

Integrating Student-Centered Learning in Finance Courses: The Case of a Malaysian Research University

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Abstract

The student-centered learning (SCL) approach is an approach to education that focuses on learners and their needs, rather than relying upon the input of the teacher's. The present paper examines how the SCL approach is integrated as a learner-centered paradigm into finance courses offered at a business school in a research university in Malaysia. Specifically, this paper identifies how a learner-centered environment is integrated into teaching methods, learning activities and evaluation tools. Since the adoption of the SCL approach is partly to cater for the needs of the research university, the analysis of the courses is supported with responses from the respective lecturers. This study finds that the lecturers of the five courses examined have used active/interactive learning and group project approaches as standard teaching methods under the SCL approach which includes projects, class discussion and presentation. Alongside these standard methods, some of the courses use additional methods under the SCL approach, including real life experiential learning and case studies. For example, students of the Investment and Portfolio Analysis course are exposed to the real world investment decision making by investing funds in selected stocks listed on Bursa Malaysia. In terms of course evaluations, the courses place greater weight on continuous assessment based on group projects and presentations, while reduce the emphasis on examinations. Overall, implementing the SCL approach requires a careful design of the learning process, which includes the classroom setting; flexibility of the curriculum; teaching methods; evaluation policies; and course content. In general, the study demonstrates that SCL has great potential to function as an effective learning tool in an environment where the labor market demands generically skilled job candidates and in which universities are demanding further resources to be devoted to efforts relating to research and publications.

Keywords: student centered learning (SCL), life experiential learning, case study approach, research university, learning methods

1. Introduction

The present analysis is conducted a tone of the most established universities in Malaysia. Since its establishment in 1970, the university has gone through numerous changes; but none has impacted the faculty members in their professional endeavors as significantly as attaining the status of research university (RU). In an effort to increase the visibility of Malaysian universities among international students, the Ministry of Higher Education (MOHE) conferred the RU status to universities with outstanding performance in regards to research publications. In October 2006, the university examined in the present study was one of four universities to obtain RU status. Since being conferred the RU status, the university has reported a significant increase in research outputs in regards to the number of articles published in high impact journals, which consequently resulted in increasing its status in the international rankings of top universities. To empower the research universities, the Malaysian government generously funds efforts towards research and publication activities through the provision of research grants to the RUs through various organizations, including MOHE and the Ministry of Science, Technology and Innovation (MOSTI). Despite the tremendous monetary and physical support, the time and energy of the researchers or faculty members are critical elements that are beyond the control of the Malaysian government or university management. Faculty members continue to be burdened with the normal teaching and administrative duties that constrain their abilities to continue to dedicate time and energy onto activities

associated with research and publications. Since a RU places a much greater emphasis on the research and publication activities of its faculty members, less of the resources of faculty members (particularly time and energy) can be allocated to teaching activities. The impacts of the RU plan have included the minimization of value-added activities during undergraduate programs that entail considerable involvement of the lecturers, and a reduction in both class size and the range of classes offered by faculties. Meanwhile more emphasis is to be placed on post-graduate programs that are tailored toward research and publication activities. The present study examines whether or not the student-centered learning (SCL) approach should be suggested as an effective solution for diminishing resources, particularly the time and energy of lecturers at the research university.

1.1 Objective of Study

Based upon extant empirical evidence, the present study proposes that SCL could be an effective solution for both the overwhelming demand of research and publication activities of faculty members of a research university; and the diminishing resources of the lecturers in regards to courses and value-added activities. More importantly, the present study examines how SCL is integrated into finance courses and whether SCL can be utilized to enhance the academic and generic skills demanded by employers from future graduates. The present study uses responses from the lecturers to support its analysis of the courses. The general hypothesis is that the results will demonstrate that the SCL is an effective learning methodology that should be adopted by higher learning institutions (HLIs) due to the greater emphasis placed upon the research and publication activities of its faculty members.

1.2 Organization of the Paper

The remainder of the paper is organized in the following manner. Section 2 describes the methodology applied in the present study. Section 3 examines the implementation of the SCL approach in finance courses at the university. Section 4 provides an analysis of the results in light of the responses from lecturers who handle the courses examined, as well as outlining the challenges faced during the implementation of the SCL approach. The last section concludes and briefly discusses the implications of the study.

2. Literature Review

Student-centered learning (SCL) is an approach to education in which the curriculum, teaching and learning activities and also assessments focus on the needs of students, rather than others involved in the educational process, such as the teachers and the administrators (UKM, 2010). The term ‘student-centered learning’, which is also referred to as ‘child-centered education’, is widely used in extant teaching and learning literature (Baeten, Kyndt, Struyven & Dochy, 2013, 2010; Asoodeh, Asoodeh & Zarepour, 2012; Wijnia, Loyens & Derous, 2011; Taylor, 2000; Simon, 1999; Burnard, 1999). Many terms have been linked with SCL, such as flexible learning (Taylor, 2000); experiential learning (Burnard, 1999); and self-directed learning. The concept of SCL was expounded as early as 1905 by Hayward and later emphasized in 1956 in Dewey’s work (O’Sullivan, 2003). The concept was later expanded into a general theory of education by Carl Rogers, the father of client-centered counseling (Burnard, 1999; Rogoff, 1999) and the constructivist learning theory which defines learning as an active process in which learners are active sense makers who seek to build coherent and organized knowledge (Mayer, 2004). The traditional environment or ‘educational atmosphere’ is criticized for resulting in students becoming passive, apathetic and bored. Therefore, the suggestion is made that students develop their own learning when and as they are ready. Teachers, on the other hand, should not intervene in the maturation process except in their limited role as a guide (Simon, 1999).

Studies on SCL are in agreement that the approach provides many advantages to the learning process. For instance it empowers and enables students to take control over their own learning and rely less on the teacher as a dictator of knowledge (Pedersen & Williams, 2004); focuses on the individual student’s needs; abilities; interests; and learning style in which the paradigm shift from teaching to an emphasis on learning encourages the power to determine educational outcomes to be moved from the teacher to the student (Barr & Tagg, 1995). In SCL, students are required to set their own learning goals and determine resources in order to actively acquire knowledge. The classroom teaching method under such an approach acknowledges the student’s voice as central to the learning experience for every learner, while the teacher plays a role as a facilitator of learning. The teacher is suggested to view the student as an intellectual contributor to the world’s knowledge; and one who is able to work in partnership with him/her to construct knowledge (Jones & Thomas, 2005). The teacher should encourage students to develop skills and to become active, responsible participants in their own learning. The function of the curriculum under the SCL approach is not only to provide solid background of discipline, but also to develop skills and self-awareness among the students.

To further highlight the advantages of SCL, studies by Baeten et al., 2010, 2013; Asoodeh et al., 2012; Wijnia et al., 2011; Huba & Freed, 2000; Pedersen & Williams, 2004; Jones & Thomas, 2005; Thanh, 2010 have argued SCL to have several advantages over traditional teaching methodologies which includes:

- taking into account students' diverse learning needs and increasing their retention of both knowledge and skills;
- increasing student's motivation and promotion of peer communication;
- engaging students actively in learning, which reduces disruptive behavior;
- allowing students to develop greater self-confidence, as they are accountable for their own learning responsibilities;
- building stronger student-teacher relationships;
- encouraging student innovation and creativity through deep learning, while promoting discovery/active learning;
- developing characteristics of lifelong learners- motivation through student's responsibility and independence,
- providing the opportunity for social acceptance and self-confidence and also improving mental ability
- enabling students to develop generic skills, such as effective participation when working as part of a team, communication and negotiation skills, effective decision making and independence; and
- emphasizing the effective use and communication of knowledge to address enduring and emerging issues and problems in real-life contexts.

2.1 Research Issues on SCL

In light of such perceived advantages, some educators have shifted away from the traditional curriculum approaches towards "hands-on" activities and "group work", while that providing students with the discretion to determine which activities they want to pursue in class. However, despite the widespread acceptance of SCL, Lea, Stephenson and Troy (2003) argue that one of the issues with SCL is the fact that many institutions and educators claim to be applying such learning approaches without actually implementing an SCL approach in practice.

In line with significant advantages of SCL, numerous studies have examined the attributes of SCL focussing on issues such as the learning environment, the mechanism and also the effectiveness of SCL. Most of the research is reported in the form of studies based on observation. In their study, Froyd and Simpson (2008) synthesized research on learning and recommended organizing the learning environment around four foci: knowledge, learner, assessment, and community. On the other hand, McCombs and Miller (2006) provide a description that sufficiently summarizes how student-centered learning impacts the relevant components of a school system. On the effectiveness of SCL, Baeten et. al (2010) examine the encouraging and discouraging factors that stimulate the adoption of deep approaches to learning in SCL. These factors can be situated in the context of the learning environment, in students' perceptions of that context and in characteristics of the students themselves. Their study shows that students in different disciplines differ in the learning approach that they adopt, with students in human sciences in general showing the deepest approach. In addition, they document the significant role of teachers on the effectiveness of SCL in which if they are involved and oriented towards students, then students are more inclined to use a deep approach.

Most of studies that examine the issues on SCL have focused on non-finance areas namely psychology, sociology, nursing and education. Study on SCL on the area of accounting which is quite closed to finance area has been examined by Fun and Maskat (2000), among others. Their study compares the teacher centered approach through teacher-centered mind mapping and SCL through student-centered mind mapping in an accounting class and the correlation between the two different methods of mind mapping with students' achievement in their tests. Students with and without accounting knowledge were taught for over a period of three months and were compared on their performance. The correlation test employed in the study provide results that show the teacher-centered mind mapping revealed a decline in the students' tests scores, and the student-centered mind mapping exhibited significant increase in the students' test scores.

3. Research Methodology

The present study examines the implementation of the SCL approach in the curriculum of the school of business at the research university, which offers programs in Finance, Insurance and Risk Management under the Finance

department. The school of business is one of three schools under the business faculty and offers other business programs such as human resource management and marketing. The analysis focuses on the finance program, which immediately adopted the SCL approach following its introduction to the school. The present study examines the implementation of the SCL approach in relation to the teaching; learning and evaluation methods employed in the five finance courses that have implemented the approach. The results from the examination of the course syllabus are analyzed in relation to brief interviews conducted with most of the lecturers that are involved in the courses that adopt the SCL approach. Overall, the study interviews nine lecturers, 2 of whom are male. All of the lecturers have attained their doctoral degrees, with the exception of one lecturer holding a Masters degree in Finance. The teaching experience of the lecturers ranges from two to 25 years.

The same set of questions was utilized during the interview of the faculty's Coordinator of the Quality Assurance (CQA), who promoted the adoption of the SCL approach among the relevant members of the faculty. The main responsibility of the Coordinator is ensuring the quality of the academic programs offered by the faculty are consistently updated and upgraded in accordance with the guidelines and requirements of the accreditation bodies, such as the Malaysian Qualifications Agency (MQA) and the International Organization for Standardization (ISO9001: 2008) (Note 1). However, the Coordinator is also responsible for communicating any changes in academic issues, including teaching and learning modes that are recommended by the top management, to ensure the actions taken by the faculties are in conformity with the mission of the university.

In this particular faculty, lecturers without administrative post are responsible for handling 4 courses per session or 2 courses per semester. Accordingly, a lecturer can provide answers which correspond to any or both of the courses that they handle. The lecturers were given two open-ended questions on (i) the reasons for their decisions (agreement) to immediately adopt the SCL approach, and (ii) the problem(s) that they have encountered following the adoption of the SCL in their classes. All respondents were required to respond in writing to minimize transcription errors. The surveys were conducted during Semester I of the 2012/2013 academic year when the SCL approach was first integrated into the finance program. To ensure the response of one lecturer was not influenced by the others, the interview was handled within the same day. Each lecturer was contacted individually, given the questions, and instructed not to discuss with the other lecturers and to provide their answers within the next 4 hours. Seven lecturers in the finance department were not included in the interviews due to several reasons including their unavailability during the day of the interview or their failure to respond to the survey question within the time given.

3.1 The Significance of Finance Courses

Finance courses are selected in the present study not only because the courses have adopted the SCL approach, but also because of the importance of such courses to the various economic development plans of the Malaysian government. Finance courses are divided into three broad areas namely financial management, capital markets and investment. Since financial services are fundamental for economic growth and development in a given country, finance education is very important to meet demands for skilled employees in the sector. In the present study, the finance department requires all students majoring in finance; and financial services and risk management to enroll in the five finance courses, while offering the finance courses as elective courses for students majoring in other business programs (marketing and management) and non-business programs (economics, accounting, social sciences, science and others). Table 1 lists the finance courses offered by the department that serve as units of analyses in the present study.

Table 1. Finance courses offered at the Finance Department

No.	Finance courses offered	Level
1	Financial Management	Introductory
2	Corporate Finance and Restructuring	Advance
3	International Finance	Advance
4	Investment and Portfolio Analysis	Advance
5	Financial Market and Institutions	Advance
6	Financial Derivatives and Risk Management	Advance
7	Islamic Finance and Banking	Advance

The courses cover all the areas in the Malaysian financial system, which is broadly divided into eight sub-sectors: investment management; insurance and *takaful*; microfinance and developmental finance institutions; capital

markets; Islamic banking; business banking; venture capital; and retail banking. The growing importance of the financial sector to strive in order to obtain the status of a high income country by 2020, as indicated in the National Key Economic Area (NKEA), has intensified the role of financial education as well as the ability to apply knowledge and skills obtained from such education, in addressing problems in a complex, real-world setting. Growing diversity in the sub-sectors has resulted in the introduction of more complex and sophisticated products and instruments. In order to enhance the financial services sector, a greater level of technical knowledge and skill in the financial arena is required among Malaysian finance students in order to prepare them to meet the demands of the financial services sector. The use of the SCL approach in finance courses is timely, considering the need to keep abreast with the dynamics of the financial landscape; to act in accordance with the Transformation Plan of the university (refer to Section 4.1) and the domains emphasized by the MQA. Moreover, continuous developments in the financial sector require contemporary finance courses to integrate innovative teaching methods, such as the implementation of the SCL approach. For instance, information concerning financial market structures in current textbooks may be outdated because the various elements of financial market structures are dynamic in nature. Similarly, relying on foreign-based textbooks may mislead the students because the financial market structures differ from one country to another. The SCL approach, which promotes research by students regarding current information on financial market structures in Malaysia in the present context, could compensate for this shortfall.

3.2 Finance and the Various Development Plans in Malaysia

The role of the financial services sector in enhancing the economic growth of Malaysia has been increasingly emphasized in the various development plans for Malaysia. In addition to Vision 2020, which outlines the preferred direction of Malaysian development aspirations, the growing role of the financial services sector can be measured based upon its inclusion in the specific national strategies, which are outlined in two Industrial Master Plans; three Outlook Perspective Plans; and various five-year Malaysia Plans. Moreover, pursuant to policy decisions regarding the need for a paradigm shift from a production-based economy to a knowledge-based economy (K-economy), Malaysians must be equipped with knowledge and be capable of excelling in the acquisition, generation, communication and exploitation of commercial knowledge in order to be competitive global players and enable sustainable long-term growth. Thus, rapid developments in the financial services sector, coupled with the economic aspirations of the Malaysia government to transform the Malaysian economy into a K-economy, enhance the need to produce skilled employees to meet the demands of the financial services sector.

3.3 Fundamental Change of the Global Financial Landscape

The global financial landscape is undergoing fundamental changes and the skills and abilities of future graduates need to be honed to reflect the emerging and evolving demands resulting from such global changes. The fundamental changes in the global financial landscape include the fact that events continue to unfold in directions that are likely to fundamentally alter the way in which financial institutions conduct their business; the reforms that are being developed or implemented to strengthen the foundations of financial stability are of a substantial scope and result in changes in both the supervision and regulation of financial institutions; and that institutions are currently making arrangements for coordination and cooperation in the area of surveillance and crisis management within and across jurisdictions. In order to manage these challenges, all stakeholders in the financial institutions, including policy makers; and important figures in the financial industry and the private sectors, must have sufficient capacity in terms of knowledge and skill in these areas. The aforementioned statement holds particularly true in relation to the efficiency of financial intermediation, which is a vital part to the success of this strategy.

3.4 Impact of Globalization and Liberalization on the Financial Services Sector

Improvements in global financial markets and sophisticated financial liberalization policies include the elimination of credit control; deregulation of interest rates; free-entry of domestic firms into the financial services sector; bank autonomy; and private ownership of banks. The envisioned improvements require a comprehensive understanding of the impacts of such improvements on the financial services sector, as well as the impact of improvements on the structures and functions of financial services. Malaysia is currently attempting to establish itself as an Islamic banking center and also moving towards the liberalization of the financial services sector. The aforementioned improvements and ambitions will have a considerable impact on the demands of the financial services for skilled and trained employees and, thus, requires a systematic and strategic education plan to be implemented by Malaysian universities to provide future graduates with the skills and knowledge to meet the demands from the financial services sector.

3.5 A New Financial Blueprint

Bank Negara Malaysia has developed a new blueprint for the financial services sector to support and drive the transformation that has taken place as a result of the shift in the global finance arena. The blueprint charts the next phase of the evolution of the financial services sector with the ambit of including Islamic financial institutions within the financial services sector. In essence, the skill and knowledge requirements must also transform to keep abreast with the transformation in the financial services sector in order to best serve Malaysians in the new environment. The nine focus areas stipulated under the Blueprint are (*Source: Bank Negara Malaysia Financial Sector Blueprint 2011-2020 (Dec 2011)*) :

- 1) Effective intermediation for a high value-added and high-income economy
- 2) Developing deep and dynamic financial markets
- 3) Financial inclusion for greater shared prosperity
- 4) Strengthening regional and international financial integration
- 5) Internationalization of Islamic finance
- 6) Regulatory and supervisory regime to safeguard the stability of the financial system
- 7) Electronic payments for greater economic efficiency
- 8) Empowering consumers
- 9) Talent development to support a more dynamic financial services sector

4. Implementation of Student-Centered Learning at a Research University

4.1 Beneficiaries at the Top of the University

The adoption of the SCL approach was quickly accepted by faculty members because the approach is considered suitable in light of the current schedule constraints of the staff. As explained earlier, faculty members of RUs are required to be actively engaged in scholarly pursuits and, as a result, are not able devote significant amounts of time and effort to organizing out-of-class activities. The relatively quick adoption of the SCL approach also results from the fact that the approach is considered the most effective vehicle to achieve the university's mission to be the leading research university in Malaysia. Specifically, the SCL is perceived as an education reform that emphasizes the importance of innovative programs that conform to the university's Transformation Plan (2008-2018) (Note 2), which is:

"A plan to propel "the university" to be one of the leading research universities in the world by 2018 and consolidating its unique role as a national university in promoting national identity and unity."

This Transformation Plan is one of the actions taken by the university in response to the National Higher Education Strategic Plan (PSPTN) which was launched in 2007 to transform the higher education landscape to meet the challenges of globalisation and the nation's transition to the knowledge-based economy. Some of these challenges are addressed in the university's Transformation Plan by: (1) emphasizing on the contribution and role of academe in moving and providing leading edge new discoveries, expansion of knowledge as well as new creations and inventions that are technologically advanced and innovative through research, development and commercialization activities; (2) supporting the creation of an entrepreneurial culture; (3) preparing the university towards greater autonomy through good governance; (4) strengthening a performance culture towards a performance-based funding; and (5) upgrading course curriculum to balance academic content and soft skills as well as shifting from supply to demand. Hence, implementing the SCL approach serves both the need of the educators/researchers; and serves as the mechanism or key to the Plan.

4.2 Beneficiaries at the Bottom of the University

The SCL has also been identified as one of the approaches that can help the students to achieve the eight desirable attributes for Malaysian students emphasized by MQF. These attributes are (i) knowledge; (ii) practical skills; (iii) social skills and responsibilities; (iv) values, attitudes and professionalism; (v) communication, leadership and team skills; (vi) problem solving and scientific skills; (vii) information management and lifelong learning skills; and (viii) managerial and entrepreneurial skills. The eight attributes represent desired learning outcomes, from which the students are expected to have high levels of communication skills; the ability to define problems, gather and evaluate information; the ability to develop solutions; the ability to work with others through team skills; and the ability to use all of these skills to address problems in a complex real-world setting. Past studies demonstrate that collaborative learning through the SCL approach is the superior approach for developing and enhancing the skills set required by students after they complete their formal education. Recent

studies (e.g., Geertsema & Lakshminarayanan, 2012) have supported the study by Johnson, Johnson and Smith (1998) which demonstrates that collaborative learning results in both academic success (higher achievement, including knowledge acquisition, accuracy, creativity in problem-solving, and higher reasoning level) and attitude effects (persistence towards goals, intrinsic motivation, applying learning in other situations, and greater time on task), all of which are attributes that match those specified by the MQA.

5. Integrating SCL in Finance Courses

The current section discusses the results of the analysis of how the SCL has been implemented in the finance courses that are listed in Table 1, specifically in relation to teaching methods, learning activities and course evaluations. The success or failures of the implementation of the SCL approach are supported by the responses obtained from the lecturers during interviews.

5.1 SCL in Teaching Method and Learning Activities

Previously, finance courses were typically taught utilizing a conventional lecture method. In most cases, lecturers give lectures for two hours, followed immediately by a tutorial session for one hour. Using such methods, lecturers are solely responsible for lecture content and the delivery of the lecture. In such an environment, learners do not participate in the learning process except as passive recipients of knowledge. Such methods have been criticized concerning their effectiveness on the basis that (1) a class environment that is centered on information-based learning can easily become dull and boring for students; (2) teaching based on one way interactive learning creates an environment where learners are merely passive listeners and passive knowledge recipients; and (3) learners have no participation in the learning process except being members of the audience.

With a shift to SCL approach, less time is allocated for lectures. Instead, other teaching methods are employed, including the use of case studies; class discussions; group discussions; group projects; and presentations. Such teaching methods require students to enhance their team work skills, while applying knowledge to the 'real world' problems. Additionally, organized learning activities that are integrated into the courses include organizing talks and visits; participation in national investment quizzes; and gathering relevant information that are not available in existing textbooks. Some of the tasks are provided in the context of problem-based learning (PBL) approaches through organized visits; presentations by practitioners that correspond with lectures; and the analysis of cases.

"We should not deny the students' right to a visit or other extra-class activities just because we are too busy to arrange for the activities. These activities are critical for them. I was skeptical the first time, but they have proven that I was wrong. With just a little push, they get everything ready. In fact, they seem to be more satisfied because they accomplish something with their own efforts. They are also more committed because these activities are from their own initiatives".

(Lecturer 2)

"SCL helps us to save our time and energy on the students while at the same time still allows the students to plan and execute the things that they want to learn from the course".

(Lecturer 1)

These observations are consistent with the argument that PBL provides a rich learning environment in which students identify issues that must be studied further and learn from examining the problems presented (Gibbs, 1992). According to Forsythe (2002), the basis of PBL is that students learn by doing PBL is a student-centered system whereby students, working within small groups, generate the information necessary to respond to, or solve, a specific problem or task. The strong points of PBL include its ability to (1) drive curiosity among students; (2) allow students to acquire attributes, such as initiative, and to learn critical thinking and problem solving skills, while acquiring knowledge of the essential concepts of the course; (3) allow students to find, determine and use appropriate learning resources, thus acquiring lifelong learning skills (Boud & Feletti, 1997); and (4) help develop critical thinking skills through carefully constructed, open-ended problems. Under the PBL approach, students encounter concepts in contextually rich situations that impart meaning to those ideas and enhance their retention. Meanwhile, the PBL approach that involve group activities, teaches students the power of working cooperatively and fosters not only valuable communication and interpersonal skills, but also a sense of community in which diversity becomes a strength and enhances the learning experience. The PBL approach addresses industry and graduate school requirement that fresh college graduates possess problem-solving skills; are able to communicate effectively across disciplines; and work with others to solve problems.

“One of the groups almost cancels their plan to have a visit to this very relevant institution simply because they could not get the bus. But, the first rejection does not stop them to keep on looking for ways to fix the problem. In less than a day, they actually get the bus... in such a short period, they learn a lot about the importance of procedures and observing them. They also learn that rules are made by humans and therefore are bendable in certain cases”.

(Lecturer 7)

5.1.1 Group and Individual Projects

All finance courses are required to have group and/or individual projects aimed at stimulating initiative among students to take more responsibility for their own learning. Students are assigned individual and group projects in which they are required to present solutions in the form of an oral presentation and/or a written report. The lecturers must guide, probe and support students' initiatives, rather than lecturing or providing easy solutions. Such projects include case studies, project proposals, and company analysis. Although Table 1 appears to show that the corporate finance and restructuring course lacks such a component in its learning activities, the course includes group projects based upon case studies. Case studies are regarded as an equivalent approach to other group projects for several reasons. Case studies are considered beneficial, in statements made by lecturers, in the following manners:

“Through Case Study-Based learning for instance, the approach provides a great way on how to improve learning experience because the learners get involve and also because it encourages immediate use of newly acquired skills”.

(Lecturer 1)

“In cases which involve a problem of an earlier year, the learners are expected to also search for actual information about the company in the subsequent years to support their recommendation”.

(Lecturer 7)

In the finance department, case studies are compulsory in the corporate finance and restructuring course. Students are divided into several groups and are required to collect information on the cases and discuss the cases in class. Case studies are also used in the financial market and institutions course and the investment and portfolio management course. Case studies require the participation and deliberate application of a broad range of skills by students. For example, when learners study financial analysis through standard learning methods, they need to calculate and understand a long list of financial ratios from a given set of financial statements to produce a comprehensive ratio analysis. However, the learners must be able to treat the exercise in an applied context so the ratio analysis can help them to forward recommendations or solutions, which are supported by an empirical foundation. Hence, case studies can be an effective learning tool to show the difference between knowing what to do; and knowing how, when and why to do it. A case study differs from other learning activities in its ability to compare the learner's suggestions or ideas with how the problem or issue has actually been resolved. Therefore, it is easier to evaluate whether or not the recommendation or solution provided by the students is correct.

5.1.2 Oral Presentations

All finance courses are required to have group and/or individual presentations in order to improve the communication skills, teamwork skills and build confidence levels of students. For the investment and portfolio analysis course, students are required to give an oral presentation on the results of their group project based upon fundamental and technical analyses. The students are also required to present how they justify the common stocks that they selected for stock investment. The groups are also required to select a topic in the course and present it in an interactive manner. The international finance course also adopts this approach, but is assigned on an individual basis, rather than a group basis. In the corporate finance and restructuring course, students are required to give an oral presentation on their analysis of the case studies. All lecturers involved in these courses indicate that enhanced communication skills are the expected result of such exercises. To ensure fairness for group projects, Lecturer 2 comments:

“I make it explicitly known that I allocate marks for team work and participation of each member (everybody have to speak up) in the presentation counts for a good percentage of the marks”.

5.1.3 Learning Outside of the Classroom

Kuh, Schuh, Whitt and Associates (1991) provide list of contributions of out-of-class experiences to valued outcomes of post secondary education, including (a) cognitive complexity (e.g., critical thinking, intellectual

flexibility, reflective judgment); (b) knowledge acquisition and application; (c) humanitarianism (e.g., interest in the welfare of others); (d) interpersonal and intrapersonal competence (e.g., self-confidence, identity, ability to relate to others); and (e) practical competence (e.g., decision making, vocational preparation). In addition, out-of-class experiences linked to persistence and educational attainment. They find that students who expend more effort in a variety of activities benefit the most intellectually and in the personal development domain. Thus, Kuh et al. (1991) concluded that in order to enhance student learning, institutions must make classroom experiences more productive and also encourage students to devote more of their time outside the classroom to educationally purposeful activities.

In order to facilitate education beyond the walls of the classroom, the Learning Outside of the Classroom approach is used in the investment and portfolio management course and the financial market and institutions course. This approach includes short visits to Malaysian regulatory bodies, such as the Securities Commission, Bank Negara Malaysia and Bursa Malaysia; and banking and financial institutions. A module written for UNESCO states that providing students with high quality learning activities in relevant situations beyond the walls of the classroom is vital for helping students appreciate their first hand experiences from a variety of different perspectives. Experiences outside the classroom also enhance learning by providing students with opportunities to practice skills of enquiry; values analysis; and clarification and problem solving in everyday situations. The visits are organized by the students, so that they are involved (or in charge) in all steps and procedures in the “event” organizing process. These processes develop students’ generic skills since activities involving students that take place outside of the classroom require careful planning of the learning activities and attention to the health and safety risks that may be encountered. Based on the lecturers’ responses, it can be deducted that organizing such visits also enhance students’ communication skills because they need to communicate with seniors or top managers of the host organizations; and the dean and deanery officers of their faculty to obtain approval and financial support from the faculty. The students must make sure that their promotion efforts also attract a sufficient number of students to participate in the event.

5.1.4 Real Experiential Learning (Stock Investment)

During the investment and portfolio analysis course, students are exposed to real investment processes in the context of listed ordinary stocks. Each group must choose at least one stock in which to invest, but the choice must be supported with technical and/or fundamental factors. The process allows the students to learn the application of theories and knowledge by analyzing and making strategic and informed decisions concerning wealth creation activities. At the end of the semester, students will experience the actual implications (profit or loss) of the investment decisions made. Students are also strongly encouraged to participate in investment games organized by Permodalan Nasional Berhad (PNB Investment Quiz) and OSK Investment Berhad (OSK Investment Challenge) to determine their respective levels of investment literacy; and gauge investment skills and consequences, respectively.

Table 2. Various teaching methods involving both group and individual learning modes under the SCL approach

Courses Teaching Methods	Financial Management (FM)	Corporate Finance and Restructuring (CFR)	International Finance (IF)	Investment and Portfolio Management (IPM)	Financial Market and Institutions (FMI)
Panel A. Group Work/Project					
Case Studies*		Analyze weekly CFR-related case studies and report (oral and written).	Analyze 2 IF-related case studies and present.	Analyze 2 IPM-related case studies and report (oral and written).	Analyze several FMI-related case studies and present.
Group Project	analyze financial performance of listed companies through benchmarking and trend analysis		- review books and articles, collect and analyze data for write-up and presentation. - gather information on investment and financing activities of MNCs - gather information on an IF issue to discuss in a debate session	- gather price of listed companies and conduct risk-return analysis on stock and portfolio, and technical analysis - analyze a topic in IPM syllabus and report (oral and written) - analyze and select stocks to invest using the class fund.	gather current information on Malaysian perspectives of FMI
Organize Visits and Talk				organize IPM-related events such as talks and field trips.	organize FMI-related events such as talks and field trips.
Panel B. Individual Work/Project					
Online discussion forum			Discuss any IF current issues		
Individual Assignments and presentations			Analyze a topic in IF syllabus, gather additional information and report (oral and written)		
Information Search	Gather information on Malaysian financial system from BNM website and internet for class discussion.				
Panel C. Entire Class					
Lecture	25/120	14/160	21/120	24/122	21/120

Course Objectives	able to apply the concepts of financial management to contemporary financial events and making financial decision making (SCL implementation through individual/group project, information serach)	study the major decision-making areas of managerial finance and some selected topics in financial theory related to the investment and financing policies of the firm and attempts to develop decision-making ability in these areas. (SCL through case studies)	analyzes financial problems corporations face that result from operating in an international environment. Expose students to areas on corporate strategy and the decision to invest abroad, forecasting exchange rates, international portfolio diversification, managing exchange risk, taxation issues, cost of capital and financial structure in the multinational firm, and sources of financing. (SCL through case studies and projects)	acquaint student with the concepts of portfolio analysis in the institutional investment management such as in managing corporate pension funds and stocks, how to establish appropriate investment objectives, develop optimal portfolio strategies, estimate risk-return tradeoffs, and evaluate investment performance. (SCL through case studies, visits, projects)	describe the role and structure of the financial system; explain the concepts of financial claim, financial intermediation and financial market; identify the different types of financial intermediaries and financial markets, and explain how they function; explain the concepts and valuation of different types of financial instruments. (SCL through case studies, projects and visits)
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Description: * A case study is an assignment which involves the lecturer selecting a case and facilitating discussions and/or reports, while leaving the problem solving process entirely in the hands of the students. Students must take the initiative to apply finance concepts and theories; search for additional information to support their arguments; and be prepared to defend the solutions provided to resolve the problems or issues highlighted in the case. The abbreviations BNM refers to Bank Negara Malaysia and BM refers to Bursa Malaysia. IPM-related events may involve presentations made by speakers from brokerage houses, such as OSK Investment Berhad, and field trips to organizations, such as Bursa Malaysia. For FMI-related events, the organizations include BNM; *takaful* and insurance companies; and the Rating Agency of Malaysia. The figures in row "Lecture" indicate the fraction of notional hours allocated to lecture.

The responses provided by the lecturer of the investment and portfolio management course validate the benefits from this SCL method:

"The SCL method really inspires the students to do more to learn. For instance from the stock investment, they get to learn how to actually do it: from opening the CDS account to choosing the shares and experiencing the loss or profit from the investment. Each group must come up with their suggestions and it is really amazing how they go beyond your expectation in justifying their choice with the analysis. They don't mind taking the loss at the end of the semester. In fact, they are happy by the fact that they have

experienced it, know that so much need to be considered when making the decision, and ... you have to check the prices every time".

By participating in events organized by the investment related event management (PNB, OSK and Commerce International Merchant Bank Berhad (CIMB)); organized visits; and presentations by guest speakers from investment-related areas, students are also presented with opportunities to deal directly with the practitioners; to learn how to prepare paper work; to learn how to deal with management of faculty and university; and to have first-hand experience with other event management procedures. The activities work well in the case of the investment and portfolio management course because the subject focuses primarily upon practical implications. Specifically referring to the presentations by practitioners, one lecturer explains:

"The students appreciate what they learn in class better after they participate in the talk. It is as if the practitioners verify the theories and knowledge that you taught them in class. Well, you can never be sure about what your students think about your lecture or class discussion. But, once they are confident that they are not learning impractical things, they start to pay attention. To me the talks (and visit) are like the labs for the Biologists, once you show the students that the rats do react in certain ways to the drugs, then they will ask more about what are in the drugs (attention)".

(Lecturer 2)

5.1.5 Using Information Communication Technology (ICT)

The use of information communication technology (ICT) to facilitate the SCL approach has been widely employed by overseas universities. For example, computer-aided learning and intranet were used to facilitate the SCL approach in the financial statement analysis course offered at the University of Otago, Dunedin, New Zealand, in 1996 (Lont, 1999). Under the SCL approach, students were given a project that requires them to create a substantial report based upon firms' financial analyses. During the learning segments of the course, intranet was used to assist students in using a series of small movies concerning relevant computer skills; supply data and information, such as financial and share prices, exams, focus questions, lecture notes and newspaper articles; and access information about the companies.

For finance courses, students are required to search for information regarding materials related to the courses; and search for current issues relating to subject matter covered during the course from various sources, including the websites of government related agencies or regulatory bodies. Information search is an important tool in contemporary education because it allows students to search for information that is not provided in the textbook, principally due the fact that textbooks are often written in the context of their country of origin. As two lecturers comment:

"The structure of Malaysian financial system is unique and different from developed countries (our textbook, Mishkin is based on the US). (2) We implement dual banking systems and promote Islamic financial institutions; hence we champion in issuing sukuk and Islamic capital market. SCL is to grab the real scenario of what is happening".

(Lecturer 4)

"In investment, information is key, and we are talking about timely and specific information. We teach the students that market is efficient of the price reflects information quickly and fully. So, you can't rely on past information to make the best investment decision. By the way, the market structure and regulations are different in Malaysia than what they read from the textbook. We have to make sure our students get all those information or else they have to know nothing about Malaysian investment when they get out from our class".

(Lecturer 2)

Lecture 4 also agrees that SCL activities that emphasize the use of ICT enhance the students' understanding of the topics, stating:

"The guidelines and regulatory environment is rapidly changing to accommodate the needs of Islamic capital market".

5.2 Course Evaluation

Previously, the evaluation for all finance courses placed more weight on examinations, which were comprised of midterm and final examinations with scores ranging from 70-80 percent, while the other 20-30 percent stemmed from quizzes and assignments. Table 3 provides the evaluations for all five courses examined after they were conducted under the SCL approach. As Table 3 clearly demonstrates, the examination components have been

reduced to 30-70 percent of the total course evaluation, whereas the components that require student participation have increased to as high as 70 percent. The most obvious case is the investment and portfolio management course, which places a minimum (30%) weight on examination and 70 percent of the evaluation on activities that focus on the continuous group and individual activities of the student.

Table 3. Composition of course evaluation by student activities in the SCL environment

Courses Evaluation	Financial Management	Corporate Finance and Restructuring	International Finance	Investment and Portfolio Management	Financial Market and Institutions
Participation	-	-	-	10	10
Quizzes	10	-	10	-	-
Case Analysis	-	-	-	10	-
Case/Project Presentation and Report– Group	20	60	40	30	30
Project Presentation and Report– Individual	-	-	-	20	-
Mid Semester Examination	30	-	30	-	30
Final Examination	40	40	30	30	30
Total	100	100	100	100	100

Description: Scores for “participation” come from students’ involvement in subject-related activities, such as participating in field trips and talks; organizing the field trips and talks; participating in PNB Investment Quiz and OSK Investment Challenge; and class discussions.

5.3 Challenges of Implementing SCL in the Finance Courses

The advantages offered by the SCL approach in improving the learning process, however, come with a price. The shift from traditional learning creates tension and new challenges. The challenges can be considered in light of a variety of intrinsic elements of the learning process, including the learners, infrastructures and instructors. For instance, in examining the barriers in implementing the SCL approach in Vietnamese higher education institutions, Thanh (2010) highlights that school infrastructures and personal perceptions are the main challenges. Similar problems are reported by two of the lecturers interviewed during the present study in comments concerning class settings which are not suitable for interactive case discussion. Another lecturer (Lecturer 2) comments that:

“the class rooms cannot accommodate a large participation for the talk. Students are interested to participate in the talk, but we cannot allocate seats for them,...it is really a waste”.

Other lecturers comment about the availability of internet-based information for issues related to the topics in their respective courses. For instance, one lecturer states that there are:

“very limited internet-sources for Islamic capital market”

(Lecturer 4)

Thanh (2010) also argues that learners do not need to be imposed with a new collection of principles when the SCL approach is adopted as a mode of instruction. Alongside problems relating to infrastructure, perception and learners’ attitudes, the lack of suitable materials and problems designed for PBL approaches serve as barriers to lecturers who are ready to integrate PBL approaches in their courses. Hence, faculty development is important to support the needs of activities organized in accordance with the SCL approach activities, as is the development of an appropriate curriculum. As one lecture notes:

“It’s difficult to implement SCL because of lack of flexibility in curriculum, for instance, all sets (some courses are divided into several sets because of a large number of students) set the same syllabus and use the same textbook”.

(Lecturer 6)

Further interviews reveal that the department requires standardization in the adoption of the list of reference material and syllabus to ensure that no students are denied information and guidance concerning the course. Such issues are important because students are required to take a standardized final examination at the end of the semester. ISO requirements mandate that all students enrolled in a course must be tested simultaneously with same final examination.

Full implementation of the SCL approach also depends on the maturity level of the students. For instance, in the case of an introductory course, such as financial management, the lecturers decide to implement the SCL approach at a minimal level because the students do not have a basic foundation in finance. In such cases, the SCL approach defeats the purpose of releasing some of the burdens from the lecturers because they have to spend a considerable amount of time and energy guiding the students in order for the students to successfully complete activities that conform to the SCL approach. As stated by two of the lecturers who handle the financial management courses:

“SCL cannot be applied in Financial Management course because the ability of the students in understanding the topics in the course syllabus. In a few topics, the lecturer needs to elaborate extensively just to make sure that the students really understand about what are being explained in the textbook and the additional reading materials. At this point, nearly all students do not have basics about Finance area..., so it is difficult to implement SCL for this course because the students will rely too much on the lecturer to explain and elaborate each topic”.

(Lecturer 8)

“SCL is not suited for beginner students because at this point (freshmen), they are only learning about the basic concepts, theories and models in Finance. They don't much about their surroundings, let alone the financial environment outside the faculty and university. Basic SCL activity like company analysis is okay because it is guided, but independent kind of activities are still too early. This activity exposes them to the need for information search, apply in it their analysis... using their technical skills. You can't force them to do other, more real stuffs unless you have time to guide them all the way”.

(Lecturer 2)

The Quality Assurance Coordinator has foreseen this problem with freshmen or first time learners in any subject area utilizing the SCL approach. The Coordinator states that the students “may not relate” despite the lecturers’ efforts. Most often, such students have just graduated from high schools and the Coordinator believes they are still influenced by their high school culture of being guided (“spoon-fed”) in all activities that they are required and expected to perform. Also, because these students have yet to learn about the concepts and theories, misconception is a common problem that, if left unguided, could be “dangerous” to the students’ long-term learning process. From the perspective of the lecturers, not all are equally excited about the advantages of implementing SCL in their teaching process. One in particular gives the following reason;

“We have been assigning projects and case studies (in one of the advanced class) to our students all this while, ..., we just didn't call it SCL”.

(Lecturer 5)

6. Conclusions and Implications

The present paper presents an analysis of the teaching methods, learning activities and course evaluations utilized to integrate a learner-centered paradigm into five finance courses taught at a business school at an established research university in Malaysia. The five courses (financial management; corporate finance and restructuring; investment and portfolio management; international finance; and financial markets and institutions) are selected as the units of analysis. Information on these courses is gathered from the respective syllabus (pro-forma). Specifically, the present paper identifies the steps used to transform the courses into learner-centered environments, which includes identifying the teaching methods; developing learning activities; and incorporating evaluation tools. From the course analysis, the present study finds that the lecturers of these five courses employ active/interactive learning (class discussions) and group project approaches as the standard teaching methods under the SCL approach. Aside from these standard methods, some of the courses use other approaches, which include real life experiential learning and case studies. In the case of the investment and portfolio management course, the students are exposed to the real world investment decision making by investing funds in selected common stocks listed on Bursa Malaysia. Course evaluations are primarily based upon examination, group projects and presentations.

The course analysis is supported by responses obtained from brief interviews with respondents, who are comprised of lecturers that are personally involved in the implementation of the SCL approach in the finance courses examined. The response of the Q&A Coordinator was also sought. Overall, the responses indicate full support for the adoption of the SCL approach, as the approach benefits both the students and the lecturers. However, the integration of the SCL approach has also presented some challenges that can only be addressed by the faculty at the management level, particularly in relation to issues concerning class setting and class room size.

Overall, the results of the present study highlight that the implementation of the SCL approach in the teaching and learning undertaken in relation to five finance courses in this department has been effective. Outside of issues concerning the standardized syllabus and the fact that the SCL approach may be inappropriate to implement in the beginners' courses, the SCL approach could be the answer for developing students' generic skills despite the tight schedule of RU faculty members. Future studies should consider the perceptions of the affected students. Students' perceptions about the effectiveness of the SCL approach in enhancing their learning are important because they are the primary recipients of benefits under the SCL approach. The effectiveness of the faculty members may also be determined on the basis of their satisfaction and organizational commitment. Future studies should also compare the practices relating to the SCL approach undertaken at other research universities.

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Note

Note 1. The Malaysian government established the MQA to oversee the accreditation of advanced academic courses and programs that meet the quality requirements stipulated in the Malaysian Qualifications Framework (MQF). The MQF outlines a set of national criteria that are based upon existing benchmarks of best practices in relation to academic programs internationally. The criteria are utilized to evaluate all qualifications awarded by recognized higher education providers in Malaysia.