-261.

Huebner, S. (2001). *Manual for the Multidimensional Students' Life Satisfaction Scale*. Columbia: University of South Carolina.

(vi) Details of the Impact or Benefit

Increasing Social Awareness

Dr. Yuen, who recently received the Hong Kong Institute of Education (HKIEd) Knowledge Transfer Award, achieved a broad level of knowledge transfer (KT): She disseminated her findings through seminars, public lectures, media, school-based feedback sessions with frontline teachers, policy makers and curriculum developers; attended five international conferences; and published four articles. A well-received student empowerment scheme (SES) was organised for 120 CIS and CBS to have a taste of university life and to enhance the intercultural communication and sensitivity of HKIEd student leaders towards Chinese and SAS immigrant students.

Underscoring the relevance of the topic, the findings have attracted wide attention from the education sector and from local and overseas media. The research findings have filled a gap in terms of increasing social awareness of the importance of the well-being and spirituality of young people. This goal calls for a more deliberate educational focus on providing specific support measures for students in Hong Kong, particularly the immigrant and underprivileged mainstream students.

Promoting Positive Changes in Attitude

The social and educational impact of the study is clear: the findings provide government officials with evidence that new curriculum initiatives are necessary to promote positive youth development. Engagement in school and society is currently segmented and differentiated across the student groups. These findings, along with related publications, serve to deepen public understanding and awareness of promoting an equitable society for all students with differentiated measures.

Fig. 1: Preliminary findings disseminated via a press conference (10 June 2014)

Fig. 2: Local media reported the findings

(vii) References to the Corroboration of Impact or Benefit

Award

Dr Yuen is one of the recipients of KT Award. Result of KT Awards Scheme 2014/15:
http://www.ied.edu.hk/rdo/KnowledgeTransfer/eng/news2.php?news_id=30

Impact

(I) Academic/Scholarly Impacts

This project deepens the understanding of LS and SpWB of students from diverse religious and cultural backgrounds. Its findings have been published by the *International Journal of Children's Spirituality* and a chapter of a Chinese book. Four article papers relating to the findings are under review. The findings have been presented in three international conferences. Moreover, the validated Chinese version of MSLSS was already used by Prof. Mantak Yuen along with the research team of University of Hong Kong in their research.

Fig.3: Poster of seminar disseminated by the research team

Fig.4: Dr. Yuen was interviewed by the students who come from different institutes on latest issues with CBS & SAS

(II) Practical Knowledge Transferred Impacts

1. Media/Community-Wide Advocacy

- Preliminary findings disseminated through a press conference (10 June 2014), attracting more than 10 local newspapers and radio media to report findings
- Live interview conducted by Radio 5 on the well-being of South Asian youth in Hong Kong, inspired by the results of the study
- Interview broadcast on Aljazeera on understanding ethnic minorities in Hong Kong
- Practical student support programme offered by the HKIEd: 12 school-based feedback sessions conducted with frontline teachers, policy makers and curriculum developers of the project schools together with a dissemination seminar held on 6 March 2014 (~30 people attending)
- Dissemination through digitalised e-television talks and Radio Television Hong Kong (RTHK) programmes

2. Dialogues with the multiple student groups

- Sharing with student leaders organised by the Fifth Leadership Empowerment Action Project   on 30 July 2014 on understanding of the education circumstances of CBS
- Holding face-to-face dialogues with 100 secondary students from diverse cultural backgrounds broadcasted by RTHK Online e-television (10 October 2015 at Delia Broadway School) to promote intercultural sensitivity and integration
- Delivering an invited address on Integrating Ethnic Minorities into Host Society in HK at the Kowloon Exhibition Centre (~100 university and secondary students attended), organised by the Hong Kong Outstanding Students' Association for Project Resonance (28 July 2014)

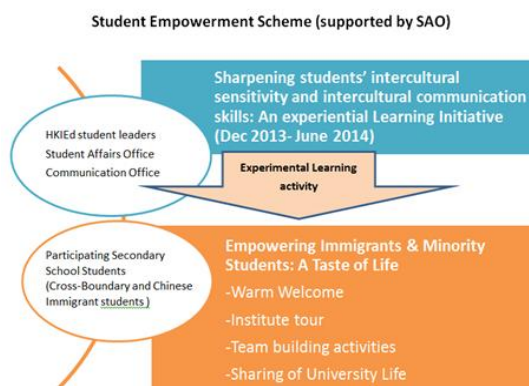**Fig. 5:** *Dr. Yuen gave a public talk in the Hong Kong Outstanding Students' Association for Project Resonance*

Fig. 6: *Student empowerment scheme*

3. Hands-on Student Empowerment Project

- As part of KT, Dr. Yuen applied for a student empowerment grant (HKD20,000) from the Student Affairs Office (SAO) to develop the sensitivity of HKIEd undergraduates to the needs of CIS and CBS. A total of 120 secondary students from different secondary schools participated in the scheme with positive feedback.
- The 3-hour university experience for students included team building, a tour of the Mong Man Wai (MMW) Library and Education Museum, and sharing by two HKIEd students from mainland China.

4. Co-curricular Course - Intercultural Sensitivity and Provision of Community Services

Informed by the findings of this study, Dr. Yuen designed a bridging leadership programme to engage HKIEd students with the SA communities to promote the well-being of the SA, CIS and CBS students through a wide range of community services (e.g., learning Chinese, identity building and talent cultivation).

Fig. 7: *Collaborated with the SAO Communication Office and the Mong Man Wai Library and NGO to offer the project called 'A taste of university life, empowering the CIS and CBS'. It was warmly welcomed by the participating secondary schools students and teachers.*

Fig. 8: *Building the intercultural leadership skills of HKIEd students to serve the ethnic minority communities.*

Impact Case History

(i)   Project Title
Effects of a language-rich phonological awareness intervention on the English language and literacy among Hong Kong Chinese kindergarten students

(ii)   Name of Principal Investigator
Dr. Yeung Siu Sze Susanna, Assistant Professor, Department of Psychological Studies

Co-Investigators:
Dr. Ng Mei Lee, Assistant Professor, Department of Early Childhood Education
Dr. King Ronnel Bornasal, Assistant Professor, Department of Curriculum and Instruction

(iii) Summary
<u>Basic details</u>
- Period: 1 February 2013 to 31 October 2014
- Funding Source: Quality Education Fund
- Participants:
  - Direct beneficiaries: 250 K3 children and 20 teachers from 8 kindergartens
  - Indirect beneficiaries: parents of the participating children and the public
- Major elements of the project:
  - Programme design
  - Programme implementation and teachers' professional development
  - Programme evaluation

<u>Purpose</u>
The primary objectives of the project are as follows:
- To design, implement and evaluate theory-driven English language and literacy programmes that focus on oral language skills and phonological awareness for Hong Kong Chinese English as a second language (ESL) for kindergarten students;
- To establish evidence-based practices in early English language learning; and
- To enhance awareness in appropriate strategies of English language teaching for local young children among educators, parents and the public.

<u>Objectives</u>
Short-term objectives:
- To enhance English oral language, phonological awareness, reading skills and English language learning motivation among the participating Chinese ESL kindergarten students
- To enhance skills and confidence of the participating Cantonese-speaking local teachers in implementing English language and literacy learning activities
- To provide guidelines for parents of the participants to support their children's English language and literacy development at home

Long-term objectives:
- To develop an evidence-based English language and literacy programme for Hong Kong Chinese ESL kindergarten students, considering the local educational contexts and children's developmental needs
- To improve English-language teaching in kindergartens by heightening the awareness of teachers and parents on the importance of delivering enjoyable learning activities to children
- To provide guidelines for local early-childhood practitioners so that they can develop their own English language and literacy curriculum in preschools

(iv)   Underpinning research
A total of 250 K3 children from eight kindergartens participated in this project; each school used Cantonese as the medium of instruction. To evaluate the effects of the English language programmes, a within-subject design was adopted. A baseline was established to compare the improvements on language and literacy measures as a result of the oral language and language-enriched phonological awareness programmes. A number of reliable and valid measures were administered in different time points to monitor the programme effects. The domains covered by these measures include receptive vocabulary, expressive vocabulary, oral communication skills, phonological awareness, reading, spelling and learning motivation in English.

Results revealed that participating children had significantly higher levels of improvements in oral language skills, phonological awareness, word reading and motivation in English learning compared with their levels of improvements prior to the implementation of the programme. Participating teachers also reported the positive impacts of the programmes on the children's engagement and self-efficacy on English learning in the classroom. The overall positive outcome of the programme provides useful insights for the field on how to best conceptualise and implement English language learning activities in this age group.

Details and element of the project
This research project has three major elements: programme design, programme implementation, and teachers' professional development and programme evaluation. Each of these elements are outlined below.

Programme Design
An innovative English language and literacy programme was designed for ESL pre-schoolers in Hong Kong. The current programme integrated oral language activities with phonological awareness instruction, which is a new method of conceptualising early English learning curriculum in Hong Kong. The project team developed detailed lesson plans that considered the learning needs of Hong Kong kindergarten students based on the team's expertise in psychology and early childhood education. The lesson plans, incorporating comments from experienced early care and education (ECE) teachers, were provided to participating schools for programme implementation.

Programme content and teaching methods:

Programme	Content	Lesson structure	Teaching methods
Oral language programme	Oral listening; Oral communication; Vocabulary building (for the next phase of phonological awareness programme)	Story telling; Extended vocabulary; Contextual speech and syntax use; Oral listening and expression	Storybook; Language games; Extended discourse
Language-enriched phonological awareness programme	Vocabulary; Syllable awareness; Rhyming skills; Phonemic awareness	Target vocabulary learning; Phonological awareness skills learning; Modelling and practices	Language games; Direct vocabulary instruction; Explicit and direct teaching of phonological awareness; Skill modelling

Programme implementation and teachers' professional development
Prior to the programme implementation, professional development workshops were held to equip participating teachers with the knowledge and skills in conducting the learning activities, as stated in the lesson plans. During programme implementation, professional consultants visited each school regularly to provide support and guidance to the teachers as they delivered and executed the learning activities.

Through these activities, the competence and confidence of the participating teachers in providing high quality English language and literacy learning activities were enhanced. Teachers' perceptions and feedback on the programmes were sought regularly through on-going professional support. After the programme implementation, teachers were interviewed to gather their experiences in classroom practice; their opinions were used to improve the programmes further. The teachers' experiences and views in programme implementation were shared in the dissemination seminar and teaching resource package.
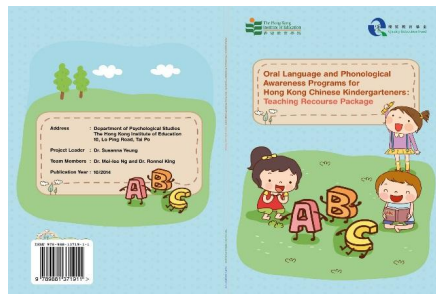
Teaching Resource Package

Parents' leaflets

(v) References to Research

Yeung, S. S., Ng, M. L., & King, R. B. (accepted). English vocabulary instruction through storybook reading for Chinese EFL Kindergarteners: Comparing rich, embedded, and incidental approaches. *Asian EFL Journal*.

Yeung, S. S., & Ganotice, F. A. (2014). The role of phonological awareness in biliteracy acquisition among Hong Kong Chinese kindergarteners who learn English-as-a-second-language (ESL). *The Asia-Pacific Education Researcher*, 23, 333-343.

Yeung, S. S., & Chan, C. K. K. (2013). Phonological awareness and oral language proficiency in learning to read English among Chinese kindergarten children in Hong Kong. *British Journal of Educational Psychology*, 83(4), 550-568.

Yeung, S. S., Siegel, L. S., & Chan, C. K. K. (2013). Effects of a phonological awareness program on English reading and spelling among Hong Kong Chinese ESL children. *Reading and Writing*, 26 (5), 681-704.

(vi) Details of the Impact or Benefit

User-friendly guidelines and detailed lesson plans in designing English learning curriculum in their own schools have been provided in the teaching resource package to local early-childhood educators. Local kindergartens can request for a copy of the teaching resource package without any cost. In this way, the knowledge transferred in this project is highly accessible by local kindergarten educators.

Nowadays, almost all kindergartens provide English language learning activities for their students. However, the practices adopted vary greatly from one school to another. Apparently, no evidenced-based practice exists in early English learning in Hong Kong despite the fact that English learning is viewed as crucial by Hong Kong parents. In this case, the knowledge transferred in this project is highly usable for local educators. The project findings have provided guidelines and concrete examples to improve English learning curriculum in Hong Kong kindergartens. Hence, majority of kindergartens in Hong Kong, along with their students, can benefit from the project findings.

| *Children were able to identify rhyming words.* | *Children tapped syllables using sticks and drums.* |

Almost all of the early childhood programmes aim to improve children's oral language skills, which are important determinants of school readiness and future literacy development. In Hong Kong, learning English has become a necessity because of its *lingua franca* status in the globalised economy. Teaching English has become increasingly common in Hong Kong kindergartens. The findings of the present project are expected to make an impact on the means by which local educators conceptualise early English language learning. Nearly 250 children and 20 teachers who participated in the project activities were the direct beneficiaries of the project. Through the dissemination of the findings and the promotion of the designed programmes in the ECE field, all of the kindergarten children and ECE practitioners are potential beneficiaries of the project. The media has also shown interest in reporting the findings of the current project, as manifested in reports published by several local newspapers.

Children enjoyed the learning activities in our programmes.

A dissemination seminar was held in October 2014 to share the findings to local kindergartens and the staff and students of the Hong Kong Institute of Education staff and students. We invited professionals from different fields to attend the dissemination seminar (e.g., language teachers, early childhood educators, academics, education coordinators and so on)

Dissemination seminar held on 18 October 2014.

(vii) References to the Corroboration of Impact or Benefit
Award
Dr Yeung is one of the recipients of KT Award. Result of Knowledge Transfer Awards Scheme 2014/15:
http://www.ied.edu.hk/rdo/KnowledgeTransfer/eng/news2.php?news_id=30

Output (No academic output has been produced by this project yet.)

Media Coverage
The project details and related findings have been reported by local newspapers.
http://the-sun.on.cc/cnt/news/20141019/00407_056.html

幼園試驗玩遊戲學英語

香港教育學院心理研究學系助理教授楊少詩（左）說，「say（說出）、tell（告訴）、do（做）」三者是學英文不可或缺。

不少家長重視幼兒英語學習。有新試驗計劃選出數個英文詞彙，幼童將詞彙融入遊戲裏，要求他們在過程中朗讀及與同學互動，加深對詞彙的印象，有別於過往的「死記硬背」地學英文。在昨天的成果分享會中，有幼稚園老師指出，課程令學生對英語的敏感度，以及學英語的動機均有明顯改善，更投入於英語課之中。

學院早前獲優質教育基金資助，為幼稚園 K3 學生設計一套口語意識訓練課程，冀有效提升小朋友英語能力，共有八間幼稚園參六周的課程試驗計劃。

香港教育及語音意與為期十

口語訓練以四本英文故事書作教材，圖為其中兩本。

避免死記硬背

課程分為口語訓練及語音意識訓練兩部分，前者會以四本英文故事書作教材，書中會選出數個英文詞彙，幼童將詞彙融入遊戲之中，要求他們在過程中朗讀及與同學互動，加深對詞彙的印象，有別於過往的「死記硬背」地學英文。後者則從遊戲之中教導學生分辨生字的音節、押韻等發音組成部分，長遠鞏固他們朗讀及串字的基礎。課程於去年十月開始，至今年四月結束，參與的學校教師事前均有出席工作坊，學習教授的技巧。

參與計劃的明愛油塘幼兒學校侯老師指出，即使遊戲多玩三數次亦不覺悶，學生在遊戲中表現投入及自信，未來會發掘更多遊戲來引導學生學習。香港教育學院心理研究學系助理教授楊少詩指出，「say（說出）、tell（告訴）、do（做）」三者不可或缺，以往教學未有重視「tell」，即由幼童主動向他人表達及解釋詞彙，鼓勵家長及老師不應埋沒他們的表達能力。

她又說，部分低收入家庭或會因資源問題，局限小朋友的英語學習發展，故未來希望爭取更多撥款，資助有關家庭學習相關的英語訓練，讓家長都可為幼兒教英文。

Number of Beneficiaries [Note 1]

Key Beneficiary Item	Nature of KT Activities involved [Note 2]	2013/14	2014/15
Number of schools benefited	Categories (4), (5) & (6)	9,996	12,733
Number of principals benefited	Categories (1), (3), (4), (5) & (6)	4,511	7,035
Number of teachers benefited	Categories (1), (3), (4), (5) & (6)	29,308	57,267
Number of students benefited	Categories (4) & (5)	462,267	550,000
Number of conference participants benefited	Category (2)	6,431	6,505
Number of organizations/ advisory bodies benefited	Category (6)	24	31

Notes:

1. The number of beneficiaries is calculated according to the number of activities involved. Some beneficiaries and schools may have been involved in more than one activity.

2. Categories of KT Activities include:
   (1) Continuing Professional Development (CPD) Courses;
   (2) Local/International Professional Conferences;
   (3) Professional Seminars/Workshops;
   (4) Commissioned/Contract Projects;
   (5) Partnership Projects for Change, Improvement and Innovation;
   (6) Consultancies.

Summary of Performance Indicators

	Performance Indicators for Knowledge Transfer Activities		2012/13 (1 July - 30 June)	2013/14 (1 July - 30 June)	2014/15 (1 July - 30 June)
1	Continuing Professional Development (CPD) Courses	Number of CPD courses	15	15	26
		Income from CPD courses	$9,528,980	$7,394,000	$12,325,540
		Number of key partners	7	4	11
		Number of student contact hours	1,472	1,684	1,598
2	Local/International Professional Conferences	Number of local/international conferences	24	23	37
		Income from conferences	$338,439	$583,700	$1,676,584
		Number of key partners	111	84	152
		Number of presentations	832	809	1,695
3	Professional Seminars/Workshops	Number of professional workshops/ seminars	255	261	332
		Income from seminars/workshops	$959,492	$714,050	$733,530
		Number of key partners	258	355	398
4	Commissioned/Contract Projects	Number of commissioned/ contract projects	46	69	80
		Income from projects	$38,146,179	$34,107,843	$46,258,115
		Number of key partners	126	145	187
5	Partnership Projects for Change, Improvement & Innovation	Number of partnership projects	85	82	100
		Income from partnership projects	$10,083,442	$10,894,087	$19,292,462
		Number of key partners	347	317	601
6	Consultancies	Number of consultancies	13	9	11
		Income from consultancies	$2,096,447	$1,827,045	$3,681,303
7	Professionals Engaged in Academic/Professional Programmes	Number of programmes involved	35	30	59
		Number of teachers engaged	89	64	82
		Number of principals engaged	16	42	25
		Number of other professionals engaged	43	46	47
8	Commercialized R&D Products and Intellectual Properties(IPs)	Number of commercialized R&D products/ IPs	5	2	4
		Income from the R&D products/ IPs	$3,615	$60,000	$8,375
9	Social, Community and Cultural Engagement	Number of public lectures/ symposiums/ exhibitions and speeches to a community audience	229	244	296
		Number of performances and exhibitions of creative works by staff or students	19	19	34
10	Staff Engaged as Professional Consultants or Members of External Advisory Bodies	Number of staff engaged	32	67	87
11	Student Engagement	Number of student internships/ placements	2,490	2,554	2,739
12	Publicity or Media Exposure	Number of publicity or media exposure related to KT, including print, on-line and electronic media	--	1,131	1,239
13	Nexus between Research and Teaching	Number of academic staff using research in teaching/ course activities	248	270	288
		Percentage of academic staff using research in teaching/ course activities	78.7%	83.3%	85.7%
		Number of academic staff using teaching as research	124	163	179
		Percentage of academic staff using teaching as research	39.4%	50.3%	53.3%
14	Publications with Local and Regional Impacts	Number of publications directly relevant to improvement, innovation and development of professional/educational practices/ policy development	732	684	787

Note：
1. All the incomes generated are in HK$.