

Developing Experiential Learning Model for Online Courses Using Social Network Systems (SNS): A Review of Research Framework

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Abstract

Many educators turn to Social Network Systems (SNS); Facebook, Instagram, WhatsApp, etc. as modes of delivery for T&L. SNS offers a dynamic learning platform that can be applied to make teaching efficient and meaningful through its interactive features. Despite the prevalence of SNS, not many studies have attempted to structure its educational content into an effective pedagogical approach. SNS provides engagement through information, entertainment which could be a good support system to conduct experiential learning through online. Experiential learning through SNS can provide new ways for students to interact, participate, and collaborate. The main objective of this study is to develop a model of experiential learning through online teaching using Social Network Sites (SNS); i.e., Facebook, Instagram, WhatsApp, Telegram. The specific objectives are to identify; i. the suitable learning activities from the four phases of experiential learning cycle (ELC), ii. the most effective interactive tool to develop educational values such as collaborative and peer learning, iii. the level of educational values collaborative and peer learning activities throughout the ELC, iv. the relationship between each phase of ELC with educational values collaborative skills and peer learning, and v. the values promoted most through ELC. This study is a quantitative study using a survey design. A total of 350 students from 4 universities are involved in this study. The five (5) universities are UPSI, UUM, UKM, UTAR and MSU. Questionnaires will be administered to all respondents through Google forms. The findings of this study will be able to help instructors to design their lessons in ELC to provide more opportunities for students to 'experience' their learning. The output of this study is a model of ELC that can be applied for online courses using SNS.

Keywords: Quality Education, Knowledgeable Civil Society, Social Network Systems, Experiential Learning, Educational Values.

Introduction

Despite the popularity of social network services (SNS), not many studies have measured the skills or educational values that could be developed through online T&L especially the

collaborative and peer learning skills. One of the ways to approach the effectiveness of digital technologies in advancing the university curriculum for online learning, is through designing for social learning (Adachi and O'Donnell 2018). The limitations of SNS as learning platforms have been highlighted such as weakness in content structure, lack of class control mechanisms for educators and risk of getting incorrect information from public sites.

Besides, online learning has its issues arising from its implementation such as ethical issues especially integrity in assessment, lack of interaction in teaching and learning, lack of quality in its delivery and top of them all is the challenge of internet accessibility. Educators' technical limitations and readiness in delivering creative online courses could have led to a lack of learning and engagement. SNS is well accepted as a medium of communication, therefore these networks should be leveraged to enhance learning and social skills. Planning content and delivery design using Experiential Learning Model into SNS is one way to engage students in learning. Despite the issues surrounding online learning, this medium seems to have met its objective.

The objective of online learning is to improve user accessibility and time flexibility. All affective learning outcomes such as communication, teamwork, leadership, inter and intrapersonal skills require students to interact. Effective learning by students requires them to engage and 'experience' the topic or issues rather than merely deliver of content and assessment of content mastery. Achieving learning outcomes especially the skills and values through face-to-face learning has been a struggle. Creativity among educators is highly sought after not only in designing the content and assessment but more in designing the lesson into an experience. E-learning has become a compulsory means of teaching and learning, no longer as a complementary or alternative method of curriculum delivery that is currently in practice. The E-learning mode of study normally focuses on the delivery of content and some interactions between educators and students.

Some challenges of e-learning are the limitation in students' participation, engagement, collaboration, and interpersonal communications. Previous research has demonstrated that students' participation in class is an important factor in their learning. However, significant barriers exist to all students' participation during whole group discussions. These barriers include dynamics related to class size and available time as well as personal dimensions such as gender, age, and learning preferences. Using active learning strategies such as experiential learning through SNS can help break down those barriers by enabling collaborative construction of understanding. SNS provides good networks for social learning and peer learning. This study is in line with the Education Blueprint (2013-2025) to enhance students learning through effective delivery.

Literature Review

One of the ways to approach the effectiveness of digital technologies in advancing the university curriculum for online learning is through designing for social learning (Adachi and O'Donnell 2018). Educational values are often described as student's aspirations that are holistic in nature and consist of the affective outcomes of education. Today's more learning happens outside the classrooms than inside in fact students absorb more information through social media, interactions with friends and sourcing information from search engines. SNS offers a dynamic learning platform that can be applied to make teaching efficient and

meaningful through its interactive features. The interactive features of SNS can be used to facilitate teaching and learning such as streamlining assignments, boosting collaboration, and fostering communication among peers and teachers. Educators can create classes, distribute assignments, send feedback, and see everything in one place. Online learning focuses on design and delivery of content, with limited assessment methods.

Online learning does have limitations in measuring affective learning outcomes which requires students' interactions. Almost all affective learning outcomes such as communication, teamwork, leadership, inter and intrapersonal skills requires students to interact. Educational values such as interpersonal and collaborative skills can be structured into planned instructions to add value to the social learning networks. The Z generation uses SNS to share their interest, opinions, and involvement in discussions which most of the time is not directly related to academics. Educators should leverage these activities to support teaching and learning using SNS to enhance class participation and student's engagement in discussions. Students are inclined to use their prior knowledge, sharing experience, and even provide supporting information and cite references in making their points through SNS. These interactions are the basis of constructivism theory which states that learning happens when we relate new information with our prior knowledge. Most students used SNS as a communication and socialization network, which does not burden them financially and not many restrictions as the conventional tutorial sessions in HEIs.

Therefore, learning through SNS is putting them in their familiar surroundings. The purpose of this study is to structure these educational values into the experiential learning activities to achieve the learning outcomes for courses conducted at tertiary levels. This study aims to use SNS especially Facebook as a support tool in helping students to learn by enhancing social learning with educational values explicitly planned in the instructions. The literature suggests that SNSs are mainly used in education as tools supporting existing social relationships and enabling the maintenance of social capital (Ellison et al., 2011). However, the value of SNSs as learning environments is still questioned (e.g. lack of content structure, insufficient control mechanisms for educators, public spaces containing inaccurate information). SNS is the world size classroom where learning takes place all the time. Typical activities of collaborative learning are the use of polls for evaluation activities and the use of group discussions in brainstorming tasks. These phenomena are stated in the social learning theory (Bandura, 1971), learning from one another, via observation, imitation, and modeling. The theory has often been called a bridge between behaviorist and cognitive learning theories because it encompasses attention, memory, and motivation.

The transformation of science that has been done conventionally requires that face-to-face in class, is now slowly integrated with the media of e-learning technology or commonly known as blended learning or hybrid learning, or even full online learning (Nuridah & Tahir, 2018). Similarly, e-learning also can be attributed to the distribution of smart systems, virtual and complementary reality, mobile devices also lead to the need for content modification, which will allow students to study during the whole life from any device and be constantly in the information and education environment (Vorotnykova, 2019). Digital learning and online learning have become a compulsory teaching and learning platform in tertiary education. Digital learning enables teaching and learning to be more efficient and dynamic which involves social networks. SNS has applications that can be leveraged for peer and collaborative

learning. Assignment creation and distribution can be accomplished through discussions boards and able to serve as classroom communication platforms. Facebook has many advantages in facilitating teaching and learning.

Besides reducing paperwork, students are encouraged to share their views and work among peers, helping to improve communication between students and teachers. Facebook is not only an effective tool for class management, but it is also a free mobile app, reliable and it has features for collaboration. Many studies on the benefit of digital classrooms to promote student participation indicate positive outcomes of using Facebook learning (Amadin et al. 2018) and students' initial perceptions of Facebook as a mobile learning experience (Heggart et al. 2018). These findings imply that further studies are needed to explore the usage of technologies in supporting the achievement of students learning outcomes. However, research in digital learning is still limited.

Heggart (2018), uses data from students' perceptions on Facebook learning to construct a framework to evaluate the use of online platforms; it identifies four concepts; pace, ease of access, collaboration and student voice/agency in exploring the usefulness of other online learning platforms, as well as pedagogical practice. Kumar, Amantha, and Bradford (2019) apply The Importance-Performance Map Analysis (IPMA) and prove that habit is the most important factor in determining actual usage of Facebook rather than Behavioural Intention. These studies indicate that Facebook is a digital platform that has big potential in leveraging learning. Effective delivery methods provide new experiences to students to link existing knowledge to the desired knowledge. Learning is the process whereby knowledge is created through the transformation of experience (Kolb, 1984).

Beard and Wilson (2002), stated that when receiving a stimulus, be it an external or internal one; a form of learning from experience is generated. Experiential Learning Cycle (ELC) is learning through four phases-cycle. Firstly, students need to understand the big picture, 'Why' to stimulate their interest in the subject matter, 'What' is the significance of this lesson to their everyday life, 'How' to understand the concepts and related theories. In return, students should apply the newly learned concept and ideas into a situation; that is the 'What if' phase. These four questions represent the learning cycle's internal structure which implies a pattern for learning new concepts. A combination of the learning modes from all four learning styles produces the highest learning level (Harb & Terry, 1995).

Among the teaching challenges in a cycle is preparing suitable materials to provide a relevant experience. In other terms, each quadrant offers a learning experience that suits one out of four learning styles according to the Kolb Learning Styles Model (KLSM); assimilators, divergers, convergers, and accommodators. KLSM is based on how students perceive and process information in learning through a two-opposite continuum; feeling and thinking in the perceiving continuum, while reflecting and doing is in the processing continuum.

Findings indicate that students put a significantly high amount of time and energy into experiential learning, which leads to increased engagement in the feeling and cognitive continuum (Rohaila et al. 2020). These are the operational definition for four phases of ELC applied in this study; Concrete Experience- The 'Why' phase is a new experience or situation is encountered, or a reinterpretation of existing experience; Reflective Observation- The

'What' phase of the new experience in reviewing and reflecting on the experience with a focus on understanding and identifying gaps in understanding; Abstract Conceptualization- The 'How' phase is the identification of what was learned from the experience, What could be changed to improve future experiences? Reflection gives rise to a new idea or a modification of an existing abstract concept. (The person has learned from their experience); Active Experimentation- The 'What If' phase is the learner applies their idea(s) to the world around them to see what happens. Based on the literature review explained, the objective of this study is:

- i. To identify the suitable learning activities from the four phases of experiential learning cycle (ELC)- Concrete Experience, Reflective Observation, Abstract Conceptualization and Active Experimentation.
- ii. To identify the most effective interactive tools to develop educational values such as collaborative and peer learning.
- iii. To identify the level of educational values such as collaborative and peer learning activities throughout the ELC.
- iv. To identify the relationship between each phase of ELC with educational values, collaborative skills and peer learning.
- v. To identify the values promoted most through ELC.
- vi. To develop a model of Experiential Learning for online courses using Social Network Sites (SNS); i.e, Facebook, Instagram, Whats App, Telegram.

Methodology

The framework is drawn up based upon the four (4) phases of ELC; Concrete Experience, Reflective Observation, Abstract Conceptualization and Active Experimentation. This research is a quantitative research using survey design. In survey research, independent and dependent variables are used to define the scope of study, but cannot be explicitly controlled by the researcher. Before conducting the survey, the researcher predicates a model that identifies the expected relationships among these variables.

This study conducted three phases of analyses, namely: (1) descriptive analysis, (2) test of validity and reliability, and (3) test of hypotheses. The study is proposed to be conducted within 24 months. Survey questionnaires are designed to obtain information on all phases of ELC. The questionnaire is adapted and adopts based on an instrument designed by Munge et al. (2018). All the research activities will be conducted to develop the model of ELC through SNS. The instrument was divided into four parts, according to four phases in the cycle. The universities chosen are Universiti Pendidikan Sultan Idris, Universiti Kebangsaan Malaysia, Universiti Utara Malaysia, Universiti Tun Abdul Razak and Malaysian Management and Science University.

Samples of university students are considered to be the most relevant because university students are regarded as the main stakeholders of online learning. A total of 350 students from the four universities will be selected as respondents, through the Heads of Departments in each university. Courses that use SNS platforms as part of the teaching and learning will be selected. Instructions will be given out on minor arrangements of delivery materials of the online classes to meet the basics of ELC cycle. For data analysis, this study uses a T-test, Pearson Correlation Analysis and Multiple Regression Analysis to test all hypotheses. T-tests determine whether there is a statistically significant difference between

the means of a population from the mean of another population. Correlation coefficients are used to determine the strength and direction of the linear relationships between two variables. Multiple regression analysis was used to examine the hypotheses on factors influencing collaborative and peer learning skills. Finally, discussions and implications of the results will be presented and provide suggestions and conclusions for the next research based on research findings.

Conclusion

Based on the research framework proposed, the expected results targeted in the aspects of novel theories or new findings or knowledge are digital learning has become a popular curriculum delivery method well accepted by educators and students due to the convenience and flexibility. To make sure T&L happens effectively, students learn through experiences created through course materials and delivery sequence. These experiences are measured and become the proxy of students' learning. The Experiential Learning Model is applied as a base in testing the levels of educational values developed in T&L using SNS.

Apart from that, the impact statement on quintuple helix for these proposed research frameworks is educational values which is often describe as learning outcomes mostly consist of effective outcomes which can only be achieved through students' interactions. SNS offers an effective platform of experiential learning which is way beyond capacity of online learning. Educators should explicitly plan the course instructions to include educational values such as interpersonal skills, peer learning and collaborative skills. Therefore, ensuring educational values are well integrated through experiential learning is crucial to ascertain students practice educational values besides engaging in the content through SNS platform. As a conclusion, this study is expected to have important implication for innovation in curriculum, which enhances the students' social learning, promotes educational values and leverages digital and experiential learning strategy. This innovation is in line with Education 4.0 and the Malaysia Education Blueprint.

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