THE STUDENT EXPERIENCE OF A BLENDED LEARNING COURSE IN HONG KONG

Jeanne Lam

School of Professional and Continuing Education The University of Hong Kong

Abstract- With the rapid increase of using blended learning in higher education, the understanding of student experience in blended learning environment becomes significant. The aim of this research was to understand the learning experience of the undergraduate Accounting sub-degree students in a blended learning environment in Hong Kong. The research was conducted on a Management Accounting course of a sub-degree programme. A case study was carried out with in-depth interviews with students as primary data sources and data analysis was performed by Thematic Analysis. The results showed that, firstly, assessment was very significant in the provision of the blended learning course and therefore design of the course activities should be aligned with assessment. Secondly, students engaged in learning activities which they perceived as helpful for their learning and design of learning activities should be helpful to students' study. Thirdly, the roles of teacher were important in blended learning. Instruction, facilitation, guidance and teaching support were vital to students' online learning. Fourthly, students actively learnt via discussing by online communication tools and sharing resources by online tools which were not designed by the teacher. With an understanding of their learning experience, lifelong education providers can adopt blended learning in the most appropriate way so that teaching and learning effectiveness can be enhanced and the benefits of blended learning can be fully implemented. This research will fill the gap and contribute to the literature about learning experience of Hong Kong sub-degree undergraduates in the blended learning environment.

Keywords- Blended learning, Student experience, Online learning.

I. INTRODUCTION

Education in Hong Kong has been undergoing a rapid reform since the end of the last century. The government emphasized enhancement of teaching and learning in (HKSARG - EDB, 2014). In line with the government's strategy, the use of Information and Communication Technology in higher education in Hong Kong has increased rapidly. A number of studies and researches were conducted on blended learning, especially for degree-level education, by the higher education institutes (Keppell 2007; Lee & Chong, 2008; Wang 2010; Leung, 2012; Yeh, 2013; Tsui, Chan, Tian, Li & Ho, 2013). However, it has been found that research on blended learning for undergraduate at the sub-degree level in Hong Kong is very limited. Learning experiences in subdegree students are very significant especially because of the rapid growth of the student number. The rapid increase of subdegree students has generated potential difficulties (Chan & Chan, 2010) and one of the key issues to quality development in sub-degree programmes is to examine learning experiences of students because they can reflect learning quality and may lead to an indication of directions for service development. Hence, it is important to understand the learning experience of Hong Kong sub-degree undergraduates in the blended learning environment, where learning is taking place in both traditional learning and online learning.

A research was conducted in the School of Professional and Continuing Education of The University of Hong Kong (HKU SPACE). The research was conducted on the Management Accounting (MA) course of the sub-degree programme named Higher Diploma in Business (Accounting). The aim of this research was to understand the learning experience of the undergraduate Accounting students in a blended learning environment in Hong Kong. With an understanding of their learning experience, lifelong education providers can adopt blended learning in the most appropriate way so that teaching and learning effectiveness can be enhanced and the benefits of blended learning can be fully implemented. This research will contribute to the literature about learning experiences of students in the blended learning environment.

II. LITERATURE REVIEW

The use of educational technology began in the 1960s when 'computer-assisted instruction and its variants were the subject of development and experimentation during the 1960s and 1970s' (Knapper & Cropley, 1999, p. 139). The incorporating the use of technological platforms and forums has radically altered the way adult learners are engaging with their educational environment (Collopy & Arnold, 2009). One of the most popular applications of educational technology is e-learning which has been widely used in higher education sectors as a supplement to the traditional classroom learning environment and in non-traditional learning (Tetiwat & Igbaria, 2000). The benefits of e-learning to enhance teaching and learning are recognized widely (Naidu, 2003; Macdonald, 2006) in that e-learning allows learners to learn across contexts and minimize restrictions on the learning location.

However, the results of using e-learning are controversial. Sikora and Carroll (2002) identify that students in higher education tend to be less satisfied with fully online e-learning mode when compared to traditional classes. Cai and Yao (2010) indicate that learners' loneliness, low motivation and doubts about the effect in education were the main problems of e-learning. On the other hand, a major limitation of face-to-face classroom teaching is teacher-led instruction in which learners are passive recipients of information (Dabbagh & Bannan-Ritland, 2005).

It is suggested that the limitation of using a purely elearning mode is minimized by the adoption of a blended mode because it is a more holistic approach in providing an overall learning environment (Bu & Bu, 2012). Graham (2006, p. 5) defines blended learning as a combination of instruction from two educational models historically separated, traditional face-to-face education and e-learning education, and further defines blended learning systems as 'combined face-to-face instruction with computer-mediated instruction'.

A number of theoretical concepts are associated with blended learning. Naismith, Lonsdale, Vavoula and Sharples (2005) find e-learning behaviourist learning as technologies are used to present learning materials, gather responses and provide feedback in education. Gillani and Guinn (2004) derived an inquiry training model from Piaget's cognitive theory for supporting a constructivism approach to teaching and learning, and appreciate how cognitive developmental theories have contributed to the e-learning environments. Huang at el (2010) conducted a study on the constructivist approach to build a cooperative programming learning system which allowed university students to learn. The results showed that such a system improved the students' learning. Chan (1996) examined the effects of constructivist approaches on the learning and understanding of learners on computersupported collaborative learning. The results also show that effective teachers developed different ways of adapting constructivist approaches during their teaching. With the components of attention, memory, behavioural rehearsal and motivation, the role of model was considered as a necessary element in social learning (Hergenhahn, 1998). Researchers realize the importance of teaching teachers to use the social computing tools to facilitate students' learning and teachers were trained to use the Learning Management System and online social computing tools to extend the social learning support to students (Li & Li, 2010).

Collaborative learning occurs when small groups of students help each other to learn (Klemm, 1994) and collaborative learning is facilitated by educational technology. Pozzi and Persico (2011) specifically state that computersupported collaborative learning systems use technology to control and monitor interactions, regulate tasks, rules and roles, and mediate new knowledge acquisition. Klemm and Snell (1996) believe group learning is a powerful educational experience and find that computer-mediated group learning can be enhanced by coupling constructivism with collaborative learning. Palloff and Pratt (2005) find interactive and collaborative learning experiences help higher-order learning outcomes to be achieved. Teachers use media forums to assess students' work and also set tasks that specifically measure students' interactions and co-operative skills (Agosto, Copeland & Zach, 2013).

Al-Ani (2013) stresses social constructionist theories underpin much of the theoretical work on blended learning and these theories focus on how the tools are used in on-line environments to support inquiry and discovery learning. With the advent of technologies, collaborative learning could be delivered with computer support. Klemm (2010) considers Moodle as an online platform based on a socio-constructivist learning approach and offers a number of interactions and tools for collaboration and exploration learning. In a research on classroom innovation, a collaborative knowledge forum

was built for students' implementation of social learning (Chan, 2009). The research showed that schools encouraged collaboration between students, group projects and peer tutoring. Through learning and sharing with each other, students could build knowledge by learning from others. Garrison and Vaughan (2008) provide an organizational framework to guide the exploration and understanding of blended learning. They shape the practice of blended learning by describing the Community of Inquiry (CoI) framework which is a unifying process that 'integrates the essential processes of personal reflection and collaboration in order to construct meaning, confirm understanding, and achieve higher-order learning outcomes' (2008, p. 29).

Self-motivation is central to most blended learning successes (Ting and Chao, 2013). Learning by motivation makes a learner put effort into learning activities in order to reach the learning goal. Biggs and Telfer (1987) identified four types of motivations, which include instrumental motivation, social motivation, achievement motivation and intrinsic motivation. Learners are found to be driven by intrinsic motivation and self-realization (Lee, 1996). Intrinsic motivation is the intrinsic need to build up competence in dealing with the environment. Motivation determines the specific goals toward which learners strive (Maehr & Meyer, 1997). Boshier (1983) developed the popular Education Participation Scale for surveying 12000 learners and confirmed Houle's topology of learners' motivation as goal oriented, activity oriented or learning oriented. Blended learning motivation is linked to learning flexibility, online learning, study management, technology, online interaction, and classroom learning (Tang & Chaw, 2013). It has been found that students' motivation can be increased through the use of blended learning (Gagnon, Gagnon, Desmartis & Njoya, 2013). More motivated input and also engagement is required in the more student-orientated online environment (Coles, 2009). Success in engaging and retaining learners is important in the online learning environment (Bach, Haynes & Smith, 2007). Biggs and Walkins (1995) proposed improving teaching by minimizing surface approaches and encouraging deep approaches. Deep approaches can be achieved by establishing a good knowledge base, ensuring intrinsic motivation with valued task and expectation of success, having interaction with others and doing learning activities. Schober and Keller (2012) find the most important factors that influence the learners' motivation in blended learning environments are features and usability of the Learning Management System, local parameters at school and the general workload that the students are exposed to.

III. METHODOLOGY

The research approaches are studies against the research purpose and research questions. The purpose of this research is to explore the student experience of a blended learning Accounting course and to examine how student engagement and other factors that influence the form of student engagement in blended learning. The research questions are to find out the reasons, the ways and the experiences of students which involve their relations with each other. Merriam (1998)

describes the qualitative research as with the goal of 'eliciting understanding and meaning, the researcher as primary instrument of data collection and analysis, the use of fieldwork, and inductive orientation to analysis, and findings that are richly descriptive' (Merriam, 1998, p.11). The deep meaning of student experience can be found in using qualitative research. The following research questions are a guide to addressing the issues in the research statement.

- a. How do students learn in a blended learning environment?
- b. What form does engagement take within blended study?
- c. What factors influence the form of student engagement in blended learning?

Qualitative research can be conducted by different research strategies. Because the nature of the research in exploring student experiences and engagements, data that arises from interpretive involvement with students' activities with judgment as human observer is need. Yin (2003) states that case studies are preferred strategy when 'how' or 'why' questions are being posted, the investigator has little control over the events, and when the focus is on contemporary phenomenon within some real-life context. Case study, therefore, is appropriate to use in this research in attempting to explore the individuals' experience in a blended learning course. Case study derived from research can be of great value in teaching and learning (Wellington, 2000) and the use of case study is a powerful means to understand institutions of higher education as socially constructed organizations (Brown, 2008). With the descriptive and exploratory nature of this research, Stake's (1995) method of case study is chosen.

The primary data sources for this study were from indepth interviews with students. Field notes from classroom observation, online environment observation, students' learning log and reflection, focus group student interviews, individual teacher interviews, individual course administrator interview were also used to supplement the primary data and to ensure the validity and reliability of the research by using a research with triangulation. The research was conducted in the Spring semester in 2013. There were 4 Management

Accounting classes with 120 students in total. Two teachers, who taught 2 classes each, were interviewed at the beginning of the semester. Two class observations were conducted for each of the classes of the 2 teachers. An additional class observation of a teacher's class was performed with an invitation from a teacher. The students' learning reflections were collected during the week right after the scheduled class observation. Among all students, 25 students in total were selected in 2 classes for the reflection research. After the examination, focus group interviews were conducted with 24 students in 4 groups. An online participation analysis was also conducted at the end of the semester.

Students' individual interviews were conducted and in-depth questions designed for answering the research questions were asked. After coding and analyzing the interview data, results and findings were obtained. The interviews were tape-recorded and the transcripts were then prepared. The transcripts were then translated into English for study. Recurring ideas and themes were identified and illustrative quotations were selected. The qualitative analysis software, Nvivo 10, for labeling and sorting segments of text into categories was used for data analysis.

Thematic Analysis of Braun and Clarke (2006) was used in data analysis of the research. Fielding and Lee (1998) describe the assemblage of qualitative data as 'multi-stranded, derives from multiple sources, and frequently has multiple forms: transcripts, field notes, documents and so on' (1998, p. 56) and using computer in qualitative research can facilitate data management, with potential to extend the capabilities of qualitative research, and enhance the acceptability and credibility of qualitative research. In this research, Nvivo 10 was used to do the coding.

IV. RESULTS AND FINDINGS

By using Thematic Analysis of Braun and Clarke (2006) in data analysis, 12 themes and 85 sub-themes were finalized. The Final Thematic Map (Braun and Wilkinson, 2003) is shown in Figure 1. The results and findings will be presented in accordance to the themes.

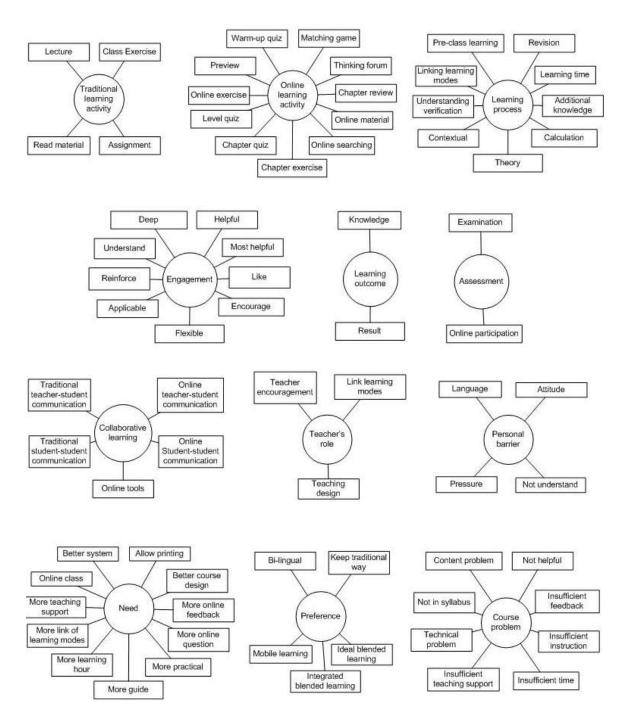


Figure 1. Final Thematic Map (12 Themes)

A. Theme 1: Traditional Learning Activity

The first theme is traditional learning activity. In the blended learning course, students learnt through participating in traditional learning activities, which include attending lecture, doing exercise in class, doing exercise after class and reading course material. All the interviewees attended the compulsory lectures and learnt theories, topics, calculation and contextual contents in the lectures. Some interviewees interacted with the teacher and other students during lecture by

asking teacher and peers questions. Some interviewees did not understand fully in the lecture. One of them found the lecturer was too rushed and one could not concentrate in the lecture.

It was found that students read different kinds of learning materials during self-learning. They read lecture notes, textbook and online materials for studying and doing revision. Many interviewees read lecture notes to learn. They read lecture notes before class, before doing online exercise, for revision, before examination and when they had problems. A

few of them found reading lecture notes helpful for their study. One student mentioned that he went to the library but he could hardly learn from reading reference material there. Instead, he chose to search for online resources to learn. He also shared online materials from accounting website and textbook for classmates to read. Online environment provided an additional channel for students to learn when they found limitations in learning with traditional learning materials. Students searched for online materials especially when they had problems, looked for interesting materials and looked for additional learning resources.

Many of the interviewees said they did class exercise in the lecture. A few interviewees described that the teacher assigned them to do class exercise individually or in group and then explained the answers to them after they had completed the exercise. An interviewee further elaborated that the class exercises include calculation and case studies. Nearly all interviewees did the exercise in the textbook and on the online platform after class. Some interviewees said the teacher instructed them to do exercise after class and would check the answers with them in the following class.

B. Theme 2: Online Learning Activity

Students learnt through participating in online learning activities. All the interviewees did online learning activity after class but a few of them did online learning activity before class. Among the three pre-class online learning activities, most students did the "Warm-up Quiz". The "Warm-up Quiz" was a simple exercise with multiple choice questions designed for students to warm-up before class. A few students used the "Warm-up Quiz" for pre-class preparation but a few others use it for revision after class. Some of the interviewees found the "Warm-up Quiz" useful. However, all the interviewees seldom and never did "Matching Game", which was a mini-game for students to learn terms and concepts, because it was too easy; too complex; not useful; time-consuming; could not help them with the examination; teacher did not asked to do; and had technical problem on display.

For the post-class online learning activities, all the interviewees did the online exercises. Most of the interviewees mentioned that the teachers instructed them to do the online exercise. Some of them found online exercise useful and helpful and they did online exercise for practising and preparing for examination. A few of them explained that online exercise helped them check what they learnt. Other interviewees found online exercise and traditional exercise were complementary to each other and they could learn by doing all the exercises. Some interviewees said the teachers instructed them to do online exercise in the class and they liked it and found it helpful.

All the interviewees did "Level Quiz" which contained multiple choice exercises at different levels of difficulties. The interviewees described "Level Quiz" contained contextual and calculation questions which consisted of 3 levels: "Gold Level", "Silver Level" and "Bronze Level". "Gold Level" questions were most advanced and "Bronze Level" questions were the easiest. Most of the interviewees found "Level Quiz" was useful and helpful. It helped in their learning in

calculation and theoretical contents. A few interviewees found the format of "Level Quiz" questions were similar to those in examination and helped them most for preparing for examination. They did "Level Quiz" weekly and some of them did it again before examination for revision. Besides, most students mentioned that "Level Quiz" contributed 5% to overall assessment of the course. Two of them did it because of the 5% assessment marks and one did it because of teacher's instruction.

Most of the interviewees did "Chapter Review" and some of them found it helped reinforced learning and was examination-oriented. "Chapter Review" was PowerPoint slides with narration by teacher for re-capturing major contents taught in the lecture. A few students combined "Chapter Review" with other learning activities to learn. Two students found "Thinking Forum", which used a case to stimulate students' discussion online, helpful. However, a student said the discussions were out of the scope of examination. Although it helped them learn more, it was timewasting if the learnt contents were not asked in examination.

Some interviewees did online searching to learn and they found online searching helpful. They did online searching when they had problems in learning and when they were doing other learning activities. Some interviewees found online materials selected in the course were helpful. During study, a student shared online learning materials to others for learning together.

C. Theme 3: Learning Process

The third theme is students' learning process. All the interviewees studied theories and calculation and almost all of them learnt contextual contents in the course. Sometimes they learnt additional knowledge outside the syllabus. They did revision by themselves and sometimes did online exercises to test if they really learnt the studied contents. Some students learnt in particular time like before examination. Students linked classroom learning, self-learning and online learning during the learning process.

During the learning process, most of the interviewees checked whether they learnt the contents. They verified whether they learnt by doing online learning activities, for example, "Level Quiz" and "Matching Game". Before the classes, some interviewees read notes or did the "Warm-up Quiz" to prepare for the class. However, a few interviewees found pre-class learning difficult and one interviewee did not do pre-class learning because he did not have time.

Some interviewees linked the online learning and traditional learning modes during the learning process. Some interviewees found linking these learning modes helped them learn in a complementary way. After attending the classes, some interviewees did "Chapter Review" to reinforce the knowledge acquired during the lecture. A few interviewees found it helpful when online learning was linked in doing online exercise in class with facilitation by teachers. One liked doing online exercise or the teacher explaining answers of online exercise in the classroom as he needed more support for online learning.

D. Theme 4: Engagement

The fourth theme is student engagement in blended learning. All interviewees said they understood or learnt in the blended learning course. Most of them used online learning or online activities to learn or understand the learning contents. Two of them elaborated that having both traditional and online learning helped them understand the contents more completely. All the interviewees found the learning activities helpful, good or useful to their study. Most of the interviewees found attending lecture most helpful or useful to their studies and two interviewees mentioned reading textbook helpful. A few interviewees said online learning reinforced or strengthened their learning. Most of the interviewees mentioned "Level Quiz" helpful or useful and some of them further elaborated that it was helpful for preparing for examination. Two interviewees gave "Thinking Forum" as example that it led them think deeply and the contents leant was more in-depth. Almost all the interviewees were motivated or encouraged to learn in the course. Some of them said the online participation marks motivated their learning. Although an interviewee was motivated to learn online because of the online participation marks at the beginning, he was then motivated to continue learning online later because online learning activities were useful.

Many interviewees found online learning provided additional learning options to them and they enjoyed the flexibility in learning time and content variety. A few of them found the online learning activity applicable. An interviewee gave an example that application of theories in "Thinking Forum" was practical and could help his career in the future. These helped the interviewees more engaged in blended learning.

E. Theme 5: Learning Outcome

Students' intended learning outcome is the fifth theme. Many interviewees associated learning objectives to examination, assessment results and online participation marks. Some interviewees explicitly said the reasons for them to study were to obtain good results in examination. Some interviewee found online learning helped them study for examination as "Chapter Review" reinforced their learning and "Level Quiz" allowed them practice more in answering questions. Only one interviewee mentioned acquiring knowledge was her study purposes. The result was consistent with the focus group interviewes' result that more interviewees aimed learning the course for good examination results.

F. Theme 6: Assessment

The sixth theme is assessment. The course assessment methods included examination and online participation assessment. All the interviewees are concerned about the examination. Some of them were examination-oriented and only focused their study on examination-related contents. An interviewee did not do "Matching Game" and another did not do "Thinking Forum" because they found these learning activities were not directly related to the examination. Half of the interviewees did "Level Quiz" to practise before examination and they believed it could help them obtain

higher marks in examination. Besides doing online activities, some students mentioned they read notes and answer questions in paper format to prepare for the examination.

Nearly all the interviewees did online exercises because of the marks. Some of them said the reasons they did the online exercises the first time because they wanted to get some marks. However, they found online learning useful after doing the online exercise. An interviewee said that 'it let me know the exercises were helpful for my examination and thus I used it to study before the examination'. Only one interviewee said the online participation marks were unimportant.

G. Theme 7: Collaborative Learning

The theme collaborative learning includes traditional teacher-student, traditional student-student, online teacherstudent and online student-student communication in the course. All the interviewees said they had traditional teacherstudent and student-student communication in the course. Almost all the interviewees asked questions to teachers in the class or after class. A few interviewees found talking to teacher useful and two interviewees liked asking teacher questions. An interviewee preferred asking teacher questions mother tongue. For traditional student-student communication, half of the interviewees said they formed learning group to learn. Some of the interviewees asked peers questions in the class or after class and two interviewees found they like communicating with peers.

For online communication, half of the interviewees said they communicated with teachers online and the tools include WhatsApp and email. However, nearly all the interviewees wanted to have online communication with teachers in virtual classroom or discussion board. One of them mentioned she wanted to have online consultation hour so that teacher could answer her questions regularly in the online system. Students had concerns on online teacher-student communication. One interviewee worried the teacher replied too late and could not give instant teaching support. Another showed concern on writing email to the teacher using English.

All the interviewees had online communication with other students. The communication tools include WhatsApp, Skype, Facebook, email and "Thinking Forum" in the online platform. Half of them described how they learnt together by setting up groups in Skype and WhatsApp. In the online communication, they discussed on the learning contents, answering questions to others and shared the learning materials. A few of them mentioned they used multimedia, including video, audio and photo, for online communication. They liked online communication with peers because it was convenient and could help them learn. Two interviewees said they would learn by discussing the questions with classmates for examination preparation. An interviewee explained that 'if there were some classmates study together, we could encourage each other to learn'. One of them even preferred learning from peers online than from the teacher.

H. Theme 8: Teacher's Role

The eighth theme is teacher's role. Teachers' involvement affected students' learning attitude. In the blended learning

course, teachers taught in the class and instructed students to do learning activities. Two interviewees said the teacher asked them questions in class to encourage them to think. One found he could get learning support more easily in the face-to-face class. Another interviewee said the teacher encouraged the students to learn in group in the class. For instruction on online learning, many interviewees said the teacher asked them to do online exercise. Some interviewees said the teacher encouraged them to the online exercise by relating it to examination.

All the interviewees found the teacher linked face-to-face class with online learning. All of them remembered the teacher mentioned online participation was part of the assessment. Almost all of them remembered the teacher asked them to do online learning activities like "Level Quiz", "Thinking Forum" and "Chapter Quiz". Half of the interviewees said the teacher linked classroom learning and online learning by asking the students to do the online exercise in class in group with the teachers' guidance. Students did level quiz exercises together in groups. A student felt linking online learning with face-to-face learning in such a way helped them did revision effectively because the teacher could identify their difficulties in online learning and help them. This helped students to do self-learning after class.

I. Theme 9: Individual Barrier

Some students had barriers in language proficiency, felt pressure, not understanding the subject content and had negative attitude towards learning. Two interviewees found using English in communication was a barrier and two found they did not understand some contents in English. A few interviewees wanted to learn difficult contents with their mother tongue and one suggested the teacher explaining difficult contents in Cantonese. Two even wanted to have the lecture in Cantonese. Half of the interviewees showed their preferences in having bilingual learning. Only one interviewee was not concern about medium of instruction.

Some of the interviewees said sometimes they did not want to study. Two interviewees found themselves lazy and only worked hard near examination. Two others found learning boring and one did not want to spend too much time to learn. An interviewee had part-time job and did not want to do self-study and online learning after work. Another interviewee found the workload too heavy. One interviewee would play computer game instead of learning if he switched on the computer even with the intention to learn.

Half of the interviewees said they sometimes did not understand while learning. When they did not understand, they tried to understand by participating in other learning activities and asking questions. Two interviewees reviewed the learning contents in "Chapter Review" when they did not understand. An interviewee asked the teacher questions while the other one asked peers questions when they did not understand. One interviewee said she did not understand the content if only attending lecture and she found online learning activities useful for complementing what she could not learn in class.

J. Theme 10: Course Problem

Students found some problems in the blended learning course. A few interviewees found some course materials in the online platform are the same as in the textbook but they expected online learning materials should be additional information that complements their traditional learning. Half of them found the design of online learning activities could be improved. For online exercises, some of them found the questions were insufficient and some found the explanation in the instant feedback was insufficient. A few interviewees said they faced technical problems in online learning. Two interviewees found the instructions given in online learning activities were insufficient.

Many interviewees found some of the learning activities not helpful to their study. Half of the interviewees said the "Matching Game" did not help their study. Two interviewees said some online materials were not in the syllabus and were not useful for examination. One interviewee found "Warm-up Quiz" not useful for examination. Two interviewees believed only reading text book was enough for preparing for examination and they did not need any other learning activities.

Two interviewees found teaching time in the class was insufficient. One of them did calculation after class to complement her learning. Two interviewees found teaching support for online learning was insufficient. They especially found difficulty in reaching the teacher to ask questions before the examination. A few interviewees said the English proficiency of teacher was not good enough. One interviewee said the teacher responded to email too slowly.

K. Theme 11: Need

Students needed and expected more in blended learning. Most of the interviewees suggested ways to enhance the online learning activities and the online platform. Many expressed their needs in having more questions in the online exercises and some of them suggested the explanations in the instant feedback should be in more details. Two interviewees found the use of Flash in online course materials inappropriate as printing was disallowed and some mobile devices could not view the Flash format contents.

Most of the interviewees suggested that there should be more ways for teachers providing teaching support. Half of the interviewees suggested linking the lectures more to online exercises for better effectiveness of blended learning. A few students wanted online classes and online consultation hours so that they could communicate with teachers online.

L. Theme 12: Preference

Students preferred keeping some traditional ways of learning. Many interviewees showed that they preferred writing when doing calculation exercises. Two interviewees found face-to-face lectures allowed more interactions and facilitated their learning. Indeed, all interviewees preferred blended learning and most of them preferred integrated blended learning. They found in integrated blended learning, they could learn in both face-to-face and online learning modes complementary and could learn flexibly. An interviewee found the current blended learning course design

was not good enough for providing integrated online learning. Two interviewees preferred non-integrated blended learning.

Some interviewees expressed their preference in learning in Cantonese or in both Cantonese and English. Two interviewees found the use of English in online communication hindered communication and learning. A few interviewees found Chinese subtitles in video helpful. An interviewee explained why he preferred using Cantonese to learn. He said 'I prefer using Cantonese in the class because it is my mother tongue. It would be clearer for me when listening to the teacher'.

Many interviewees preferred using mobile devices to learn online. Half of the interviewees found mobile learning allowed them to learn beyond time and location constraints. One believed mobile learning could facilitate instant communication. However, two interviewees did not prefer mobile learning. One of them even did not own a smartphone for mobile learning.

V. DISCUSSIONS

The results show that students are highly concerned on academic results. Most of their learning objectives are for good academic results and most of them participate in learning activities which could help them obtaining high marks. Though a few students had the intention to acquire more knowledge and to learn more practical contents which could help their career in future, they are also concerned about academic results which affect their opportunity in having further study and finding a job. Therefore, the way of assessment is very significant in the provision of blended learning course. It is also found that students engaged in learning activities which they perceived as helpful for their learning and design of learning activities should be helpful to students' study. The students engaged in learning when they liked the course activities; teachers encouraged them to learn; they understood the content, learning was reinforced; they could have deep learning; the course was applicable; and learning mode was flexible. The design of learning activities should be aligned with assessment and the assessment methods should be aligned with the designed learning activities. The design should achieve both purposes in facilitating students to learn and helping them to prepare for the examination.

The role of the teacher is important in blended learning. Instruction, facilitation, guidance and teaching support are vital to students' online learning. Students participated in some of the learning activities because they were instructed by the teacher. After experiencing the learning activities, they knew how much they could learn from them and then decided their own learning style. During online learning, students found problems and needed online teaching support. For doing online exercises, they found the size of question pool and the depth of instant feedback insufficient. Therefore, they would like more questions and more detailed explanation and instant feedback. Besides, they need to ask questions and suggested having online discussion, online consultation hours and online classes to help them learn online with more support.

Students actively learn via discussing by online communication tools and sharing resources by online tools which are not prescribed by the teacher. They found online communication between teacher and students and among peers helpful. They learned in groups using Skype, WhatsApp and Facebook with document, text, audio and video means. The social learning in group and online collaboration initiated by the students themselves show the power of online educational technologies and imply future design and development of blended learning courses.

Although the students have individual barriers, they found blended learning helpful to their study and all of them prefer blended learning. The majority prefer integrated blended learning while the others prefer non-integrated blended learning. Some of them prefer mobile learning which could help them learn beyond time and place limitation. This also implies that institutions and teachers should facilitate and support students' learning in the online environment.

VI. CONCLUSIONS

With the rapid increase of using blended learning in higher education, the understanding of student experience in blended learning environment becomes significant. In this research, a case study was conducted with in-depth individual interviews with students in a Management Accounting course of a sub-degree programme. The research aimed at understanding the learning experience of the undergraduate Accounting sub-degree students in a blended learning environment in Hong Kong.

Data analysis was performed by Thematic Analysis and 12 themes and 85 sub-themes are identified. The themes include traditional learning activity, online learning activity, learning process, engagement, learning outcome, assessment, collaborative learning, teacher's role, individual barrier, course problem, needs and preference. From the analysis of results, it is found that assessment was very significant in the provision of the blended learning course and design of the course activities should be aligned with assessment. Students engaged in learning activities which they perceived as helpful for their learning and design of learning activities should be helpful to students' study. Besides, the roles of teacher are important in blended learning. Instruction, facilitation, guidance and teaching support are vital to students' online learning. Furthermore, students actively learn via discussing using online communication tools and sharing resources using online tools which were not prescribed by the teacher. Although the students have individual barriers, they found blended learning helpful to their study and all of them prefer blended learning. The majority prefer integrated blended learning while the others prefer non-integrated blended learning. All these results imply the ways of using blended learning to further enhance teaching and learning.

With an understanding of their learning experience, lifelong education providers can adopt blended learning in the most appropriate way so that teaching and learning effectiveness can be enhanced and the benefits of blended learning can be fully implemented. The limitation of the research is that it identified several themes and understood

how students experience in blended learning. However, it did not generalise the results with the nature of case study. Further studies are required to generalise students' blended learning experience. Indeed, the research explored the learning experience of Hong Kong sub-degree undergraduates in the blended learning environment which filled the research gap and contributed to the literature.

VII. ACKNOWLEDGEMENTS

This paper documents part of the results in a research study of the Doctor of Education (Lifelong Education) programme of the University of Nottingham, United Kingdom. This is to acknowledge the University and the supervisors, Dr. Gordon Joyes and Prof. Charles Crook. Their dedication in supporting and guiding the research is much appreciated.

REFERENCES

- [1]. Agosto, D. E., Copeland, A. J., & Zach, L. (2013). Testing the benefits of blended education: using social technology to foster collaboration and knowledge sharing in face-to-face LIS courses. *Journal of Education for Library and Information Science*, 54 (2), 94-107.
- [2]. Al-Ani, W. T. (2013). Blended learning approach using Moodle and student's achievement at Sultan Qaboos University in Oman. *Journal of Education and Learning*, 2 (3), 96-110.
- [3]. Bach, S., Haynes, P., & Smith, J. L. (2007). *Online Learning and Teaching in Higher Education*. NY: Open University Press.
- [4]. Braun, V., & Clarke, V. (2006). Using thematic analysis in Psychology. *Qualitative Research in Psychology, 3 (2), 77-*101
- [5]. Braun V. & Wilkinson S. (2003). Liability or asset? Women talk about the vagina. *Psychology of Women Section Review*, 5, 28-42.
- [6]. Bu, H. & Bu, S. (2012). Study on innovation of teacher training model in basic education from the perspective of blended learning. *International Education Studies*, 5 (3), 39-43.
- [7]. Biggs J. & Telfer R. (1987). *The Process of Learning*. Sydney: Prentice-Hall.
- [8]. Chan, K.K.C. (1996). Promoting learning and understanding through constructivist approaches for Chinese learners, in A. Watkins & J. Biggs (Eds.), Teaching the Chinese Learner: Psychological and Pedagogical Perspectives (pp. 181-204). HK: The University of Hong Kong.
- [9]. Chan, K.K.C. (2009). Classroom innovation for the Chinese learners, in C.K.K. Chan & N. Rao (Eds.), Revisiting the Chinese Learner: Changing Contexts, Changing Education (pp. 169-210). HK: The University of Hong Kong.
- [10]. Chan Y. M. & Chan C. M. S. (2010). Approach to learning of sub-degree students in Hong Kong. *Research in Education*, 84 (1), 65-77.
- [11]. Coles, C. (2009). The role of new technology in improving engagement among Law students in higher education. Journal of Information, Law and Technology, 2009 (3). Retrieved 23 September 2014 at www2.warwick.ac.uk/fac/soc/law/elj/jilt/2009_3/coles.
- [12].Collopy, R., & Arnold, J. (2009). To blend or not to blend: online and blended learning environments in undergraduate

- teacher education. Issues in Teacher Education, 18(2), 85-101.
- [13] Dabbagh, N. & Bannan-Ritland, B. (2005). Online learning: concepts, strategies, and application. *Upper Saddle River*, NJ: Pearson Education, Inc.
- [14] Fielding, N. G. G. & Lee, R. M. (1998). Computer Analysis and Qualitative Research, London: Sage Publications Ltd.
- [15] Gagnon, M. P., Gagnon, J., Desmartis, M., & Njoya, M. (2013). The impact of blended teaching on knowledge, satisfaction, and self-directed learning in Nursing undergraduates: a randomized, controlled trial. *Nursing Education Perspectives*, 34(6), 377-382.
- [16].Garrison, D. R. & Vaughan, N. D. (2008). Blended Learning in Higher Education, US: Jossey-Bass.
- [17]. Gillani, B. & Guinn, C. (2004). Cognitive theories and the design of e-learning environments. *Studies in Health Technology and Informatics*, 2004(109), 143-151.
- [18].Graham, C. R. (2005). Blended learning systems: definition, current trends, and future directions, in C. J. Bonk & C. R. Graham (Eds.) Handbook of Blended Learning: Global Perspectives, Local Designs (pp. 3-21). CA: Pfeiffer Publishing.
- [19]. Hergenhahn, B. R. (1988). An Introduction to Theories of Learning (3rd ed.). N. J.: Prentice Hall.
- [20].HKSARG EDB (2014) Key Statistics on Post-secondary Education, Education and Bureau, The Government of Hong Kong Special Administrative Region. Retrieved 1 May 2014 at http://www.edb.gov.hk/attachment/en/edu-system/postsecondary/policy-doc/postsec_keystat%20(2012-13)%20(Sept2013).pdf.
- [21]. Huang, I., Hwang, G. J. & Yang, I. J. (2010). Optimization of a cooperative programming learning system using a constructivist approach, in the *proceedings of The 18th International Conference on Computers in Education*, 29 Nov 2010 3 Dec 2010, Putrajaya, Malaysia.
- [22].Keppell, M. J. (2007). Instructional designers on the borderline: brokering across communities of practice, in Keppell M. (Ed.), *Instructional Design: Case Studies in Communities of Practice* (pp.68-89). Hershey, PA: Information Science Publishing.
- [23].Klemm, U. (2010). The use of Moodle and Web 2.0 applications for second language acquisition in hybrid learning settings at secondary school level, in Au O., Kong S. C. & Kling F. (Eds.), *Hybrid Learning* 2.0 (pp. 226-236). BJ: Beijing Normal University.
- [24].Klemm, W. R. (1994). Using a formal collaborative learning paradigm for veterinary medical education, Journal of Veterinary Medical Education, 21 (1). Retrieved 16 October 2014 at http://scholar.lib.vt.edu/ejournals/JVME/V21-1/Klemm.html.
- [25]. Klemm, W. R. & Snell, J. R. (1996). Enriching computermediated group learning by coupling constructivism with collaborative learning. *Journal of Instructional Science and Technology*, 1 (2), 1-11.
- [26]. Knapper, C. & Cropley A. (2000). *Lifelong Learning in Higher Education (3rd ed.)*. London: Kogan Page.
- [27].Li, J. & Li, Y. (2010). Computer education for Chinese college English teachers: time to take action, in the proceedings of the 5th International Conference on Computer Science & Education, August 24-27, 2010, Hefei, China.
- [28].Lee K. K. & Chong M. P. (2008). Blended learning: a case study for Japanese language studies' in J. Fong, R. Kwan &

- F. L. Wang (Eds.) *Proceedings of the 1st International Conference on Hybrid Learning and Education* (pp. 450-462). Berlin, Heidelberg: Springer.
- [29].Lee, W.O. (1996). The cultural context for Chinese learners: conceptions of learning in the Confucian tradition, in D. A. Watkins & J. B. Biggs (Eds.) The Chinese Learner: Cultural, Psychological and Contextual Influences. HK: CERC.
- [30].Macdonald, J. (2006). Blended Learning and Online Tutoring: A Good Practice Guide. Hampshire: Gower.
- [31].Maehr, M. L. & Meyer, H. A. (1997). Understanding motivation and schooling: where we've been, where we are, and where we need to go. *Educational Psychology Review*, *9* (4), 371-409.
- [32].Merriam, S. B. (1998). Qualitative Research and Case Study Applications in Education. San Francisco: Jossey-Bass.
- [33].Naismith, L., Lonsdale, P., Vavoula, G. & Sharples, M. (2005). Literature Review in Mobile Technologies and Learning. Report 11, Bristol: NESTA Futurelab.
- [34]. Najjar, J. (2011). Towards outcome based learning: an engineering education case, *Global Engineering Education Conference. IEEE 2011*, 1039-1048.
- [35].Palloff, R. M. & Pratt, K. (2005). Collaborative Online Learning Together in Community. San Francisco: Jossey-Bass.
- [36].Pozzi F., & Persico D. (2011). Techniques for Fostering Collaboration in Online Learning Communities, Theoretical and Practical Perspectives. New York: Hershey.
- [37]. Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage Publications.
- [38]. Schober, A. & Keller, L. (2012). Impact factors for learner motivation in blended learning environment. *International Journal of Emerging Technologies in Learning*, 7, 31-47.
- [39].Sikora, A. C., & Carroll, C. D. (2002). Postsecondary Education Descriptive Analysis Reports, U.S. Department

- of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- [40]. Tang, C. M., & Chaw, L. Y. (2013). Readiness for blended learning: understanding attitude of University students. *International Journal of Cyber Society and Education*, 6(2), 79-100.
- [41]. Tetiwat, O. & Igbaria, M. (2000). Opportunities in webbased teaching: the future of education, in A. Aggarwal (Ed.), Web-based Learning and Teaching Technologies: Opportunities and Challenges (pp. 17-32). London: Idea Group Publishing.
- [42]. Ting, K., & Chao, M. (2013). The application of self-regulated strategies to blended learning. *English Language Teaching*, 6(7), 26-32.
- [43] Tsui, C. S. K., Chan P. C. L., Tian V. I., Li K. C. & Ho, A, W, M. (2013). Effectiveness of Blended Learning: a Study on Undergraduate Students in Hong Kong. Lee Shau Kee School of Business and Administration, HK: Open University of Hong Kong.
- [44]. Wellington, J. (2000). Education Research: Contemporary Issues and Practical Approaches. London: Continuum.
- [45]. Wang, L. (2010). Implementing and promoting blended learning in higher education institutions: comparing different approaches, in E. Ng (Ed.), *Comparative Blended Learning Practices and Environments* (pp. 70-87). Hershey, PA: Information Science Reference.
- [46] Yeh, H. W. M. (2013). Developing an autonomous language learning framework in a blended learning environment: a Hong Kong case study', in V. C. Bryan & V. C. X. Wang (Eds.), Technology Use and Research Approaches for Community Education and Professional Development (pp. 150-170). Hershey, PA: Information Science Reference.
- [47]. Yin R. K. (2003). Case Study Research: Design and Methods (3rd ed.). UK: Sage Publications, Inc.