Annual Report on
Knowledge Transfer Activities 2012/13

Submitted to
The University Grants Committee

Contents

1.   **Background**

The Hong Kong Institute of Education (HKIEd) is undergoing its transformation into a multi-disciplinary university that focuses on education with strong research capacity. The Institute is devoted to the advancement of scholarship learning with knowledge creation (research) and transfer and application (teaching and services). Knowledge transfer (KT) is considered the third pillar of institutional development, and is directly linked to research and teaching. KT activities are central to the Institute's pursuit of research and innovation that not only extend knowledge frontiers but also benefit the education sector and the entire community. The Institute considers KT as a form of service to the community and as a profession, rather than as a tool to generate revenue. With its increasingly robust research culture and proactive approach in KT, the Institute has facilitated educational change, social progress, and human betterment in education and in communities throughout Hong Kong and beyond in other areas.

This report provides an update on KT activities and on the initiatives undertaken by the Institute during the reporting period of 1 July 2012 to 30 June 2013.

2.   **KT Activities in 2012/13**

The earmarked funding of the University Grants Committee (UGC) for KT activities has enabled the Institute to continue supporting and promoting a wide range of KT activities within the reporting year. This additional allocation was utilised for KT activities and initiatives at both the Institute and the academic unit levels through the implementation of 'facilitating' and 'capacity-building' approaches as mentioned in the Institute's Initial Statement.

At the Institute level, the following strategies remain enacted to encourage and facilitate KT activities across the Institute:

2.1 **KT Awards:** The KT Awards scheme has been in place since 2009 in support of 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. Nominated projects from different units are assessed by a selection panel comprising seven academic staff members and one external member (a local secondary school principal). Two KT awards were given to two successful projects in 2012/13. The KT Awards scheme not only aims to enhance KT awareness across the Institute, but also promotes integration of research in KT to maximise the synergy and the mutual benefits derived from scholarly and professional activities.

2.2 **KT Sharing Sessions:** In 2012/13, sharing sessions on KT were organised at the

Institute level, through which staff members were able to share KT success stories and practical experiences. All staff members are welcome to attend the sharing sessions. Four KT sharing sessions were held between December 2012 and June 2013, which the participants found useful and practical.

2.3 **HKIEd Research and Scholarship Website:** The website offers free and convenient services to local education practitioners as a one-stop, online portal to research information and resources. Primary and secondary schools have been invited to subscribe to the website. In the past year, the number of school subscriptions increased by 176. As of 30 July 2013, a total of 454 schools have subscribed the site, including 234 primary and 220 secondary schools. The website has considerably benefited local and international students, teachers and scholars, with the more visible research outputs of the Institute that are readily available on the Internet. The website allows knowledge, efforts, and results of academic research conducted by Institute staff members to be transferred directly to potential users on the Internet, thereby becoming a community channel between the Institute and the public in sharing knowledge and ideas. To enhance visibility of the website, we have also created a link to the HKIEd Research and Scholarship website from that of the Hong Kong Teachers' Centre (http://www.edb.org.hk/hktc/index.aspx?id=20060614162407&lang=e).

2.4 **KT Website:** The KT website (http://www.ied.edu.hk/rdo/KnowledgeTransfer/eng/) continues to function as an important channel for the visibility of KT, thereby demonstrating the breadth of the Institute's KT activities; publicising the Institute's KT policies, guidelines and activities; highlighting showcases; sharing good practices, establishing networks with various internal and external stakeholders (such as researchers, experts, research teams, special interest groups, the school sector, the Education Bureau (EDB), funding bodies, and the business sector); and promoting interaction and exchange of new ideas on KT.

2.5 **KT Database:** This is a user-friendly online system for annually submitted KT data by Institute-level research centres, and concerned academic support units has continued to be used. This system has facilitated the consolidation of KT data and the updating of the central database of all related activities in the KT website. The central database aids in planning, monitoring, reviewing, and promoting KT at the Institute.

At the academic unit level, the Institute continues to provide a KT Matching Grant Scheme for 2012/13 in order to promote ownership, creativity, and innovation in academic units in terms of organising KT activities and initiatives. The Institute supports and encourages staff members, departments, and Institute-level research centres who wish to organise and creatively conduct KT activities according to their own capacity and strengths. The Institute

then promotes a wide range of KT activities as a whole to serve the diverse needs of the community.

In 2012/13, four Institute-level research centres and three Faculties along with their constituent departments, research centres, and professional development centres at the Faculty-level continued to be key academic units in providing the academic community with comprehensive KT activities. The projects supported by the Matching Grant Scheme cover education and non-education fields.

The following is a summary of the different KT activities undertaken by various units and their key beneficiaries during the reporting year. In 2012/13, 11,118 schools, 46,121 teachers, 424,420 students, and 27,763 other stakeholders benefited from these activities. The total number of beneficiaries has been calculated according to the actual man-times and number of schools involved. Some of them have been involved in more than one activity.

Continuing Professional Development courses
A total of 15 Continuing Professional Development (CPD) courses (with 1,472 student contact hours) were delivered in coordination with 7 key partners. Among the beneficiaries of these courses were 1,911 teachers, and 3 principals.

Professional conferences
A total of 4,469 local/international participants benefited from 24 local/international professional conferences that were organised in cooperation with 111 key partners. A total 832 presentations were shown.

Professional seminars/workshops
A total of 255 professional seminars/workshops were organised in association with 258 key partners. These were attended by 14,730 teachers, 1,239 principals, and 8,545 other stakeholders.

Commissioned/contract projects
46 commissioned/contract projects involving 126 key partners were carried out, generating approximately HK$38.1 million in income. Beneficiaries included 7,528 teachers, 1,431 principals, 12,306 other stakeholders, 6,668 schools, 2,896 classes and 56,460 students.

Partnership projects for change, improvement, and innovation
A total of 85 partnership projects were carried out in association with 347 key partners, generating an income of approximately HK$10.1 million. A total of 15,382 teachers, 1,002 principals, 4,672 other stakeholders, 3,007 schools, 7,546 classes and 367,960 students benefited from the projects.

Consultancies

13 consultancy works were conducted by HKIEd staff in relating to specific projects, in which 6,570 teachers, 1,289 principals, 2,240 other stakeholders, 1,443 schools, 3 organisations and 2 advisory bodies benefited.

Engaging professionals in academic/professional programmes
In 35 academic/professional programmes, 16 principals, 89 teachers, and 43 other professionals were engaged. A total of 3,875 participants benefited from these programmes.

Commercialized R&D products
5 commercialised R&D products, which generated a total income of about HK$3,615, were produced.

Social, community, and cultural engagements
229 events were organised, involving public lectures/symposiums/seminars/conferences/exhibitions and speeches to a community audience. In addition, 19 performances and exhibitions of creative works by staff members and students were also organised.

Staff members engaged as members of external advisory bodies
32 staff members were engaged as members of external advisory bodies in various posts, such as chairman, member, consulting editor, associate editor, chief editor, subject expert, and external assessor.

To demonstrate the effects of the activities on the community, case stories on three projects are presented in **Appendix I**.

3. **Building an Environment Enabling for KT**
In the 2012/13 reporting year, the Institute adopted various strategies to create an environment conducive to KT and to encourage senior academics and research/development centres to lead research directives, formulate KT-related projects, and draw in collaborative ventures, exchange, and publication opportunities through their own network. The segments below provide brief descriptions of the current KT-enabling environment in the Institute:

3.1 *Supportive institutional policy on KT implementation*
As mentioned in the last annual report on KT, the Institute has embedded KT in its institutional policies and guidelines, which facilitated the implementation of KT across the Institute with outside partners. Examples of these policies include the following:
- Guidelines for regular appraisal/promotion/re-appointment of academic/teaching staff;
- Staff engagement in outside activities; and
- Visiting professorship scheme.

3.2 *Incentives bringing about genuine cultural and behavioural changes among Faculties to*

become more active in taking up KT

To enhance the internal culture for KT, the Institute has provided funding incentives and fostered public recognition to support the planning and implementation of KT activities and initiatives by different units, which include the following:

- KT Awards Scheme (Section 2.1);
- KT Matching Grant Scheme (Section 2); and
- Regular dissemination of the latest staff developments and achievements in research and KT activities to internal and external stakeholders via different channels, such as the Institute's website and Annual Report, the KT website, the Research and Scholarship website, e-staff bulletins, the e-magazine *Joy of Learning*, press releases, the intranet, and email.

3.3 *Sharing good practices and advanced knowledge*

Good practices and advanced knowledge are continuously being shared among staff members and the community through several activities listed below.

- Organisation of local and international conferences, seminars, and workshops in priority areas:
  - In 2012/13, the Institute held 11 international conferences, which served as platforms for sharing advanced knowledge and good practices in the academic community and the public;
  - The Institute has engaged in various professional support activities/projects with the goal of fostering partnership with schools, sponsoring bodies, and the school community. The activities include two high-profile events, namely, the 2013 Deputy Principals' Forum/Inauguration Ceremony of the Hong Kong Association of Deputy Principals and the China-Hong Kong Principal Forum, which engage local schools in the senior administrative level and provide support to school leaders in overcoming increasing challenges brought by the education reform; and
  - Seminars and workshops were also launched for local primary and secondary school teachers, university teachers, educational researchers, and educational policymakers to promote effective assessment in teaching and learning. Teaching and learning skills, such as quality feedback, self-directed learning, and quality item setting, were harnessed among the participants.
- Holding of KT sharing sessions (see Section 2.2);
- Maintaining and updating of the research and scholarship website, which enhances the visibility of research projects, outputs, and activities of the Institute on the Internet (see Section 2.3);
- Dissemination of good practices and advanced knowledge via different channels, such as the Institute's website and Annual Report, the KT website, the Research and Scholarship website, e-staff bulletins, the e-magazine Joy of Learning, press

releases, the intranet, and email;

- Maintenance and enhancement of the HKIEd Research Repository, which allows academic knowledge, effort, and results of academic research by Institute staff members to immediately reach potential users;

- Maintenance of the Hong Kong Education Bibliographic Database; and

- Management of the Hong Kong Museum of Education (HKME), which is a thematic museum that informs the wider community of the legacy of education; a one-year exhibition on 'Hong Kong's Education Heritage' was launched in October 2012, with support obtained from four major school-sponsoring bodies, including the Catholic Diocese of Hong Kong, the Anglican (Hong Kong) Primary School Council, the Hong Kong Council of the Church of Christ in China, and the Tung Wah Group of Hospitals; at present, the Museum has attracted a total of 10,000 visitors and 127 visiting groups during the year.

3.4 *Capacity-building measures on KT*

The Institute has implemented a number of capacity-building measures to promote and sustain KT as an institutional function at par with research and teaching. These measures include the following:

- Embedding KT as key services in the staff performance appraisal system;

- Positioning the Institute's teaching and services as research-based, with high added value on intellectual capital;

- Organising professional development seminars or workshops for the Institute's staff members, thus enhancing their capacity to engage in high-level KT activities, such as statistical consulting on research design, data collection, data analysis, and result interpretation; these seminars or workshops are provided to all staff members in the campus;

- Consolidating research infrastructure to include Institute-level research centres as well as research and professional development centres at the Faculty level, which work closely with the Graduate School and three Faculties and their constituent departments, transforming the overall research capacity of the Institute;

- Encouraging staff members to engage in various forms of school partnership programs that are crucial in ensuring the two-way flow of KT between the Institute and the academic community; one example is a project by the Department of Chinese Language Studies, which established partnerships with other schools to train teachers on the Chinese Language subject and to develop and improve the curriculum for the subject; and

- Building stronger networks and strategic partnerships with international partners and leading universities; the current network of the Institute has extended to nearly 120 institutions/organisations in 25 countries and regions.

3.5 *Systems for monitoring, evaluating, and assessing outcomes of KT activities*

As part of the reporting mechanism, Faculties, research centres, and relevant academic support units are required to submit annual reports on the implementation of their respective KT activities, including data on a list of quantitative outcome indicators specific to their key KT activities. A system for the online submission for annual KT reports was adopted to help them fulfil this requirement, which aims to consolidate KT data and update the central database of KT activities in the KT website. The central database aids in the planning, monitoring, review, and promotion of KT at the Institute. The Institute's KT implementation progress will be reported to the Academic Board by September 2013.

Furthermore, to ensure the proper use of funds, commissioned or KT project partnerships funded by external grants are being monitored and evaluated in accordance with their respective guidelines. Evaluation forms were distributed to participants in professional development courses, conferences, seminars, and workshops to solicit their feedback for self-reflection and improvement purposes.

Google Analytics has been utilized to measure and evaluate traffic in the HKIEd Research Repository website. Total visits to the Repository increased from 93,908 in 2011/12 to 120,606 in 2012/13, indicating 28% annual growth. The monthly average visits increased from 7,826 to 10,050 visits. In 2012/13, 73% of the visits came through search engines.

With regard to the demographic characteristics of the visitors in 2012/13, the Repository recorded visitors from China, Taiwan, the US, the UK, Australia, and Canada. The number of visitors improved from 36,492 in 2011/12 to 51,249 in 2012/13, indicating 40% annual growth. Foreign traffic accounts for about 40% of total visits within the reporting period. More in-depth analyses on content pages and viewing time were also conducted to monitor and evaluate the outcomes.

4. **Performance Measurement and Key Performance Indicators (KPIs)**

The outcomes of KT activities conducted by different units in the Institute were closely monitored using KPIs. As stated above, Institute-level research centres, and relevant academic support units were required to submit annual reports on the implementation of their KT activities. These reports included data on the list of KPIs specific to their key KT activities. KT activities placed under evaluation in 2012/13 were categorised as follows:

- Continuing Professional Development (CPD) courses
- Professional conferences
- Professional seminars/workshops
- Commissioned/contract projects
- Partnership projects for change, improvement, and innovation
- Consultancies

- Professionals engaged in academic/professional programmes
- Commercialized R&D products
- Publications with local and regional effects
- Staff engaged as members of external advisory bodies
- Social and cultural engagements

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 in recent years. Such progress can be seen in the obtained KPIs detailed in **Appendix II**, which also shows the changes in the number of beneficiaries, key partners, and other KPIs for KT activities during the past year. Most of the figures show positive growth from the periods 2011/12 to 2012/13. Examples of such progress are the 'number of schools benefited', which increased by 15.2% (from 9,654 in 2011/12 to 11,118 in 2012/13); the 'number of classes benefited', which increased by 44.1% (from 7,247 in 2011/12 to 10,442 in 2012/13); the 'number of principals benefited', which increased from 4,889 in 2011/12 to 4,964 in 2012/13; the 'number of students benefited', which increased by 7.3% (from 395,625 in 2011/12 to 424,420 in 2012/13); the 'number of teachers benefited', which increased from 46,102 in 2011/12 to 46,121 in 2012/13. Other indicator figures had also increased in 2012/13 as compared to those in 2011/12, such as the 'number of other professionals engaged' (increased by 53.6%, from 28 in 2011/12 to 43 in 2012/13), and the 'number of participants benefited' (increased by 16.7%, from 3,320 in 2011/12 to 3,875 in 2012/13) in the Institute's academic/professional programmes.

The figures for some KPIs decreased in 2012/13 as compared with those in 2011/12. In particular, 2012/13 exhibited a decline in the 'number of other stakeholders benefited', the 'number of organizations benefited', and the 'number of participants in professional conferences'. As mentioned in the last annual report on KT, staff members were burdened with the tasks related to the implementation of the 334/335 Curriculum and of the double-cohort year, as well as those related to the preparation of the Research Assessment Exercise for 2014. Staff members were also engaged in Faculty restructuring due to the changing role of the Institute and the changing context of tertiary education in Hong Kong. Unsurprisingly, the level of performance of some categories of KT activities in 2012/13 has been affected. These can be attributed to factors that include changes in educational policy and environment, bidding opportunities for commissioned projects, completion of some large-scale KT projects, and transfer-out of some KT projects due to the departure of project investigators.

Regarding categories of KT activities specifically undertaken by staff members of the Institute, the percentage change on individual KPIs between 2011/12 and 2012/13 is presented in **Appendix III**. Though the generation of profit from KT activities is not the priority of the

Institute, in comparison with building research capacity and effect, the 'income from partnership projects' increased by 73.8% and the 'income from CPD courses' by 129.2%.

Among the different categories of KT KPIs, data on the 'number of publications with local and regional impacts' for 2012/13 will be captured by the Common Data Collection Format (CDCF) exercise. These data will be provided to UGC by November 2013, in accordance with the normal CDCF work schedule.

5. **Foreseeable Risks Leading to Possible Underachievement of KT**

In the coming year, the Institute will face certain challenges and risks that may affect its performance in implementing and overseeing the progress of various KT activities. The main concern is time constraint contributed by the busy schedule of staff members in teaching and research, who may not find time for the conduct of KT initiatives. The efforts and energy of staff members are focused on preparations for the 2014 Research Assessment Exercise, Academic Development Proposal (ADP) for 2015-18, and applications for Programme Area Accreditation (PAA) for non-education disciplines. These competing priorities will require a considerable amount of time from staff members, thus affecting their efforts in participating in KT activities.

6. **Concluding Remarks**

As the Institute is an evolving model of a university with the societal mission of contributing to life-long learning and human betterment in Hong Kong and in other areas, it will continue to promote applied research for improving teaching and learning, and for developing professional practice, which has academic, curriculum, policy, and wider social effects. Given the institutional focus of KT on capacity building, collaborative research opportunities, integration with research and teaching and partnership building for education development and professional enhancement, attaining profits from KT activities is evidently not the priority of the Institute.

In moving forward, despite foreseeable challenges, the Institute will continue to provide a supportive and sustainable environment for the development of the KT culture, with concerted efforts of staff members at all levels in implementing a wide range of KT activities. It is expected that the integration of research, teaching, and KT activities of staff members will continue to benefit the school sector and the wider community.

Impact Case History
From the Assessment Research Centre (ARC)

(i) Project Title
Optimizing Assessment Feedback using SP Xpress ® (善用SP-特快電子報告優化評估反饋計劃)

(ii) Name of Principal Investigator
Professor Magdalena Mo Ching MOK

(iii) Summary
Optimizing Assessment Feedback using SP Xpress ® (善用SP-特快電子報告優化評估反饋計劃) is a donation project supported by Hong Kong Education Publishing Limited and United English Publishing Limited. The project aims to enhance teaching and learning in schools through the provision of assessment-generated diagnostic feedback using the newly developed SP Xpress package.

The student-problem chart (SP chart) generated by the SP Xpress package provides teachers with information about each student's academic performance. The information includes the number of multiple-choice items that a student correctly answered (MC), the number of correctly answered constructed-response items (CR), the total number of correctly answered items (TOTAL), his or her modified caution index (student MCI) and performance (Performance), and his or her student type classified according to the student's MCI (Type). Teachers can inspect the information to obtain a better understanding of the knowledge of each student.

The SP chart also displays item information that includes the number and percentage of students who provided correct (scored as 1) and incorrect (scored as 0) answers for constructed-response items, the frequency and percentage of choice for each option of the multiple-choice items, the item P-value (i.e., the ratio of students who correctly answered the item), the MCI, and the type of item according to its MCI. Teachers can refine the items used in future assessments.

MC/Blank	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC	MC				
Key:	A	B	A	C	C	C	A	B	B	D	C	C				
Item	Q5	Q4	Q10	Q12	Q1	Q3	Q7	Q11	Q2	Q8	Q9	Q6	TOTAL	%	MCI	Type
S29	+	+	+	+	+	+	+	+	+	+	+	B	11	91.7	0.0	A
S7	+	+	+	+	D	+	+	A	+	+	+	+	10	83.3	0.6	B
S11	+	+	+	+	+	+	+	+	+	+	A	A	10	83.3	0.0	A
S16	+	+	+	+	+	+	+	C	+	+	+	A	10	83.3	0.2	A
S21	+	+	+	+	+	+	+	+	+	C	A	+	10	83.3	0.2	A
S2	+	+	+	+	B	+	+	+	+	A	+	A	9	75.0	0.3	A
S25	+	+	+	+	+	+	+	A	+	C	+	B	9	75.0	0.1	A
S27	+	D	+	+	+	+	D	+	+	+	A	+	9	75.0	0.4	B
S28	+	+	+	+	+	+	+	+	+	C	A	A	9	75.0	0.0	A
S1	+	+	+	+	+	+	D	+	D	+	A	B	8	66.7	0.1	A
S5	+	+	C	+	+	+	D	+	A	+	+	B	8	66.7	0.3	B
S9	+	+	+	+	D	D	+	D	+	+	+	B	8	66.7	0.4	B
S13	+	D	+	+	+	+	+	+	A	C	+	B	8	66.7	0.2	A
S19	+	+	+	+	D	+	D	+	+	+	A	A	8	66.7	0.2	A
S4	+	+	C	+	D	+	+	+	C	C	+	B	7	58.3	0.3	B
S6	+	+	+	+	+	D	+	C	C	+	B	A	7	58.3	0.2	A
S10	+	+	+	+	+	D	D	C	+	C	A	+	7	58.3	0.3	A
S14	B	D	+	+	+	+	D	+	+	C	+	A	7	58.3	0.5	B
S18	+	+	+	+	+	+	+	C	A	C	D	B	7	58.3	0.0	A
S20	+	+	+	+	+	+	C	+	D	C	A	B	7	58.3	0.0	A
S26	+	A	+	+	+	+	+	D	+	C	A	A	7	58.3	0.1	A
S30	+	+	D	D	+	+	C	+	+	A	B	+	7	58.3	0.4	B
S8	+	D	+	B	+	+	+	C	C	+	B	A	6	50.0	0.3	A
S22	+	+	B	+	+	+	D	+	A	C	D	D	6	50.0	0.1	A
S3	+	+	+	A	+	D	C	D	C	C	A	+	5	41.7	0.3	D
S17	+	+	C	A	+	+	C	+	C	C	A	B	5	41.7	0.1	D
S23	+	+	+	A	D	D	C	A	D	+	A	+	5	41.7	0.4	C
S15	B	D	B	D	B	A	+	C	C	+	+	+	4	33.3	1.0	C
S12	+	D	+	+	B	B	C	C	C	C	D	B	3	25.0	0.0	D
S24	+	+	C	D	+	D	D	A	C	A	A	D	3	25.0	0.0	D
% of A	93.3	3.33	76.7	10	0	3.33	53.3	13.3	13.3	10	43.3	30				
% of B	6.67	76.7	6.67	3.33	10	3.33	0	53.3	50	0	10	36.7				
% of C	0	0	13.3	76.7	73.3	73.3	20	23.3	26.7	46.7	36.7	26.7				
% of D	0	20	3.33	10	16.7	20	26.7	10	10	43.3	10	6.67				
% Miss	0	0	0	0	0	0	0	0	0	0	0	0				
Item MCI	0.33	0.34	0.24	0.11	0.41	0.12	0.19	0.25	0.06	0.32	0.27	0.51				
Item P-value	0.93	0.77	0.77	0.77	0.73	0.73	0.53	0.53	0.50	0.43	0.37	0.27				
Item MCI Type	B	B	A	A	B	A	A	A	A	C	D	C				
Pt-Bis	0.12	0.08	0.25	0.48	-0.05	0.45	0.26	0.15	0.52	0.04	0.12	-0.27				

The student-problem chart (SP chart)

Twenty-one workshops were organized from January 2011 to January 2013 to teach local teachers, university students, and government officials in education-related industry on the effective use of the SP Xpress package. Approximately 1,500 copies of the book entitled, 《優化學習導向評估之 SP Xpress version 2.2》, were also published to further promote the assessment package.

(iv) Underpinning Research

The SP chart was originally created by Takahiro Sato in the 1970s. This learning assessment tool was then introduced by Harnisch to students in the United States and Hong Kong in the early 1980s. Further applications of the SP chart can be found in Chacko (1998), Dai et al. (2005), Dinero and Blixt (1988), Ngan (2011), Yu (2002), and others. The SP chart uses a number of indices, including the disparity index, homogeneity index, item-modified caution

index, and student-modified caution index, to diagnose student responses to tests (Harnisch and Linn, 1981). The SP chart also carries diagnostic information regarding the extent to which each assessment item attracts normal or aberrant response patterns from the candidates.

(v) References to the Research

Mok, M. M. C., Lam, S. M., Ngan, M. Y., Yao, J. J., Wong, M. Y. W., Xu, J. K., & Ting, S. Y. C. (2012). Student-Problem Chart: An Essential Tool for SLOA. In M. M. C. Mok, (Ed.). Self-directed Learning Oriented Assessments in the Asia-Pacific, pp. 203–221. New York: Springer. ISBN 978-94-007-4506-3 (DOI 10.1007/978-94-007-4507-0)

(vi) Corroboration of Impact or Benefit

Twenty-one SP Xpress workshops were organized from January 2011 to January 2013. The workshops attracted over 550 participants from local primary schools, secondary schools, and universities, including local teachers and students at Hong Kong Institute of Education and The Hong Kong Polytechnic University. Officials of the HK Education Bureau, officials and teachers of HuaDu Education Bureau, Guangzhou, researchers of the College of Foreign Studies of Jiaxing University, and members of the Tianjin Education Steering Committee also participated in the workshops.


SP Xpress workshop

Workshop participants were provided with a step-by-step training on the use of the SP Xpress package, from data entry to chart/indicator interpretation. Quality feedback was then

provided to students, and the items were refined according to the outputs. Each participant received a copy of the book, 《優化學習導向評估之 SP Xpress version 2.2》, which includes a software disc. The participants were encouraged to use SP Xpress in their own schools, and introduce the package to other teachers.

Evaluation forms were also distributed to the participants. Most of the feedback was positive. Roughly 97% of the participants agreed on the effectiveness of workshops in equipping them with professional knowledge and skills. Over 98% of the participants expressed satisfaction with the overall arrangement and content of the workshops.

SP Xpress workshop participants in the Assessment Conference 2013 held on January 15–16, 2013 were asked to share their experiences and opinions on SP Xpress application at their schools/ institutes. The three parallel sessions on SP Xpress discussed the following topics:

- "Facilitating junior English teaching and learning by SP-Xpress and Rasch Model," presented by Ms. Shaobing TANG from Huadu Education Bureau, Guangzhou, Guangdong;

- "Using SP Xpress for assessment data analysis to enhance learning and teaching in the subject of English Language," presented by Miss Zoe CHAN from Lingnan University Alumni Association (HK) Primary School; and
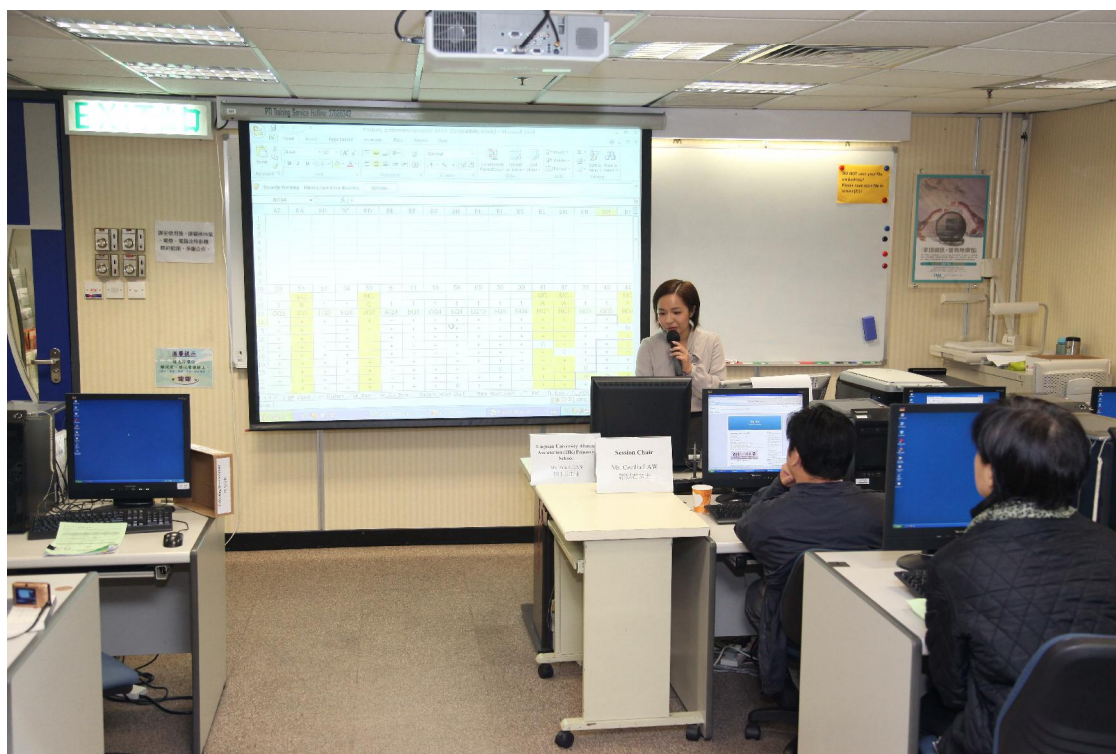
Miss Zoe CHAN, English Panel Chairperson of Lingnan University Alumni Association (H.K.) Primary School, is sharing her experiences on SP Xpress application.

- "Using SP Xpress to analyze students' performance and evaluate assessment items," presented by Mr. Martin Kar Kin MA, Ms. Whitney Tin Chee CHAN, and Mr. William Yiu Man LEE from St Anthony's School.

The presenters utilized the knowledge they learned from the SP Xpress workshops in their own schools/institutes using SP Xpress to analyze item quality and the performance of their students. Their experiences and encouraging outcomes of using SP Xpress could further promote the assessment package to local and non-local educational professionals.

The book entitled, *Self-directed Learning Oriented Assessments in the Asia-Pacific*, with a chapter on SP Xpress that we have written, "Student-Problem Chart: An Essential Tool for SLOA," was also launched at the Assessment Conference 2013.

A book on SP Xpress entitled, 《優化學習導向評估之 SP Xpress version 2.2》, was likewise published. Approximately 1,500 copies of the book were printed, and roughly 700 copies continue to be distributed to workshop participants, partner schools, educational researchers, and institutes. The follow-up questionnaire revealed that over 92.7% of the book recipients believed that the book enabled them to use SP Xpress more effectively.
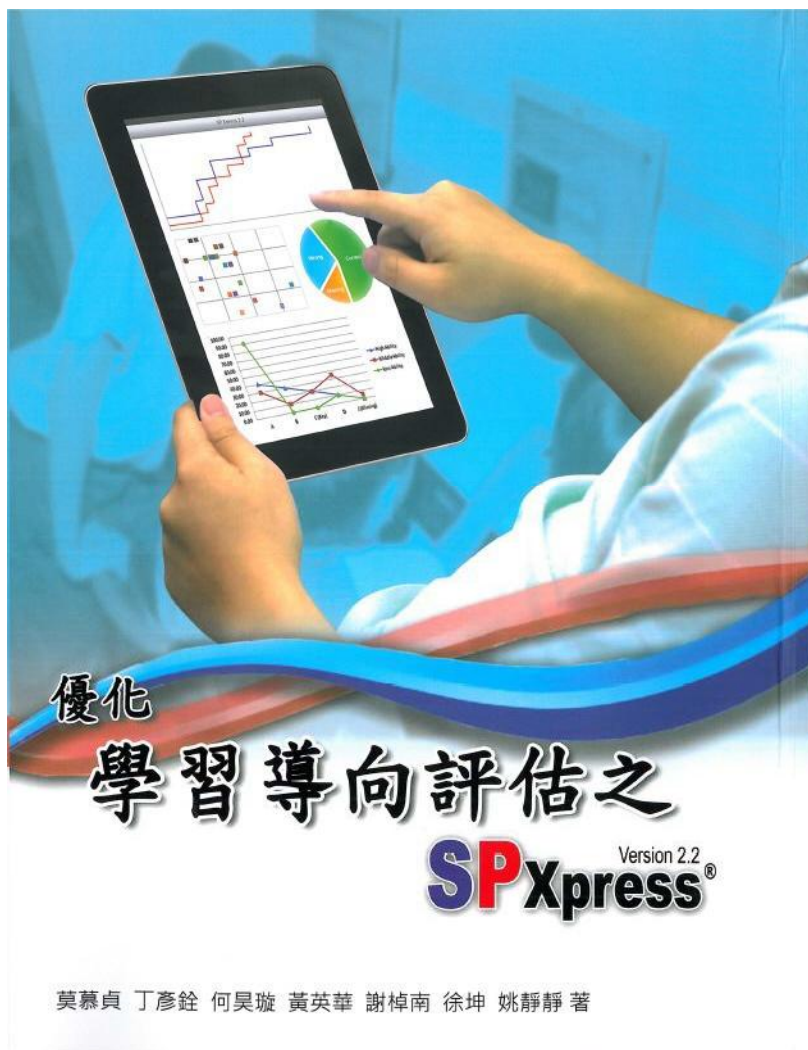
The cover of《優化學習導向評估之 SP Xpress version 2.2》

Impact Case History
From The Joseph Lau Luen Luen Hung Charitable Trust
Asia Pacific Centre for Leadership and Change (APCLC)

(i) Project Title

    Links: Leading learning and schools

(ii) Name of Principal Investigator

    Professor Allan WALKER

(iii) Summary

Purpose

The overall aim of Links is to provide a connected set of experiences which simultaneously builds individual and group leadership capability which contributes to meaningful school improvement.

The purpose of Links is to:

- improve the learning and lives of international school students through building the capacity and performance of school leaders.

- establish the conditions and support necessary for committed school leaders to simultaneously learn to lead and lead to learn.

- nurture the values, knowledge, skills, intelligences and attitudes which combine to help individual and teams of leaders lead successfully.

- connect learned experiential knowledge with formal and research based-knowledge.

Leader learning at different Links experiential learning avenues.

For example, school leaders learn and lead through:

- recognising and pooling talent
- empowering self and others through collective action. developing and spreading social and cultural intelligence.
- having and spreading passion.
- possessing and sharpening pragmatic management skills.
- feeling valued and building esteem.
- finding and nurturing investigation of and reflection on learning.
- empowering self and others through collective action.

School connection

Each participating school nominates a leader from within the school to work with participants from their school to maximize the flow of knowledge from Links deeper into the school.

Learning configurations

Links is structured around: (i) individual leaders, (ii) Learning Alliances, (iii) Learning Precincts, and (iv) a Learning Cohort.

Individual participants are organized into a Learning Alliance (three leaders from the same school and one senior leader from another school). Learning Alliances are grouped into larger structures called Learning Precincts. All precincts taken together form the overall Learning Cohort.

Allan joined the Links Alliance Learning.

Links leaders link together.

Key learning outcomes: Platforms, Portals, and Projects

Three formal outcomes frame learning across Links. These comprise both the processes and outcomes of learning. As such, they come together to help leaders develop multiple skills, knowledge, intelligences, and capabilities and to apply these for student good. The three formal outcomes are:

- Personal Leadership Charter (Platform)
  (http://www.ied.edu.hk/apclc/links/Personal Leadership Charter.html)
- Learning Postcards
  (http://www.ied.edu.hk/apclc/links/latest_postcards.html)
- Agency Projects
  (http://www.ied.edu.hk/apclc/links/agency_inquiry_project.html)

The key tangible output of Links is the Agency Project run by each Learning Alliance in their own school, with the assistance of their director. The focus of the project is discussed with the principal and/or their delegate and regular updates are provided by the Alliance. The project focuses on a real issue/problem/intervention confronting the school. The importance of the project must be justified and defended by the Learning Alliance. In short, it is expected to make a noticeable difference.

Links graduates presenting their Agency Projects at Links Learning Expo.

(iv) Underpinning Research

Formal knowledge transferred draws predominantly on research generated at the Hong Kong Institute of Education (HKIEd). Knowledge is organized around: Leading Learning, Leading Others, Leading Cross-cultural Teams, Leading Talent, Leading Strategically, Leading for Improved Outcomes.

Knowledge draws on completed and in-training research into multiple aspects of school leadership. This includes two GRF projects (Missing Link I and II) investigating the link between leadership and student outcomes (leadership practices and school conditions); projects commissioned by the International Baccalaureate (IB) investigating leadership and organization in international schools. We also draw on previous GRF projects into Leadership Succession, the Vice-principalship in Hong Kong, and HKIEd-funded projects into middle leadership and international school leadership. Knowledge is transferred through various formats and media.

We draw heavily on our research/writing about effective leader development. This informs both the process and the content of the programme. For example, the way we integrate the power of tacit knowledge with formal knowledge, the use of mentors, school connections, learning networks cross-cultural understanding in leader development. We also use knowledge acquired through two TDGs to inform programme development.

We draw on our 20 years experience of running cutting-edge leader development programmes. In this way we model best practice developed through HKIEd programmes. This supports our belief that knowledge transfer is not only about the sharing of formal, research-based knowledge, but also about modeling the best ways to deliver and facilitate learning which makes a difference in the community.

(v) References to the Research

Details of publication and research projects available upon request.

(vi) Corroboration of Impact or Benefit

- The programme, in its third year, is drawing to a close. The following outcomes have been delivered in line with set purposes (formal evaluations are available):
- The programme has directly impacted 106 school middle leaders matched with 44 senior leaders across 20 schools. Knowledge generated (through projects and other learning outcomes) has impacted over 1,500 teachers and their students.
- Completed Inquiry projects have lead to major improvements in school structures and student learning within and across schools (see list of projects completed at *www.ied.edu.hk/apclc/links/agency_inquiry_project.html*).
- Participants have designed, refined and applied their personal leadership platforms and expectations and publically presented these to principals and colleagues. Platform development has increased understanding, self-leadership and laid a foundation for capacity enhancement.
- The programme has highlighted the importance of tacit knowledge through the purposeful transfer between middle and senior leaders and teachers; and between HKIEd academics and scholar-practitioners.
- The programme has embedded professional learning and support networks among leaders and schools. As such, it helped initiate a trusting and professionally supportive learning culture which endures beyond the programme. The network sustains professional learning and provides emotional support.
- The programme has provided multiple opportunities for leaders to learn from prominent academics. Knowledge from research conducted and published at HKIEd has formed the

bulk of the formal input. This provides both formal (empirically-based) knowledge and creative stimulus.

- The programme is specifically for middle leaders in Hong Kong international schools It therefore positions HKIEd firmly as the leader in this area.
- The purposeful linking of formal and tacit knowledge through data collection, application, and reflection has scaled up leader capacity within and across schools.

(vii) References to the Corroboration of Impact or Benefit

The programme has made a significant contribution to school leader development in Hong Kong, and hundreds of leaders and teachers and thousands of students benefitted from this programme. The success of the programme is evident in its popularity among middle leaders and the continuing involvement of busy senior management in international schools. Although participation in Links is entirely voluntary, the great majority of leaders elect to join (it is quite competitive). A breakdown of the enrollment for current and over the past two years is presented below.

	2010-11		2011-12		2012-13	
	Total Coaches	Total Leaders	Total Coaches	Total Leaders	Total Coaches	Total Leaders
Primary School	8	21	7	19	8	18
Secondary School	7	15	7	15	7	18
Total	15	36	14	34	15	

- Promotions. Research by the sponsoring body has indicated increased promotion success for people completing the programme.
- Spread. Many go on to leadership positions overseas, present their work from the programme at different professional events, and become invited presenters to run school-based workshops.
- MA. The majority of students enrolling in the IEMA have come from this programme or its predecessor, "Leading Upstream."
- Recognition: HKIEd is the only local institution engaged to train leaders in international schools.
- As stated in its Mission, HKIEd serves the community through research that contributes to the advancement of knowledge and innovation in education, and through collaboration with schools and other educational organizations that contribute to the development and improvement of educational policies and practices. Therefore, our

corporate responsibility is to contribute to both theory and practice in Hong Kong education. Links contributes to the development of competent values-driven leaders who can create a satisfying and productive work environment for teachers and an effective learning environment for students.

- The programme assembles a team of outstanding and experienced scholar practitioners who are committed to serving the local educational community. They contribute through serving as mentors, coaches, and counselors. Their willingness and devotion to the programme sets a fine example for all leaders and helps foster the sense of social responsibility amongst the education community. The leaders who have benefited from the programme have become an important resource for building better schools in the future.

- The intentional construction of the learning network maximizes the possibility that the learning coming out of Links spreads beyond the participants and endures well beyond the programme. Therefore, Links meets the commitment of HKIEd to promote life-long learning among the professional it works with.

Impact Case History
From the Faculty of Education and Human Development (FEHD)

(i) Project title

Promoting Good Practices in Teaching through AClass

(ii) Name of Principal Investigator (if applicable)

Dr. Lam Bick Har

(iii) Summary

The objectives of this study are as follows:

- To promote active engagement in action research projects and teaching experimentations
- To construct a means for teachers and educators to share and exchange innovative practices that would form a community of practice
- To facilitate knowledge transfer by forming a group of practitioners who are interested in sharing pilot-tested teaching and research materials
- To promote collaboration and synergy among teachers across the school and higher education institution sectors

This project aims to support the ongoing development of a professional development website that serves to provide research-based, pilot-tested teaching materials and collaborative action research output. The website, known as Active Classroom (AClass, http://www.ied.edu.hk/aclass/), was set up in 2006. Since then, AClass has been used by school principals, teachers, university professors, and the Institute for Teacher Training. The project was supported by the Knowledge Transfer (KT) fund of 2010–2011, during which substantial developments were achieved in enriching the website conten and its networking with the school community. The 2012–2013 project is named "Enhancing Teaching Excellence through AClass", it further extends its audience from the school community to the higher education community. More courses have been added to the website to accommodate the needs of educational development in a new direction.

(iv) Underpinning research

Two concepts, the Community of Practice (CoP) and Knowledge Transfer (KT), have led to the development of AClass, an online platform through which both school and university teachers share ideas and teaching methods to improve student learning.

A CoP is a group of people who have developed an identity defined by a shared domain of

interest. KT involves the process of systematically identifying, acquiring, creating, representing, distributing, and maintaining knowledge.

AClass aims to bring teachers together for professional learning by providing all teachers with free access to pilot-tested materials and exemplars contributed by practitioners in schools and higher education institutions. Being a member of AClass implies having the commitment to improve teaching for the sake of all students. AClass members thus create a shared competence that distinguishes them from other people. By disseminating artifacts and methods of teaching and research over an e-platform, tacit knowledge is made explicit and then imparted to its members. During its creation and sharing, knowledge can be learnt, and thus more people would be engaged in innovation and improvements to benefit the society.

As a professional development platform for teachers, AClass promotes constructive pedagogies in an effort to identify the learner as an important agent in the learning process. AClass considers the interests, characteristics, and prior knowledge, of the learners to make learning more meaningful. The concepts and methodology of AClass echo the current reform promoted in both the higher education and school curricula in Hong Kong. AClass provides theories and exemplars on authentic, experiential, and cooperative learning methods, as well as promotes meaningful teaching that helps students actualize themselves through learning.

(v) References to the research
Lam, B. H. (2013). Constructivist learning and teaching. Retrieved from http://www.ied.edu.hk/aclass/ (Theories)

Lam, B. H. (2011). Teacher as Researcher and Teacher Development. In S. N. Phillipson, & B. H. Lam (Eds.), *Learning and Teaching in the Chinese Classroom. Hong Kong: HKU Press* (231-264). Hong Kong: HKU Press.

Supovitz, J. A. (2002). Developing communities of instructional practice. *Teachers College Record, 104(8),* 1591-1626.

(vi) Corroboration of impact or benefit
The Hong Kong Institute of Education community, including students, teachers, and research staff can use the AClass materials to support their studies and professional practices. Staff members collaborate and exchange ideas in the redevelopment process of AClass. The content of AClass could likewise interest trainers and teachers of instruction design and training. Thus, educational communities, governments, and non-governmental organizations that are highly involved in education reform, training, and development may use the courses

of AClass to train local teachers and professionals. The project can realize the purpose of KT by establishing the platform as a mechanism for transfer.

The AClass website was accessed by over 250 users from November 2012 to May 2013. The users included in-service teachers and students who viewed the course materials as well as trainers of governmental organizations.

The participants and trainers in the training program for curriculum leaders in primary school are currently using AClass course materials in discussing classroom innovations and practices for professional development. In-service and prospective teachers use the exemplar lesson and curriculum plans to prepare their supervised classes, and watch the video lessons to gain know-how and skills for their professional development

Over the past two years, local students and in-service teachers in Hong Kong and Mainland China has referenced the AClass site in their teaching projects or classroom-based lessons.

Furthermore, several local schools have participated in the AClass project and benefited from the partnership through the research teaching lessons. Users adapted the materials of AClass in different ways. For example, a school utilized AClass as its professional development organizer and adopts site materials for teachers to further develop their own classroom practices. A professional organization has initiated a discussion with the project leader for collaborative teaching development projects over AClass. These examples indicate the significance of AClass in forming a CoP.

Since the launch of AClass, qualitative responses have been collected from participants, who acknowledged the quality of the materials. Many users have also commended the quality assurance function of AClass. For example, the teachers introduced to AClass in 2011 stated that the site "was very user friendly, the open access nature was facilitative to teacher self-study" and that the materials were "meticulously prepared to guide learners of all stages". In the trial launch of the project last May 2013, AClass was commended as an insightful platform of sharing for both the local community and other regions in China. Formal evaluation data of AClass for the current round would be gathered in November 2013, approximately three months after the launch of the site, to examine the effectiveness of AClass based on its conceptual framework.

(vii) References to the corroboration of impact or benefit
Lam, B. H. (2013). Active classroom: A platform for constructing community of practice and promoting knowledge transfer**.** Retrieved from http://www.ied.edu.hk/aclass/ (About us)

Diagram I: Homepage of Active Classroom: http://www.ied.edu.hk/aclass/

Diagram 2: Publicity Materials of AClass (2013)

Number of Beneficiaries [Note 1] and Other Key Performance Indicators (KPIs)

	Nature of KT Activities involved [Note 2]	2011/12	2012/13	% change (comparing 2012/13 with 2011/12)
Number of advisory bodies benefited	Category (6)	4	2	-50.0%
Number of classes benefited	Categories (4) & (5)	7,247	10,442	44.1%
Number of key partners	Categories (1), (2), (3), (4) & (5)	850	849	-0.1%
Number of participants in professional conference	Category (2)	5,625	4,469	-20.6%
Number of organizations benefited	Category (6)	8	3	-62.5%
Number of other professionals engaged	Category (7)	28	43	53.6%
Number of other stakeholders benefited	Categories (3), (4), (5) & (6)	74,077	27,763	-62.5%
Number of participants benefited [Note 3]	Category (7)	3,320	3,875	16.7%
Number of principals benefited	Categories (1), (3), (4), (5) & (6)	4,889	4,964	1.5%
Number of principals engaged	Category (7)	4	16	300.0%
Number of schools benefited	Categories (4), (5) & (6)	9,654	11,118	15.2%
Number of social/ professional leaders engaged	Category (7)	0	0	NA
Number of students benefited	Categories (4) & (5)	395,625	424,420	7.3%
Number of teachers benefited	Categories (1), (3), (4), (5) & (6)	46,102	46,121	0.0%
Number of teachers engaged	Category (7)	89	89	0.0%

Notes:

1. The number of beneficiaries refer to man-time/school-time, and individuals are counted only once across different beneficiary types for a particular KT 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; (7) Professionals Engaged in Academic/Professional Programmes; (8) Commercialized R&D Products and Intellectual Properties(IPs); (9) Social, Community and Cultural Engagement; and (10) Staff Engaged as Member of External Advisory Bodies.

3. Number of participants refers to the number of students who attended the academic programmes under category (7) of KT activities i.e. Professionals Engaged in Academic/Professional Programmes.

Summary of Key Performance Indicators

Key Performance Indicators for Knowledge Transfer Activities		2011/12 (1 July to 31 June)	2012/13 (1 July to 30 June)	% change (comparing 2011/12 and 2012/13)	Projected Targets 2013/14 (1 July to 30 June)
1	**Continuing Professional Development (CPD) Courses**				
	Number of CPD courses	16	15	-6.25%	16
	Income from CPD courses	$4,156,883	$9,528,980	129.23%	$4,281,589
	Number of key partners	8	7	-12.50%	8
	Number of teachers benefited	1,603	1,911	19.21%	1,651
	Number of principals benefited	2	3	50.00%	2
	Number of student contact hours	--	1,472	--	1,516
2	**Local/International Professional Conferences**				
	Number of local/international conferences	30	24	-20.00%	31
	Income from conferences	$2,162,123	$338,439	-84.35%	$2,226,987
	Number of key partners	128	111	-13.28%	132
	Number of presentations	1,069	832	-22.17%	1,101
	Number of participants benefited	5,625	4,469	-20.55%	5,794
3	**Professional Seminars/Workshops**				
	Number of professional workshops/ seminars	258	255	-1.16%	266
	Income from seminars/workshops	$1,070,610	$959,492	-10.38%	$1,102,728
	Number of key partners	390	258	-33.85%	402
	Number of teachers benefited	14,095	14,730	4.51%	14,518
	Number of principals benefited	1,615	1,239	-23.28%	1,663
	Number of other stakeholders benefited	6,555	8,545	30.36%	6,752
4	**Commissioned/Contract Projects**				
	Number of commissioned/ contract projects	38	46	21.05%	39
	Income from projects	$32,380,284	$38,146,179	17.81%	$33,351,693
	Number of key partners	120	126	5.00%	124
	Number of teachers benefited	8,733	7,528	-13.80%	8,995
	Number of principals benefited	901	1,431	58.82%	928
	Number of other stakeholders benefited	32,211	12,306	-61.80%	33,177
	Number of schools benefited	8,027	6,668	-16.93%	8,268
	Number of classes benefited	6,487	2,896	-55.36%	6,682
	Number of students benefited	165,305	56,460	-65.84%	170,264
5	**Partnership Projects for Change, Improvement & Innovation**				
	Number of partnership projects	80	85	6.25%	82
	Income from partnership projects	$5,803,248	$10,083,442	73.76%	$5,977,346
	Number of key partners	204	347	70.10%	210
	Number of teachers benefited	19,345	15,382	-20.49%	19,925
	Number of principals benefited	1,927	1,002	-48.00%	1,985
	Number of other stakeholders benefited	26,133	4,672	-82.12%	26,917
	Number of schools benefited	1,182	3,007	154.40%	1,217
	Number of classes benefited	760	7,546	892.89%	783
	Number of students benefited	230,320	367,960	59.76%	237,230
6	**Consultancies**				
	Number of consultancies	21	13	-38.10%	22
	Income from consultancies	$2,487,120	$2,096,447	-15.71%	$2,561,734
	Number of teachers benefited	2,326	6,570	182.46%	2,396
	Number of principals benefited	444	1,289	190.32%	457
	Number of other stakeholders benefited	9,178	2,240	-75.59%	9,453
	Number of schools benefited	445	1,443	224.27%	458
	Number of organizations benefited	8	3	-62.50%	8
	Number of advisory bodies benefited	4	2	-50.00%	4
7	**Professionals Engaged in Academic/Professional Programmes**				
	Number of programmes involved	39	35	-10.26%	40
	Number of teachers engaged	89	89	0.00%	92
	Number of principals engaged	4	16	300.00%	4
	Number of other professionals engaged	28	43	53.57%	29
	Number of participants benefited	3,320	3,875	16.72%	3,420
8	**Commercialized R&D Products and Intellectual Properties(IPs)**				
	Number of commercialized R&D products/ IPs	18	5	-72.22%	19
	Income from the R&D products/ IPs	$180,876	$3,615	-98.00%	$186,302
9	**Social, Community and Cultural Engagement**				
	Number of public lectures/ symposiums/ exhibitions and speeches to a community audience	--	229	--	236
	Number of performances and exhibitions of creative works by staff or students	--	19	--	20
	Income from the events (HK$)	--	$786,081	--	$809,663
10	**Staff Engaged as Member of External Advisory Bodies**				
	Number of staff engaged	--	32	--	33
11	**Publications with Local and Regional Impacts**				
	Number of publications directly relevant to improvement, innovation and development of professional/educational practices/ policy development	676	732	8.28%	754