

Using Career Education and Career Services to Enhance Employability: A Case of The Hong Kong Polytechnic University

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The provision of career education to facilitate students' possession of the requisite skills and knowledge relevant to the workplace plays a pivotal role in enhancing students' employability. The Hong Kong Polytechnic University, with a mandate to provide application-oriented education, has a mission and tradition of keeping abreast of the market and community needs to ensure that its students receive top-notch career education and services so that they can secure employment, which they are aspired to, upon graduation and contribute effectively thereafter. This article will look at some major milestones that signify this tradition over the years, from the recognition for professional licensing, to the offering of first batch of degree programs with substantial work-based experience; to the availability of general education short courses for broadening knowledge base; to the launching of summer internships and mandatory outcome-based work-integrated education for providing more experiential learning opportunities; to the introduction of individual developmental profiles and electronic portfolios for developing generic competencies and

showcasing achievements; and finally, to the provision of a multitude of career services for facilitating the matching of talents to the job market. Despite all such endeavors, further critical enhancements still need to be made.

Keywords: career education; career services; enhancing employability

Career Services have been the most established services offered to students in The Hong Kong Polytechnic University (PolyU). The scope and delivery mode have witnessed a great deal of changes in the past decades in view of the changes within the university and the macro environment outside. It is a pity that it has lost track of the documentation of the developmental path over the years. This article will look at some major milestones that help us collate the evidence, though fragmented, of the growth of career services in PolyU.

While offering career services to both employers and students to facilitate the matching of talents to the demands of the job market, our major role is to provide career education — to facilitate students' understanding of self and their motivation in setting clear career goals; to offer guidance for making sound career choices and decisions; and to help them acquire job-hunting skills and implement relevant and effective job-hunting strategies. In a nutshell, the aim is to enhance students' *employability* so that they can secure employment, which they are aspired to, upon graduation and contribute effectively thereafter. A prerequisite for boosting one's employability, we firmly believe, is the acquisition and possession of "a set of attributes, skills and knowledge that all labour market participants should possess to ensure they have the capability of being effective in the workplace — to the benefit of themselves, their employer and the wider economy" (Confederation of British Industry, 2007, p. 6).

Toward the Recognition for Application-oriented Professional Licensing

The Hong Kong Polytechnic was formally established on 1 August 1972, taking over the campus and staff of the Hong Kong Technical College. Its mandate was to provide application-oriented education to meet the community need for professional manpower resources. It started with a much larger student population on part-time mode. Such students were actually working in the field already and their objective was to enhance their professional qualifications. Thus, by and large, the major career directions had been set and the critical task for enhancing employability was to get the necessary recognition for professional licensing.

Students at that time did not have much need in career education. Many might not even need information on job opportunities. The institution had a unique niche in comparison with other higher education institutions and its graduates with technical skills were keenly sought after. Students by and large did not have too much concern about landing a relevant job. For those who would like to develop themselves further, they would be thinking of furthering their studies to get higher professional recognition.

First Degree Programs with Substantial Work-based Experience

In the late 1970s, after a few Technical Institutes were opened to offer programs at technician and crafts levels, the institution started to offer professional programs at a higher standard. In 1983, five programs at degree level were first launched. The students then were mainly school leavers who did not have relevant working experience.

One of the distinctive features of its earlier undergraduate curriculum was the component of solid industrial experience which was in line with

its application-oriented role. The mode of such industrial experience varied from discipline to discipline. For all its engineering undergraduate programs, one-year working experience sandwiched between the second and final year of study was offered. For other disciplines like allied health, social work and hotel management, students had blocks of fieldwork throughout the duration of the program. Such training, an integral part of the curriculum, took place in workplaces, but was managed, supervised and assessed by faculty members of corresponding departments. The articulated outcome was more on discipline-specific application of theory and the transfer of work experience to classroom. During this period, the possession of a degree enhanced by work-based application experience was a very prominent key to employability.

As we had taken in more students directly from secondary schools whose background was getting more diverse, the challenge then was to help them articulate their unique edges. The Student Affairs Office (SAO) started to manage a Careers Information Centre to motivate students to come to receive basic job-hunt training like résumé writing and interview skills. The Centre also provided them with other career services and career-related information like job advertisements, employer information, and prospectuses of various universities (especially overseas ones) to facilitate graduating students to prepare for their careers.

General Education to Complement Professional Study

While the institution was planning to offer more programs at degree and postgraduate level, extensive consultations were made among employers on their expectations. One key feedback was that while its students were very hands-on, the narrow professional focus needed to be expanded.

At that time, the institution did not have any General Education or Liberal Studies program. In 1985, the Academic Board then commissioned

the SAO to pilot on a Complementary Studies program, which was one of the many attempts to expand the horizons of students. A series of non-credit bearing short courses were offered to all students. Participation was on a voluntary basis. It was to add some flavor of general education to complement the technical keynote of its curriculum.

The objectives of these courses were:

1. To broaden students' knowledge base by the learning of new subjects or disciplines.
2. To enhance their understanding of society in general.
3. To enable them to better appreciate the various aspects of Chinese culture.
4. To develop their ability for aesthetic and artistic appreciation.
5. To develop their knowledge in areas useful to their profession or desirable for their adult life.

Courses under the Complementary Studies program were organized around a framework by the following domains of knowledge: Art and Culture; Business, Economics and Management; Chinese Culture and China Studies; Communication; Health Education; History and Geography; Political and Public Affairs; Science and Technology; and Social Science and Personal Development.

The significance of this move was to acknowledge that there were more to do than technical application to enhance the employability of its students. The approach then was to broaden students' knowledge base. The SAO was expected to complement academic departments to help groom students for better employability beside the professional domain.

The challenge at that time was to connect these co-curricular activities to employment. The connection was not an automatic one to

students, employers or even to colleagues in the SAO. Thus, a database of students' co-curricular activities was built and a "Co-curricular Achievement Transcript" was issued to each student so that students could demonstrate to employers that their participation in these activities were recognized and that such activities were intentionally offered by the university.

Summer Internships for Local and Non-local Application

With the approval from the University and Polytechnic Grants Committee for self-accreditation of degree programs, the institution assumed full university status and was named as "The Hong Kong Polytechnic University" in 1994. As time went by, the sandwich placements gradually became optional. Currently, there is only one degree program under the Department of Computing Studies in PolyU with one-year compulsory sandwich placements. Many departments then compressed the duration of training so that it could be completed during the summer break. There were many reasons for such changes, but the most prominent one was that the longer duration of programs was not attractive to potential applicants who tended to equate an extra year of study with higher opportunity cost.

In 1997, PolyU started the "Preferred Graduate" development program, a summer internship program offered in partnership with key employers. Capitalized on its excellent network with employers, PolyU signed memorandums with its key industrial partners to arrange for relevant internships during the summer months. It was to reinstate its commitment in providing application-oriented learning. The SAO was commissioned to coordinate the program, which marked the beginning of the SAO's involvement in experiential learning.

In 1998, PolyU started to offer internship opportunities outside Hong Kong: to cities in the Chinese mainland and to different countries all over

the world. It was an attempt to add another dimension of cultural exposure to the internship experience. Exposure in the Chinese mainland has become relevant after Hong Kong's return to China. The internship helped students understand more about the Chinese mainland and prepare them for their future employment which would by and large have substantial dealings with the mainland.

The challenge of the SAO during that stage lied in the lack of information and connection in the Chinese mainland. The SAO started to experiment on various models of collaboration like working through agents, partner universities or government departments to open up more opportunities. Making offshore trips suddenly became a regular feature of colleagues of the careers team. Nevertheless, the outcome was fruitful — PolyU were among the first pioneers to invite practitioners from the mainland to have attachments with its career and counseling services and to offer in-house sharing with its staff and students.

Generic Competencies for All-round Development

Articulation of Generic Competencies in the Second Strategic Plan of PolyU

Since the early 1990s, generic competencies — transferable, multifunctional knowledge, skills and attitudes that people could learn and develop in different ways and learning environments, and apply across a variety of job and life contexts — have been capturing growing attention all over the world. The urgency in developing generic competencies in recent years is mainly fueled by employers from various industries. Rapid changes in technology and global competition prompt employers to look for all-round employees who demonstrate teamwork, problem-solving ability, flexibility, initiative, and the capacity to undertake many different tasks and handle information (National Centre for Vocational Education Research, 2003). Proficiency in the broad range

of generic skills has become the main requirement for the modern worker (Department of Education, Science and Training, 2002).

Australian Technology Network (2000) named such competencies as “graduate attributes,” and defined them as “the qualities, skills and understandings a university community agrees its students would desirably develop during their time at the institution and, consequently, shape the contribution they are able to make to their profession and as a citizen” (para. 1). In Canada, the Conference Board of Canada (2000) introduced the concept of “Employability Skills 2000+,” and described such competencies as “the skills you need to enter, stay in, and progress in the world of work — whether you work on your own or as a part of a team.”

In the Strategic Plan for 2001–2002 to 2006–2007, with the theme of “Creating a Competitive Edge for our Students and the Community,” PolyU made an attempt to spell out the generic competencies that its graduates are expected to master for standing out from the crowd.

Strategic Objective One has been “To enhance the all-round development of students, particularly in the areas of global outlook, critical and creative thinking, social and national responsibility, cultural appreciation, life-long learning, biliteracy and trilingualism, entrepreneurship and leadership” (Hong Kong Polytechnic University, 2001). Putting the making of all-round graduates the first priority of PolyU gave a very strong signal to key stakeholders about its commitment in this direction. The profile of the “preferred graduate” is in line with its motto promulgated in 2000: To learn and to apply, for the benefit of mankind.

In subsequent years, all departments reviewed their programs and conducted mapping exercises to ensure that the different generic

competencies had been covered in the syllabus. Curriculum mapping is a means to make explicit how such attributes are addressed in the conduct and content of a given course or program. It is an excellent starting point to align the course design with its expected outcomes.

The SAO's "SPECIAL" Framework of All-round Development

The SAO has been one of the departments that responded most enthusiastically to the call of making the development of generic competencies an overt outcome and relating that to students' competitive edge. This proved to be a timely response to the expectations of employers upon PolyU graduates. Numerous reports have recognized that a strong disciplinary knowledge does not in and of itself guarantee graduate employment (Crebert, Bates, Bell, Patrick, & Cragolini, 2004, p. 148). Now that we were confident of the solid professional grounding, stakeholders within PolyU were now fully aware that the employability agenda should move into the less charted seas of soft skills and personal qualities.

From Table 1, it is apparent that the generic competencies PolyU pledges are very much in line with the attributes and skills considered as components of employability in different countries.

To make the picture more sophisticated, the SAO saw its role as the "sole agent" in the PolyU community to advocate wellness in physical, intra- and inter-personal domains. Thus, it took the initiative to supplement a few more attributes to complete the big picture of being all-round.

In order to help students understand the competencies that PolyU would like them to develop, and the way to groom them as all-round preferred graduates, the SAO had also come up with a SPECIAL framework of developmental domains grounded on both Chinese

Table 1. Generic Competencies/Attributes Proposed by the Confederation of British Industry, the Department of Education, Science and Training (DEST), and PolyU

Generic attributes proposed by the Confederation of British Industry (2007) (United Kingdom)	Attributes proposed by DEST (2002) (Australia)	Generic competencies of an all-round graduate proposed by PolyU (2001)
<ul style="list-style-type: none"> • Self-management 	<ul style="list-style-type: none"> • Self-management 	<ul style="list-style-type: none"> • Healthy lifestyle • Emotional intelligence and psychological wellness • Social and national responsibility
<ul style="list-style-type: none"> • Teamworking • Business and customer awareness 	<ul style="list-style-type: none"> • Teamwork 	<ul style="list-style-type: none"> • Teamwork • Global outlook • Interpersonal effectiveness
<ul style="list-style-type: none"> • Problem solving 	<ul style="list-style-type: none"> • Problem solving 	<ul style="list-style-type: none"> • Problem solving • Critical thinking • Creative thinking
<ul style="list-style-type: none"> • Communication and literacy 	<ul style="list-style-type: none"> • Communication 	<ul style="list-style-type: none"> • Communication
<ul style="list-style-type: none"> • Positive attitude 	<ul style="list-style-type: none"> • Planning and organizing • Initiative and enterprise • Life-long learning 	<ul style="list-style-type: none"> • Emotional intelligence and psychological wellness • Social and national responsibility • Leadership • Entrepreneurship • Life-long learning

philosophy and current needs (Fung & Lee, 2007). Individual generic competencies would then be nested under the different domains of this umbrella concept. This framework helps students visualize the idea of “all-round” and to link up the attributes. SPECIAL stands for:

- **S**ocial development
- **P**hysical and psychological development
- **E**thics
- **C**areer development
- **I**ntellectual development
- **A**esthetics
- **L**earning

Outcome-based “Work-integrated Education”

In the strategic plan of PolyU, another bold step was to launch mandatory work-integrated education (WIE) as a graduate requirement for all degree graduates. The policy was implemented from the intake cohort of 2005. The objectives of launching mandatory WIE are:

1. To reaffirm the positioning of PolyU as a university offering academic programs in a professional context.
2. To strengthen the competitive edge of PolyU’s professional-based programs with a view to attract more quality students and to enhance the employability of students.
3. To help achieve Strategic Objective One of enhancing the all-round development of students.

The second objective of using working experience to enhance students’ employability gives an additional demand beyond the internship practice in earlier years that focused on professional know-how. The third objective also links working experience with all-round development. Workplace is surely a good platform for practicing the attributes, skills

and knowledge that employers would like graduates to demonstrate, and many of such elements have been articulated in Strategic Objective One.

The Institutional Project of “Self-assessment of All-round Development”

The current trend in the education arena is such that much emphasis has been placed on being outcome-based (Biggs, 2003). Hence, in 2006, the Learning and Teaching Committee of PolyU commissioned the SAO to lead a project committee of educational experts and faculty members to develop an assessment tool — the Self-assessment of All-round Development (SAARD) Inventory. It is to articulate the expected learning outcomes related to the generic competencies that the university pledges, to collect evidence to gauge the value added, and to ultimately help students learn and gain the said outcomes. A series of cross-validation studies involving thousands of participants from all faculties and departments of PolyU at different levels of study were conducted to examine the reliability and validity of the instrument.

After conducting the cross-validation studies, the final version of the 56-item SAARD Inventory was found to contain 11 reasonably meaningful and reliable factors, including: Cognitive and Learning Abilities, Communication, Cultural Appreciation, Emotional Intelligence and Psychological Wellness, Entrepreneurship, Global Outlook, Healthy Lifestyle – Health Responsibility, Healthy Lifestyle – Physical Activity, Interpersonal Effectiveness, Social and National Responsibility, and Working in Groups (Fung, Lee, Kwan, & Wong, 2006; Fung, Lee, & Wong, 2007).

Known group validity was also explored in the cross-validation studies by testing the hypothesis that certain subgroups of students would give higher ratings along particular competencies than would others. Results generated from independent-samples *t* tests were in general

consistent with the expected patterns of ratings. For instance, it was found that as expected, those studying “Business,” owing to their training background, did rate themselves significantly higher than all other students in their development along Entrepreneurship (defined as “the ability to discover, create and catch new opportunities and the willingness to take prudent risk for new prospects”). And as a result of their physical prowess, as expected, male students reported a higher level of engagement in physical activities and exercises (an indicator of Healthy Lifestyle in the SAARD Inventory) than their female counterparts. The results yielded evidence of discriminant validity for some of the subscales of the SAARD Inventory. Taking together, the aforementioned initial evidence lent reasonably good support to the construct validity of the SAARD Inventory.

Outcome Assessment Model and Its Limitations

The outcome assessment model of PolyU is very straightforward. It let students assess themselves using the SAARD Inventory upon admission (i.e., pre-test) and then do it again upon graduation (i.e., post-test). The differences in ratings will, to a certain extent, reflect the developmental outcomes along the said generic competencies after the PolyU learning experience. Up to now, PolyU has collected data from a total of nearly 19,000 students, and established norms for its newly admitted freshmen as well as graduates taking full-time bachelor’s degree and higher diploma programs respectively.

For the cohorts of graduates from 2009 to 2010, 2,238 degree graduates and 1,356 sub-degree graduates who had also done the assessment upon admission could be identified. Thus, we could further compare their mean ratings given at the two temporal points (i.e., pre-test versus post-test) using repeated measures analyses. The results indicated that there was significant increase in students’ ratings along most of the generic competencies upon graduation. The most pronounced difference

was observed in Communication (defined as “the ability to apply oral and writing skills to communicate clearly, concisely, and effectively with others”). However, no significant difference could be found in Social and National Responsibility (defined as “the willingness to concern over ethical/moral issues, to take part in voluntary social services to help those in need, and to care about one’s own country”).

To disseminate the findings of the SAARD survey on a regular basis, annual reports have been generated at the institutional level to inform the senior management regarding the trend of student development. Faculty and departmental profiles have also been compiled to inform faculty/departmental colleagues as to how well their students have been faring. A lot of collaborative projects with various departments have been established subsequently. Internally, the findings would also inform the university of how well its own developmental programs may help in grooming students to achieve intended learning outcomes.

At the individual student level, all students who have participated in the SAARD survey upon admission will have access to their own developmental profiles in generic competencies from day one, and thus will be more aware of their own strengths and weaknesses even at this early stage of their university life. Subsequently, it is easier to engage students in planning for their further enhancement.

The outcome-based model is admittedly simplistic and we are aware of its “inadequacies.” The difficulties that come with the interpretation of data from self-reported surveys like the SAARD survey may have raised the eyebrow of some. Students’ growth during their spell at PolyU is, strictly speaking, a compound result of learning experience undergone both inside and outside PolyU, as well as of the natural maturation process. So we need to be cautious against reading too much into the results regarding the pre-test–post-test comparisons of ratings from

surveys as being indicative of the value-addedness of university education. In the future, quasi-experimental studies involving comparisons with equivalent control groups may have to be conducted so as to delineate more clearly the impact of university education.

Besides, “employability” is not built upon a bag of loose attributes. It stems from a holistic compound of generic skills and the requisite capacity to deploy them seamlessly and appropriately to work situations. Thus, students’ responses to the items which tap into various generic competencies separately during surveys may do good to conceal rather than unearth the totality and fluidity of their overall employability. Hence, the natural next step would be to triangulate students’ ratings along selected SAARD subscales with their relevant scores/ratings given by their teachers, their internship supervisors and/or subject experts on the basis of their in-class and/or internship participation processes as well as their actual performances in group projects, group competitions and/or internships so as to further validate the SAARD Inventory, to reveal discrepancies, and to broaden understanding of students’ full potential in employability.

Developmental Planning with Electronic Portfolios

The United Kingdom’s policy of implementing personal development planning (PDP) in higher education (HE) does inspire us with a lot of insight. PDP is seen as “a structured and supported process undertaken by a learner to reflect upon their own learning, performance and/or achievement and to plan for their personal, educational and career development. ... Effective PDP improves the capacity of individuals to review, plan and take responsibility for their own learning and to understand what and how they learn. PDP helps learners articulate their learning and the achievements and outcomes of HE more explicitly, and supports the concept that learning is a lifelong and life-wide activity”

(Quality Assurance Agency for Higher Education, 2009, p. 2, para. 2–3). The expected benefits of PDP are exactly what we are looking for to fill the gap we have in helping students develop their generic competencies.

The SAO thus launched its second mega project of SPECIAL ePortfolio in 2008 to help students make sense of their development in generic competencies. To meet the needs of the “Generation Y” — A generation of young people born between 1976–1995 or 1988–2001 (depending on the source), who are comfortable with computer technology and “want to know where they are going with their learning — and why” (Coates, 2007, point 14 of the last section), it is a personalized, structured and organized platform for each individual student. The portfolio is more than just an electronic dossier; it does not fall neatly under any of the three most common ePortfolio archetypes identified on the website of rSmart (Sakai Collaboration and Learning Environment, 2010), namely, (a) “Personal Representation Portfolios” for showcasing a selection of one’s work in a given area; (b) “Teaching and Learning Portfolios” for guiding students in collecting and reflecting upon learning artifacts as well as for presenting their work for feedback and evaluation; and (c) “Assessment and Accreditation Portfolios” for assessing the efficacy of a given instructional program or objective.

PolyU’s ePortfolio serves as a platform to facilitate the assessment of outcomes and learning, and the showcase of achievements. At the same time, it is also a business-to-customer service outlet.

Learning-oriented: From Organizational Expectation to Personal Development

In the ePortfolio, PolyU tries to provide scaffolding features to help students get the most out of their learning experience, from understanding organizational expectations to setting personal goals and making development plans. It can be a general plan across different programs/

activities, or a specific learning plan for a particular program/activity for students. After participating in the said programs/activities and gaining insights, students can do their reflections. There are guiding questions to help them dig deeper into their experience and reflect on the learning, which include constructing their own personal meaning from such learning exposures, both inside and outside the curriculum.

There are some very basic functions of learning management in the ePortfolio system to facilitate the submission of work to instructors who can give students feedback and make assessment. Currently, a number of academic departments are collaborating with the SAO to make use of the SPECIAL ePortfolio platform for the submission of assignments. In fact, one of the most encouraging examples is that the School of Nursing has used the ePortfolio to manage their course of professional development which is to coach students to set goals on how to be an effective nursing practitioner in terms of generic competencies, to implement the plan, and to reflect on the impact on personal growth.

Competency-based for Facilitating the Articulation of Outcomes

The ePortfolio system is a competency-based system built on the aforementioned SPECIAL framework comprised of desirable generic competencies necessary for students' academic, personal and career development throughout their university life. It starts with individual reports of various assessments that students have participated. According to Schein (1995), learning and change always starts with some "disconfirming information" that generates "survival anxiety" which will motivate the subject to action. In our case, students' individual SAARD profiles will be sent to their ePortfolios and the PolyU average is subtly included to help students get some reference of their own relative standing. Students will be prompted to see counselors for interpretation. Thus, the pre-test SAARD assessment is a diagnosis and serves as a motivator for managed learning.

Having reviewed their own SAARD profiles, students can engage in more in-depth self-evaluation of each of the generic competencies so as to know more about their developmental needs by completing the on-line inventories embedded in their ePortfolios, the latter of which cover a broader repertoire of competency dimensions as self-help resources.

A typical in-depth profile of a particular generic competency will include a concise descriptor of the competency in question and the core dimensions nested within it, as well as information regarding how an individual student is faring along the said dimensions of the expected behaviors, the knowledge of which will make the goal setting and planning more focused and concrete.

There is a close relationship between PDP and career development learning. Effective engagement with the PDP process can provide students with both the evidence and the language to convey their achievements to employers. In addition, reflecting on development and identifying strengths (and weaknesses) can help the individual develop as a learner and understand how their learning relates to a wider context (Rees, 2006).

Career Services and Further Enhancements

Career Services

At present, besides career education, the SAO also provides a multitude of career services with an aim to facilitate the matching of talents to the demands of the job market. The current scope of career services includes services to employers to facilitate the recruitment of talents, be they for permanent, part-time or internship posts; as well as services to students to facilitate the flow of information related to the job market and the world of opportunities. The SAO works with departments and faculties to source internship opportunities both locally and offshore

to ensure that all students can duly fulfill the graduate requirement of WIE. It also act as the central coordinator of WIE, managing the central records, issuing transcripts, and collating the institutional report. Last but not least, the SAO conducts surveys on graduate employment and collect feedback from employers.

Further Enhancements

While the responsibility for the grooming of employability has already been shared by the many stakeholders both inside and outside the SAO, we could envisage a number of critical gaps to fill, namely:

1. Refining the definition of “employability.”
2. Making an attempt to measure the overall employability.
3. Facilitating students to demonstrate employability in their ePortfolios.
4. Marketing the ePortfolio to employers to make better recruitment decisions.
5. Enhancing students’ learning and articulation of learning outcomes in terms of their employability.

By doing so, the SAO would be weaving the threads of personal development, the measurement of generic competencies, internship, and the ePortfolio together for a new and holistic fabric of employability.

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以生涯教育及生涯服務提升就業競爭力：
香港理工大學實例分享

提供生涯教育，以協助學生掌握就業所必備的技巧和知識，對提升其就業競爭力有關鍵作用。香港理工大學是一所應用型大學，一直本着傳統與使命，緊貼並回應市場和社區需要，提供優質生涯教育及服務，協助學生發揮所長，貢獻社會。本文旨在回顧及分享這些年來，標誌着這傳統的一些重要里程碑，包括：從學生的專業資格取得業界認可，到首度推出提供大量實習機會的學位課程；進而推出短期通識課程，擴闊學生視野；再全面推行暑期實習並將成果為本的「校企協作教育」列為本科生課程必修項目，讓更多學生能從體驗式學習中獲益；及至提供個人發展概況報告及電子學習檔案平台，協助學生發展通才技能、展示發展成果；最後，是提供全方位生涯服務，做好人才與就業市場的配對工作。繼往開來，雖然過往點滴累積的成果已不算少，然而未來要面對的挑戰將會更多。

關鍵詞：生涯教育；生涯服務；提升就業競爭力