

**C031 Enhancing Student Learning Experience on Convention and Events  
Education with Multi-Disciplinary Projects**

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## ABSTRACT

To coincide with the development of a teaching and research hotel, a cross-department project was proposed to create “multi-disciplinary experiences”. One of the several multi-disciplinary learning pilot projects involved students from hospitality and computing in convention and events education. The aim of this research is to measure the perceived effectiveness of multi-disciplinary learning in convention and events education. The research focuses at finding out students’ perception on achieving enhanced learning outcomes through a multi-disciplinary student project. By adopting a two-stage quantitative approach, a total of 107 pre-course and 133 post-course questionnaires were collected and analyzed. Findings showed that students not only enhance their knowledge significantly in their own disciplines but also the other discipline not originally their expertise. The multi-disciplinary learning experience was perceived to highly improve both hospitality and computing students in knowledge on convention and events management and database system development.

**Keywords:** Convention and Events, Education, Multi-disciplinary, Learning, Authentic Experience

## INTRODUCTION

Hospitality is a discipline which is not only based on theoretical foundations but requires intensive hands-on experience and knowledge from the actual working environment. Experiential learning has long been an approach used in hospitality and tourism education (Lau & Wong, 2010). In order to address concerns on curricula and provide tourism education that is grounded in real practice with the opportunity for students to work in the real life setting of an operational hotel before they graduate, some universities and hotel schools have purpose built teaching hotels and facilities (Lau, et al., 2011). The Hong Kong Polytechnic University (PolyU) has built the Hotel ICON as a dedicated premises including a hotel conference and training centre and research and teaching facilities. The objective of establishing and operating the Hotel ICON is to further the development, promotion and advancement of hotel, hospitality and tourism management education and research and to educate students in the world's finest hotel environment which will be the launching pad for successful careers (SHTM, 2009).

In order to achieve PolyU's current strategic plan (2008/9-2011/12) which endorses the goal and value of multi-disciplinary studies and there is commitment to working towards providing such opportunities. It states intent to:

To develop and implement a plan to offer undergraduate and taught postgraduate programmes in selected multi-disciplinary areas, by first identifying areas for such development and then facilitating collaboration across departments. (PolyU Strategic Planning Committee, 2008, p. 10)

It is anticipated that the Hotel ICON Project may pave the way for the development of such multi-disciplinary programmes. Despite there were many research conducted to analyse the event management curriculum around the world (Lee, Lee, & Kim, 2009; Phelan, Kavanaugh, Mills, & SooCheong, 2009; Solnet, Kralj, Kay, & DeVeau, 2009; Zeng & Yang, 2011), which also included literature about experiential or real world participatory learning in convention and events education (Digance, Davidson, & Gleeson, 2001; Moscardo & Norris, 2004). However, there has been relatively little research in multi-disciplinary approach in convention and event education. This study may initiate discussion about the effectiveness of multi-disciplinary learning experience in convention and event education.

## **BACKGROUND**

To coincide with the development of this teaching and research hotel, a cross-department project was proposed to create "multi-disciplinary experiences". The activities are learner-focused and aimed at developing the potential of the training hotel facility and its impact on students. The project's main strategy is to initiate a series of linked multi-disciplinary student projects that will be built through collaboration between hospitality and several other disciplines in the University including: Applied Biology and Chemical Technology; Computing; Textile and Clothing and English Language. In which, the Hotel ICON will be used as a platform for different faculties to extend their knowledge to a hotel environment and give a chance to students to experience how to apply their expertise to the hotel industry.

One of the several multi-disciplinary learning pilot projects involved students from hospitality and computing in convention and events education. Two groups of hospitality students enrolling in the subjects "Special Event Project I" and "Special Topics in Convention and Events" collaborated with computing students enrolling in "Foundations of Database Systems" on developing two computer systems for a real conference which will also be held

in Hotel ICON. The project required hospitality students to communicate with and precisely request computing students to develop a Banquet Managing System and Delegates Monitoring System. By acting different roles, students were expected to understand the communication flow of the industry practice through this multi-disciplinary learning project. Moreover, students were expected to work towards specific subject learning outcomes but within a common teaching and learning context that will be both challenging to their own expertise. There were also rich opportunities for introducing problem-based learning, critical thinking and collaborative teamwork. Table 1 shows the requirements between students who worked on traditional convention and events subject term project and multi-disciplinary project.

Table 1: Requirements between traditional convention and events subject term project and multi-disciplinary student project

Traditional Convention and Events Subject Term Project	Multi-disciplinary Student Project
<ul style="list-style-type: none"> <li>- Research on the topic about Convention and Events industry</li> <li>- A lecture class presentation and class discussion on specific topic about Convention and Events industry</li> <li>- Provide references (trade and academic journal publication articles) for the presentation content</li> <li>- A peer review</li> </ul>	<ul style="list-style-type: none"> <li>- Meet with the “Special Event Project I” students (clients) to determine the wish list for the technology needs of the conference the clients are planning</li> <li>- Participate in three forum discussions with the “Foundations of Database Systems” students (vendors) to develop the computing system for the conference</li> <li>- Write a 500-word summary of clients’ wish list and present to the vendors</li> <li>- A 10-minute presentation to be given to the vendors’ class</li> <li>- A lecture class presentation and class discussion about the system development process</li> </ul>

## LITERATURE REVIEW

Scholars and researchers have suggested multi-disciplinary, or ideally inter-disciplinary study, can enrich learning experiences and provide a channel for students to broaden their knowledge and skills with the co-existence of a number of disciplines (Davies &



Devlin, 2010; Kruck & Teer, 2009; Sager, Fernández, & Thursby, 2006). Davies & Devlin (2010) explain disciplines are generally considered more discrete than 'field of study', as discipline experts and universities provide a framework for students by setting out a 'field' of study. 'Multi-disciplinarity recognises that there are many discrete and autonomous disciplines. In terms of research, in some areas of investigation there may be multidisciplinary contributions from several discipline areas to a joint research program. In practice, each of the disciplines contributes from its own perspective. In both a practical and intellectual sense, each of the disciplines stands alone. Multi-disciplinary education programs usually involve grouping a number of students to work on specific projects, involving a number of multi-disciplinary considerations (Sager, et al., 2006). This becomes a trend in many tertiary education institutions especially in health services sector (Choi & Pak, 2006; Mirjam, 2010) and engineering fields (Bernstein, Brockman, Kogge, Snider, & Walvoord, 2003; Mengel & Carter, 1999; Sager, et al., 2006). However, there is little research on this approach to education in the hotel, convention and events, or hospitality field.

Despite the noted trends in hospitality and tourism education there still remains a concern about the mismatch between the education that students receive and the needs of the industry (Jia, Ayres, & Huyton, 2010). Beaven and Wright (2006) point out that potential employers in event industry place lots of emphasis on industry experience and expect students to have substantial hands-on experience in project management, and budgeting. Botterill & Tribe (2000) suggest educators should give students an understanding of operational issues and a set of wider subjects which affect the industry when planning courses. In Arcodia & Baker (2003), computer knowledge and skills are found as the most practical skills required by employers. A new practice is for event organizers of large event to setup dedicated computer system. Most of these software packages allow organizer to draft a registration spreadsheet, to administer participation fees, to monitor actual registration, and, in some cases, even to initiate "e-badging" of delegates, enabling delegates to print out their name tag in advance on their own PC (Davidson, Alford, & Seaton, 2002). It is considered an excellent opportunity to include both convention and events management students in the School of Hotel and Tourism Management (SHTM) and computing (COMP) students in this project and find out the effectiveness of multi-disciplinary approach in convention and event management education.

## **METHODOLOGY**

The aim of this research is to measure the perceived effectiveness of multi-disciplinary learning in convention and events education. The research focuses at finding out students' perception on achieving enhanced learning outcomes through a multi-disciplinary student project. By adopting a two-stage quantitative approach, student's learning in other disciplines was also measured by a pre-then-post survey. This research also discusses the experience on applying multi-disciplinary learning into a real world event project with students of different disciplines. Pre-course and post-course questionnaires were distributed to and collected from all 147 students from hospitality and computing disciplines involved in this multi-disciplinary learning project before and after the system development project. These two questionnaires covered different aspects include knowledge in relational database, knowledge in convention and events management, learning outcomes and actual experience of multi-disciplinary learning.

## **FINDINGS**

A total of 107 pre-course and 133 post-course completed and valid questionnaires were collected and analyzed. Overall findings show this multi-disciplinary learning project enhanced student's knowledge in general. (See Table 2.) In general, students involved in the project indicated an improved understanding in the both database systems development and convention and events, from a mean below 3.0 to all above 3.0. Students involved in the project also stated a stronger trust in the systems they developed can be applied to the real world setting of the hotel.

Table 2: Results on Overall Enhanced Learning

	Pre-course (n=107)		Post-course (n=133)	
	Mean	SD	Mean	SD
I have a good understanding in database system design and implementation.	2.99	.927	3.71	.742
I am capable to transfer others' needs into a database design.	2.97	.906	3.56	.807
I can write computer programs in one or more programming language(s).	2.92	1.188	3.47	1.125
I have good understanding in hotel and tourism industry and its operations.	2.64	1.151	3.22	.920
I understand what kind of computer systems could be used in convention and events.	2.58	1.037	3.46	.790
I know how to organize convention and events.	2.91	1.103	3.36	.904
I think the computer program developed can be applied in Hotel ICON.	3.59	.768	3.78	.760

Note: A 5-point Likert scale was used in both questionnaires, where 1 = strongly disagree and 5 = strongly agree

Findings also show that students not only enhance their knowledge significantly in their own disciplines but also the other discipline not originally their expertise (See Table 3). COMP students leaped from 2.96 to 3.75 about the understanding in database system design while also increased their knowledge in convention and events (from 2.59 to 3.09). The multi-disciplinary learning experience was perceived to highly improve both hospitality and computing students in knowledge on convention and events management and database system development. On one side, hospitality students revealed that through developing the banquet management and delegate monitoring systems, their knowledge convention and events organization and hotel and tourism industry operations was progressed (3.41 to 3.94, and 3.97 to 4.09). Meanwhile, they also indicated a significant improvement in computing discipline on technical knowledge on database system design and implementation (from 3.06 to 3.59), computer program development and programming languages (from 1.90 to 2.38). On the other side, computing students not only indicated a considerable increase in capability to transfer client's needs into database design (from 3.04 to 3.67) and further understanding in database system design and implementation but also enhance their understanding in types of computer systems used in convention and events industry (from 2.23 to 3.31).

Table 3 Mean Comparison of Pre-course and Post-course Questionnaires on Students' Knowledge

	COMP students			SHTM students		
	Pre-course (n=75)	Post-course (n=101)	Sig.	Pre-course (n=32)	Post-course (n=32)	Sig.
I have a good understanding in database system design and implementation.	2.96	3.75	0.000*	3.06	3.59	0.022*
I am capable to transfer others' needs into a database design.	3.04	3.67	0.001*	2.81	3.19	0.704
I can write computer programmes in one or more programming language(s).	3.33	3.81	0.009*	1.90	2.38	0.454
I have good understanding in hotel and tourism industry and its operations.	2.08	2.95	0.000*	3.97	4.09	0.524
I understand what kind of computer systems could be used in convention and events.	2.23	3.31	0.000*	3.41	3.94	0.04*
I know how to organize convention and events.	2.55	3.09	0.029*	3.75	4.22	0.038*

Note: A 5-point Likert scale was used in both questionnaires, where 1 = strongly disagree and 5 = strongly agree

Students perceived this multi-disciplinary project a good learning experience which allowed them to gain understanding on the operation of hotel and logistics in convention and events and provided them a chance to handle a real IT project. (See Table 4.) Both groups of student considered the new knowledge gained from their own and other disciplines will benefit the future career (3.85 and 3.94). Besides, both groups of students believe this multi-disciplinary learning experience provided them a real case to apply their learning (3.94



and 4.42) and a chance to strengthen their communication skills (3.55 and 4.00). Students also trusted the systems they developed will be workable in the real event (3.72 and 3.97) through this totally authentic learning experience. Results reflected that multi-disciplinary students project provide them a chance to work in a real problem in an authentic environment (3.72 and 3.97) and they agreed the project was an innovative learning experience (3.82 and 4.03). Students indicated that they will recommend multi-disciplinary student project to other students as the learning experience helped them perform better in their studies.

Table 4 Students' experience on multi-disciplinary project

	COMP Students (n=101)	SHTM Students (n=32)
	Mean	
The joint project was a good learning experience.	3.75	4.36
The joint project allowed me to gain more understanding on the operation of hotel and logistics in convention and events.	3.33	3.97
The joint project provided the chance for me to handle a real IT project.	4.06	3.82
I gained new knowledge which will benefit me in my job in the future.	3.85	3.94
The joint project gave me a real problem or case to apply my learning.	3.94	4.42
The joint project helped me to strengthen my communication skills.	3.55	4.00
I think the computer programme developed can be applied in Hotel ICON.	3.72	3.97
I tried something new and innovative.	3.82	4.03
I will recommend other students to join multi-disciplinary student joint projects if there is a chance.	3.71	4.06
The joint project has helped me to perform better in my studies.	3.47	3.76

Note: A 5-point Likert scale was used in both questionnaires, where 1 = strongly disagree and 5 = strongly agree

Although most of the students will recommend other students to join this kind of multi-disciplinary learning experience, the comparatively heavy workload could be one of the possible factors that may discourage students' interests towards multi-disciplinary activities in convention and events courses. Thus, educators should consider course planning and

workload for different student groups involved in the learning activities, and creates more interacting opportunities for students from different disciplines.

## CONCLUSION

This multi-disciplinary student project provided a real case for students to apply learning through workable data systems developed for a real event in a authentic hotel environment. Students not only perceived good learning experience with enhance learning in different disciplines, but also considered the learning experience is beneficial to their future career. Further research on supplementing this research from a qualitative approach to investigate the factors contributing to such learning experience was recommended. A comparison of more student groups from different disciplines can also contribute to the measurement of perceived effectiveness of multi-disciplinary learning.

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