

Enhancing Social And Lifelong Learning Skills Through The Use Of Mobile Technology As A Motivational Factor

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Growing use of technology by students is having an impact on teaching and learning as students are increasingly seeking to use technologies to engage in a range of academic activities. The traditional way of teaching and learning have to change in order to enhance students' social and lifelong learning skills. Communicating with mobile phone have become a daily routine by most students. They are motivated to almost anything that involves mobile technology. That is why they are spending hours with their phones. Thus, this study is done to recognize how mobile technology can help enhancing the social and lifelong learning of students through a case done in Seminar in Management Accounting class with the use of social and lifelong learning rubric and action research methodology. The study found that students have the opportunity to engage with the business communities through the use of mobile technology. The technologies enable them to engage with other party regardless of time and situations.

Keywords: social and lifelong learning skills, mobile technology, education, action research.

Service-learning can benefit all participants, students, faculty, academic institutions and their communities (See Table 1). Students gain academic knowledge and skills, interpersonal skills, and self-confidence. Faculty can enhance the quality of their teaching, find opportunities for research and outlets for professional expertise. Service-learning supports the civic engagement mission of colleges and universities and improves town/gown relationships. Community members receive valued service and institutional support. Student benefits of service-learning include enhanced opportunities for learning, and personal and social skill development. Students gain increased

knowledge of academic materials, their communities, and themselves. Service-learning is a form of experiential education that supports deep learning. Through their service-learning activities, students apply classroom knowledge in practical settings to enhance their understanding of class materials (Eckersley, Tobin & Windsor, 2018; Saylor, Hertsenberg, McQuillan, O'Connell, Shoe & Calamar, 2018).

Service-learning provides students with opportunities to develop civic engagement skills. By working with community members, students can enhance their group, organizational and interpersonal skills.

They also can gain important experience working with diverse members of their communities. Learn more about how service learning can be used to connect classroom learning with societal issues. Students can gain better understanding of

themselves as they explore and develop ways to contribute to their communities. They can develop self-confidence and an enhanced commitment to public service (Maruyama, Furco & Song, 2018; Soria & Mitchell, 2018).

Table 1

Benefits of Community Engagement

STUDENT BENEFITS OF COMMUNITY ENGAGEMENT:	
Learning Outcome	<ul style="list-style-type: none"> -Positive impact on students' academic learning -Improves students' ability to apply what they have learned in "the real world" -Positive impact on academic outcomes such as demonstrated complexity of understanding, problem analysis, problem-solving, critical thinking, and cognitive development -Improved ability to understand complexity and ambiguity
Personal Outcome	<ul style="list-style-type: none"> -Greater sense of personal efficacy, personal identity, spiritual growth, and moral development -Greater interpersonal development, particularly the ability to work well with others, and build leadership and communication skills
Social Outcome	<ul style="list-style-type: none"> -Reduced stereotypes and greater inter-cultural understanding -Improved social responsibility and citizenship skills -Greater involvement in community service after graduation
Career Development	<ul style="list-style-type: none"> -Connections with professionals and community members for learning and career opportunities -Greater academic learning, leadership skills, and personal efficacy can lead to greater opportunity
Relationship With The Institution	<ul style="list-style-type: none"> -Stronger relationships with faculty -Greater satisfaction with college -Improved graduation rates

<p>FACULTY BENEFITS OF COMMUNITY ENGAGEMENT</p>	<ul style="list-style-type: none"> -Satisfaction with the quality of student learning -New avenues for research and publication via new relationships between faculty and community -Providing networking opportunities with engaged faculty in other disciplines or institutions -A stronger commitment to one's research
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Source: Brandy (2018) <https://cft.vanderbilt.edu/guides-sub-pages/teaching-through-community-engagement/>

Internet Technology in Education

Students today are part of the millennial generation. They have grown up surrounded by technology and it is being used extensively by this generation. They are spending most of their time online and easily learn new technologies. Interactive media that offer a means to hold two-way conversations with others is preferred over viewing television, reading or any other one-way method of communicating concepts. Students use the Internet for coursework, looking up information on the web and downloading music, software and movies, job searching, shopping and games. The Internet is their favoured medium for social interaction via social web sites like Facebook, My Space, and Twitter (Jones, 2009).

The traditional classroom where teachers are the primary source of information will not keep students engaged in the scholarship process. According to Tapscott (1998), students who are not engaged will not achieve. Prensky (2010) argues that the millennial generation tend to deliver a short attention span or lack of care. He directs to their ability to sit for hours watching movies, playing video games or sitting in front of a computer looking at things on the Internet. The same students that can't concentrate in grade will use after school time to work with computers and the Internet and acquire skills that will be useful to them in the hereafter.

Results from study done by Vannatta and Beyerbach. (2000) indicate that project activities facilitated (1) increased proficiency in technology applications and instructional methods among all participants and (2) faculty integration of technology in education courses. In addition, higher education faculty and preservice teachers felt that project activities enabled a constructivist view of technology integration, as they now see technology as an instructional tool used to engage students in meaningful learning.

In terms of attitude changes, study by Christensen (2002) stressed that the technology integration education is shown to have a rapid, positive effect on teacher attitudes, such as computer anxiety, perceived importance of computers, and computer enjoyment. This type of education is shown to have a time-lagged positive effect on the attitudes of students as well (Niederhauser & Lindstrom, 2018; Tsai, 2018; Tourón, Navarro-Asencio., Lizasoain, López-González, & García-San Pedro, 2018)

While Hoyer (2005) stressed that the proponents of technology use in education cite numerous studies showing how the use of technology enhances learning and allows teachers to address the students' individual learning styles. Often literature reveals various of opinion regarding the benefits of technology in education. Those less inclined to embrace technology

often point out weaknesses in studies advocating technology while they cite their own studies highlighting factors suggesting that technology may not be as effective as initially thought in promoting learning.

Motivation Theory

Computers and technology are generally said as being effective in increasing student motivation (Kulik, Bangert, & Williams, 1983; Software Publishers Association, 1995). Recent curricular innovations using the Internet, including particular aspects of telecommunications such as E-mail, can capitalize on students' general interest in computers and social communication or collaboration. For lesson, some Internet science projects link students, teachers, and scientists through E-mail or World Wide Web-based message boards, offering a forum for cross-classroom discussion and communication. In the research performed on network science programs showed that individuals have described various characteristics that have been variously attributed to contributing to a high degree of student motivation and performance (Fishman & Pea, 1994; Lenk, 1992; Weir, 1992; Riel, 1987). These common characteristics include communication, collaboration, authenticity, access to real-time information, and first-hand resources. Students in this generation are so motivated on internet technology. Most of students have their own smartphones and computers. They spent most of their time with the technology gadgets. Technology gadgets make them alert and motivated. They are even used as stress reduction tools.

Motivation is an internal state or condition (sometimes described as a need, desire, or want) that serves to activate or energize behaviour and give it direction (Kleinginna and Kleinginna, 1981). It is the internal state or condition that activates behaviour and gives it direction, desire or want that energizes and directs

goal-oriented behaviour; influence of needs and desires on the intensity and direction of behaviour. Franken (2006) provides an additional component of motivation as the arousal, direction, and persistence of behaviour.

Motivation can be specified as a desire to enlist in an activity out of wonder, interest, or enjoyment. The term motivation refers to factors that activate, direct, and sustain goal-directed behaviour (Nevid, 2013). Most motivation theorists assume that motivation is involved in the performance of all learned responses; that is, a learned behaviour will not occur unless it is energized. The major question among psychologists, in general, is whether motivation is a primary or secondary influence on behaviour. That is, are changes in behaviour better explained by principles of environmental/ecological influences, perception, memory, cognitive development, emotion, explanatory style, or personality or are concepts unique to motivation more pertinent. According to Hull's drive reduction theory, learning reduces drives and therefore motivation is essential to learning. The degree of the learning achieved can be manipulated by the strength of the drive and its underlying motivation. Thus, educators and students need to embed technology in teaching and learning in order to keep students motivated and hence help them achieve the learning goals.

Previous studies on mobile technology integration in teaching and learning has yet done for increasing accounting students' social and learning skills. Most of studies done on how mobile technology integration give benefits to teaching and learning as well as the technology tools that can be used to improve students' awareness on absorbing knowledge (Cheng, Hwang & Chen, 2019; Kapoor & Datir, 2019; Lall, Rees, Law, Dunleavy, Cotič & Car, 2019; Leem & Sung, 2019; MacCallum & Bell, 2019; McMullen,

Hannula Sormunen, Kainulainen, Kiili & Lehtinen, 2019; Zhai, Li & Chen, 2019). Previous studies agreed that the use of technology in teaching and learning increases students' academic performance and may compliment a teacher's existing pedagogy (Callaghan, Long, Es, Reich, & Rutherford, 2018; Shyr, & Chen, 2018; Kareem, 2018; Kale, 2018; Tadesse, Gillies, & Campbell, 2018).

This study is significant for the proper recognition of the improving students' social skills and lifelong learning skills. The results are expected to provide an alternative way to reaching the community through mobile technology thus will cultivate the students' engagement with the community in a continuous manner. It may encourage the educator and the administrators to make changes and adapt to changes in today's environment. Thus, help their educators in their teaching performance in improving students' skills. This study will assist the planners in the proper selection of methods, techniques, and strategies that need to be reinforced.

Method

This study employed action research where the data will be collected through rubric assessments, observations, checklists and reflections as well as literatures. According to Mc Niff (2010), action research is done by the practitioner. It involves oneself thinking about and reflecting on his/her work. Action research is an enquiry conducted by oneself where the practitioner thinks about his/her own life and work. In action research report, it shows how practitioner has carried out a systematic investigation into his/her own behaviour, and the reasons for that behaviour. The study was conducted in BKAM3033 (Seminar in Management Accounting) class in A181 session. This course is a fully theoretical subject and a core subject for Bachelor in Accounting

and Bachelor in Accounting (Information System) students. In this course, students need to do a project. The project needs student to go to the business community and search for their practice and problems. To achieve the objectives of the study, the 'Social Skills' and 'Lifelong Learning' rubrics of University Utara Malaysia were used as instrument measurement. In this study, the lecturer is acting or behave as if she is 'the facilitator' in the project carried by the students. There are three stages, Pre-Stage, During-Stage and Post-Stage.

Pre-Implementation Stage

At the pre-implementation stage, the researcher inform the students on the activities to be conducted in their project. The students were asked to search for their business operators. Once the find the business operator, they sent formal letter that stated their purpose of meeting. The students set on the time and date for future meeting. Questions and answers session was held to clarify any inquiries from the students.

During Implementation Stage

There were two cycles involve:

Cycle 1 – In this cycle, the lecturer jointed a group of students (Group A) in their project to meet the business operator. The first meeting was held at business operator's premise. The introduction of the project and the expectation of further engagement with the business operator were explained by the students. The students made the interview. The business operator was invited to joint WhatsApp group and Facebook that concern on the accounting and business activities. The business operator was informed on the use of mobile technology in replacing face to face meeting. The business operator would use this opportunity to interact with the students on any questions and views regarding accounting practices. The lecturer observed and took field notes during the

meeting. Soon after the meeting was finished, the lecturer would assess the social skill using social skill rubric for the session, asked students' feedback and did reflection. The lifelong learning skills were assessed through final report by using information management and lifelong learning rubric.

First reflection: Made adjustment/improvement by considering all feedback and observations.

Cycle 2 – In this cycle, the lecturer jointed another group of students (Group B) in their project to meet the business operator which was held at business operator's premise. During the second cycle, the same activities as in the first cycle were conducted. The lecturer did improvements based on the reflections, observations and field notes based on the first phase. The WhatsApp group and Facebook that were created with the operator were monitored by the lecturer. The same cycle were conducted in cycle 3 if the rubric assessment did not achieve the required level and more improvement to be made.

Post Implementation-Stage

The reflection on the whole observation, field notes and rubrics, interviews were analysed. Students from Group A and B as well as the business operators were interviewed to understand their perceptions on the community engagement and how they gained benefits or faced obstacles from the activities with the use of mobile technology. The rubric of social skills and lifelong learning were assessed to understand the enhancement of those skills. The WhatsApp group and Facebook that were created with the operator were monitored by the lecturer. All data were analysed and reported.

Students sent the business operator regular electronic updates for feedback. This continual communication positively af-

ected both the business operators' and the students' relationship with each other and the class/lecturer. Students presented the business operator with a final written report and presentation, and also presented their findings to the class and posted in the e-learning forum. Students used screen-based technology throughout the course to facilitate the project and communications.

The students' communications with the business community in WhatsApp and Facebook and other electronic applications were discussed online/real time. It would be reviewed every week since the first meeting with the business operators. All discussions were screenshot for evidence of online communication/socialization. Reflection was done to comprehend the whole processed that take place.

Results and Discussion

CYCLE 1:

In this cycle, the lecturer jointed a group of students (Group A) in their project to meet the business operator. The first meeting was held at business operator's premise. The introduction of the project and the expectation of further engagement with the business operator were explained by the students. The students made the interview. The business operator was invited to joint Whatsapp group and facebook that concern on the accounting and business activities. The business operator was informed on the use of mobile technology in replacing face to face meeting. The business operator would use this opportunity to interact with the students on any questions and views regarding accounting practices. The lecturer observed and took fieldnotes during the meeting. Soon after the meeting was finished, the lecturer would assess the social skill using social skill rubric (See Appendix 1) for the session, asked students' feedback and did

reflection.. The lifelong learning skills were assessed through final report by using lifelong learning rubric.

Observations and assesment rubrics were be taken by the lecturer on each group to understand the situation during the discussions. The assesment on Social skills Rubric (See Table 2) showed that in terms of self confidence, students were frequently deminstrated self confidence in doing tasks. They had hasitation in throwing questions and there were times when silent moment ocured. In term of tolerance and respectful, students showed excellent level of respects, accepted and supported the opinion of others and tried to keep others working well together. In term of social communication, students were in good

level in starting, maintaining and ending a conversation in a friendly manner. They maintained good eye contact and took turn to talk with respect to the business operator. The students’ etiquette level were excellent where they always ethically behaved when carrying out responsibilities to the group. As far as emotion management is concern, the students showed a good attitude and behaviour when socializing with others, managed emotional distress wisely and received and gave praise and constructive criticism. Lastly, in term of social contribution to the society, the students’ level were good. They were still in the learning process and tried to contribute as per student levels.

Table 2
Social Skills Rubric in First Cycle

CONTENT (Social Skills and Responsibilities)					
Criteria	Poor (0-3)	Fair (4-6)	Good (7-9)	Excellent (10-12)	Score
Self Confidence	Little or no self confidence in doing tasks.	Sometimes demonstrates self confidence in doing tasks.	Frequently demonstrates self confidence in doing tasks. 9	Always demonstrates self confidence in doing tasks.	9
Tolerance and Respectful	Rarely respects, accepts and supports the opinion of others. Often is not a good team player.	Fairly respects, accepts and supports the opinion of others, but sometimes is not a good team member.	Usually respects, accepts and supports the opinion of others. Does not cause “waves” in the group.	Always respects, accepts and supports the opinion of others. Tries to keep people working well together. 10	10
Social Communication	Rarely shows interest to participate in conversations. Limited eye contact. Always disrupt or monopolise conversations.	Takes part in conversations when initiated by others. Appropriate eye contact. Interfere or monopolise conversations.	Starts, maintains and ends a conversation in a friendly manner. Maintains good eye contact. Takes turn to	Starts, maintains and ends a conversation naturally. Uses appropriate eye contact and body language. Takes turn to	8

			talk with respect. 8	talk with respect and actively listen to others.	
Etiquette	Need guidance to be ethical when carrying out responsibilities to the group/community/society.	Ethical when carrying out responsibilities to the group/community/society, but sometimes put self-interest first.	Frequently ethical when carrying out responsibilities to the group/community/society.	Always ethical and promote being ethical when carrying out responsibilities to the group/community/society. 10	10
Emotion Management	Need guidance from others to correct attitude and behaviour and manage emotions.	Sometimes able to fix undesirable attitude and behavior by own self. Able to manage simple emotional distress satisfactorily. Receive and give some praises as well as criticisms accordingly.	Fixes undesirable attitude and behavior by own self. Manages emotional distress well. Receives and gives praise and some criticism accordingly.	Always show a good attitude and behaviour when socializing with others. Manage emotional distress wisely. Receive and give praise and constructive criticism. 10	10
Social Responsibility – Contribution to Society	Shows little concern and consideration towards the diversity of values and/or beliefs, as well as group/community/society wellness.	Shows concern and considerate towards the diversity of values and/or beliefs, as well as group/community/society wellness. Socialises and communicates in satisfactory manner (listen, understand, share and provide feedback) with members of the group/community/society.	Willing to guide in order to improve knowledge for the common group/community/society wellness. Socialises and communicates in good manner (listen, understand, share and provide feedback) with members of the community. Able to maintain collaboration and cooperation in a multicultural community. 8	Willing to guide in order to improve knowledge for the common group/community/society wellness. Socialises and communicates in excellent manner (listen, understand, share and provide feedback) with members of the group/community/society. Able to nurture and maintain collaboration and cooperation in a multicultural group/community	8

				TOTAL SCORE:	55/72
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After Group A submitted the final report. Lifelong learning skill were evaluated based on lifelong learning rubric (see Table 3). The group was in good level for information retrieval and management. They demonstrated ability to find and managed relevant information with minimum guidance but not from various sources. In term of autonomous learning, students were able to to accept new ideas; able and willing to conduct autonomous learning. In the interest traits, students explored a topic in depth, yielding insight and/or information

indicating considerable interest in the subject matter. In term of initiative, students demonstrated moderate initiative in completing a task. While in term of sources and references, all sources (information and graphics) were accurately documented, but a few were not in the desired format. Most references were cited in text and appropriately provided in reference list. Most references used correct style and format.

Table 3
Information Management and Lifelong learning Skill Rubric in First Cycle

CONTENT (Information Management and Lifelong Learning)					
Traits	Poor (0-3)	Fair (4-6)	Good (7-9)	Excellent (10-12)	Score
Information retrieval and management	Not being able to find and manage relevant information.	Only being able to find and manage relevant information with instructor's guidance.	Demonstrate ability to find and manage relevant information with minimum guidance but not from various sources. 9	Always able to find and manage relevant and high quality information.	9 x 2
Autonomous learning.	Difficult to accept new ideas; not able and not willing to conduct autonomous learning.	Need time to accept new ideas; not able but willing to conduct autonomous learning.	Able to accept new ideas; able and willing to conduct autonomous learning. 9	Always seek knowledge and able to accept new ideas; able and willing to conduct autonomous learning.	9
Interest	Merely explores a topic at a surface level with a very basic facts indicating limited interest on the subject	Explores a topic with some evidence of depth with occasional insight and/or information indicating	Explores a topic in depth, yielding insight and/or information indicating considerable interest in the subject matter.	Explores a topic in depth yielding a rich awareness indicating intense interest in the subject matter.	8

	matter.	moderate interest in the subject matter.	8		
Initiative	No initiative to complete a task.	Demonstrates limited initiative in completing a task.	Demonstrates moderate initiative in completing a task.	Demonstrates good initiative in completing a task. 11	11
Sources and References	Some sources are not accurately documented. References are not cited in text, and no or few references are provided in the reference list. Style and format are incorrect.	All sources (information and graphics) are accurately documented but many are not in the desired format. Few references are cited in text and in the reference list. Most references use incorrect style and format.	All sources (information and graphics) are accurately documented, but a few are not in the desired format. Most references are cited in text and appropriately provided in reference list. Most references use correct style and format. 8	All sources (information and graphics) are accurately documented in the desired format. Complete references in text and reference list. All references use correct style and format.	8
Total Score					54/60

CYCLE 2:

In this cycle, improvement were made from cycle 1. The lecturer followed another group of students (Group B) in their project to meet the business operator which was held at business operator’s premise. During the second cycle, the same activities as in the first cycle were conducted. The lecturer did improvements based on the reflections, observations and field notes based on the first phase. The Whatsapp group and Facebook that were created with the operator were monitored by the lecturer. The same cycle were conducted in cycle 3 if the rubric assessment did not achive the required level and more improvement to be made.

In cycle 2, observations and assesement rubrics were be taken by the lecturer on each group to understand the situation during the discussions. The assesement on Social skills Rubric (See Table 4) showed that in terms of self confidence, students were always demonstrates self confidence in doing tasks. They had confidence in throwing questions and there were times when silent moment occured. In term of tolerance and respectful, students showed excellent level of respects, accepted and supported the opinion of others and tried to keep others working well together. In term of social communication, students were in excellent level in starting, maintaining and ending a conversation in a friendly manner. They started, maintained and

ended a conversation naturally. They also used appropriate eye contact and body language as well as took turn to talk with respect and actively listened to others. The students' etiquette level were excellent where they always ethically behaved when carrying out responsibilities to the group. As far as emotion management is concern, the students showed an excellent attitude and behaviour when socializing with others, managed emotional distress wisely and received and gave praise and constructive criticism. They always managed emotional distress wisely. The students

received and gave praise and constructive criticism. Lastly, in term of social contribution to the society, the students' level were excellent. Student were willing to guide in order to improve knowledge for the common group/community/society wellness. They socialised and communicated in excellent manner (listen, understand, share and provide feedback) with members of the group/community/society. They were able to nurture and maintain collaboration and cooperation in a multicultural group/community/society.

Table 4
Social Skills Rubric in Second Cycle

CONTENT (Social Skills and Responsibilities)					
Criteria	Poor (0-3)	Fair (4-6)	Good (7-9)	Excellent (10-12)	Score
Self Confidence	Little or no self confidence in doing tasks	Sometimes demonstrates self confidence in doing tasks.	Frequently demonstrates self confidence in doing tasks.	Always demonstrates self confidence in doing tasks. 10	10
Tolerance and Respectful	Rarely respects, accepts and supports the opinion of others. Often is not a good team player.	Fairly respects, accepts and supports the opinion of others, but sometimes is not a good team member.	Usually respects, accepts and supports the opinion of others. Does not cause "waves" in the group.	Always respects, accepts and supports the opinion of others. Tries to keep people working well together. 10	10
Social Communication	Rarely shows interest to participate in conversations. Limited eye contact. Always disrupt or monopolise conversa-	Takes part in conversations when initiated by others. Appropriate eye contact. Interfere or monopolise conversations.	Starts, maintains and ends a conversation in a friendly manner. Maintains good eye contact. Takes turn to talk with respect.	Starts, maintains and ends a conversation naturally. Uses appropriate eye contact and body language. Takes turn to talk with respect and actively listen to others. 9	9

	tions.				
Etiquette	Need guidance to be ethical when carrying out responsibilities to the group/community/society.	Ethical when carrying out responsibilities to the group/community/society, but sometimes put self-interest first.	Frequently ethical when carrying out responsibilities to the group/community/society.	Always ethical and promote being ethical when carrying out responsibilities to the group/community/society. 10	10
Emotion Management	Need guidance from others to correct attitude and behaviour and manage emotions.	Sometimes able to fix undesirable attitude and behavior by own self. Able to manage simple emotional distress satisfactorily. Receive and give some praises as well as criticisms accordingly.	Fixes undesirable attitude and behavior by own self. Manages emotional distress well. Receives and gives praise and some criticism accordingly.	Always show a good attitude and behaviour when socializing with others. Manage emotional distress wisely. Receive and give praise and constructive criticism. 11	11
Social Responsibility – Contribution to Society	Shows little concern and consideration towards the diversity of values and/or beliefs, as well as group/community/society wellness.	Shows concern and considerate towards the diversity of values and/or beliefs, as well as group/community/society wellness. Socialises and communicates in satisfactory manner (listen, understand, share and provide feedback) with members of the group/community/society.	Willing to guide in order to improve knowledge for the common group/community/society wellness. Socialises and communicates in good manner (listen, understand, share and provide feedback) with members of the community. Able to maintain collaboration and coop-	Willing to guide in order to improve knowledge for the common group/community/society wellness. Socialises and communicates in excellent manner (listen, understand, share and provide feedback) with members of the group/community/society. Able to nurture and maintain collaboration and cooperation in a multicultural group/community/	9

			eration in a multicultural community.	society. 9	
				TOTAL SCORE:	59/72

After Group B submitted the final report. Lifelong learning skill were evaluated based on lifelong learning rubric (see Table 5). The group was in excellent level for information retrieval and management. They were always able to find and manage relevant and high quality information.. In term of autonomous learning, students were able to seek knowledge and able to accept new ideas; able

and willing to conduct autonomous learning. In the interest traits, students explored a topic in depth, yielding insight and/or information indicating considerable interest in the subject matter. In term of initiative, students demonstrated moderate initiative in completing a task. While in term of sources and references, all sources (information and graphics) were accurately documented in the desired format, completed references in text and reference list, all references used correct style and format.

Table 5
Information Management and Lifelong learning Skill Rubric in Second Cycle

CONTENT (Information Management and Lifelong Learning)					
Traits	Poor (0-3)	Fair (4-6)	Good (7-9)	Excellent (10-12)	Score
Information retrieval and management	Not being able to find and manage relevant information.	Only being able to find and manage relevant information with instructor's guidance.	Demonstrate ability to find and manage relevant information with minimum guidance but not from various sources. 9	Always able to find and manage relevant and high quality information.	9 x 2
Autonomous learning.	Difficult to accept new ideas; not able and not willing to conduct autonomous learning.	Need time to accept new ideas; not able but willing to conduct autonomous learning.	Able to accept new ideas; able and willing to conduct autonomous learning. 9	Always seek knowledge and able to accept new ideas; able and willing to conduct autonomous learning.	9
Interest	Merely explores a topic at a surface level with a very	Explores a topic with some evidence of	Explores a topic in depth, yielding insight	Explores a topic in depth yielding a rich awareness indicating intense	10

	basic facts indicating limited interest on the subject matter.	depth with occasional insight and/or information indicating moderate interest in the subject matter.	and/or information indicating considerable interest in the subject matter.	interest in the subject matter. 10	
Initiative	No initiative to complete a task.	Demonstrates limited initiative in completing a task.	Demonstrates moderate initiative in completing a task.	Demonstrates good initiative in completing a task. 11	11
Sources and References	Some sources are not accurately documented. References are not cited in text, and no or few references are provided in the reference list. Style and format are incorrect.	All sources (information and graphics) are accurately documented but many are not in the desired format. Few references are cited in text and in the reference list. Most references use incorrect style and format.	All sources (information and graphics) are accurately documented, but a few are not in the desired format. Most references are cited in text and appropriately provided in reference list. Most references use correct style and format.	All sources (information and graphics) are accurately documented in the desired format. Complete references in text and reference list. All references use correct style and format. 10	10
Total Score					58/60

POST IMPLEMENTATION-STAGE

The Refection

Students were not accustomed to interview the business operator. They tried to build self confidence and develop acceptable communication during the conversation. The students did not have difficulties in contacting the business operator through whatsapp application. Through mobile technology, student were able to ask and get explanation from the business operator without meeting face to face. The recommendations from report

were accepted in welcoming manner by the business operator. The use of mobile technology in connecting with the business operators keep the student in touch with them in any time that they desired. There are no barriers in getting or giving the information from each parties. Students feel confident whenever they are using the handphone. They feel less stress and happy with the use of handphone/mobile to undergone their service learning activities. Students had active interaction with the business

operators. Mobile technology enable students to communicate and build relationship with the business operators at any time. They can have real-time conversations with the business players. In terms of cost, mobile technology is the cheapest way for the students to interact with the business operators where they do not have to do the real visits every time they want to communicate or give advice/service to the business operators.

There are things that need to be improved. Students must able to explain clearly on the finished report about the business operator's operation. Students must treat the business operator like a customer were they have to attend any queries from them. These will ensure that the purpose of service learning is achieved.

Conclusion

Findings of the study reveal that accounting students' social skills and lifelong learning skills with the business community are enhanced through the use of mobile technology. The report that the students produced help the business community to improve their accounting practices. This engagement will develop students' social skills and lifelong learning skills. Service-learning improves students with opportunities to develop community engagement skills. By mixing with community members, the students enhance their group, organizational and interpersonal skills as well as gain important experience working with varieties members of their communities. Service learning can be used to connect classroom learning with societal issues. Students gain better understanding of themselves as they explore and develop ways to contribute to their communities. They develop self-confidence and an enhanced commitment to community service.

Students' limited time and packed schedules to meet the business community, communicate and interact with the business community are solved through mobile technology. Mobile technology enables students to communicate and give information or receive fast feedback to the business community effectively. Today's technology has provided flexibility for students to engage in academic discourse irrespective of the location and time. With rapid technological advancements, mobile technology offers incredible opportunities, especially in the area of higher education in incorporating service learning in their programs.

References

- Alrasheedi, M., & Capretz, L. F. (2018). Determination of critical success factors affecting mobile learning: a meta-analysis approach. arXiv preprint arXiv:1801.04288.
- Brandy, J (2018) .What is Service Learning or Community Engagement? Creative Commons Attribution-NonCommercial 4.0 International License <https://cft.vanderbilt.edu/guides-sub-pages/teaching-through-community-engagement/>
- Busulwa, H. S., & Bbuye, J. (2018). Attitudes and coping practices of using mobile phones for teaching and learning in a Uganda Secondary school. *Open Learning: The Journal of Open, Distance and e-Learning*, 33(1), 34-45.
- Callaghan, M. N., Long, J. J., Es, E. A., Reich, S. M., & Rutherford, T. (2018). How teachers integrate a math computer game: Professional development use, teaching practices, and student achievement. *Journal*

- of Computer Assisted Learning, 34(1), 10-19.
- Charp, S. (2003). Technology Integration in Teaching and Learning. *THE Journal (Technological Horizons In Education)*, 30(8), 8.
- Cheng, S. C., Hwang, G. J., & Chen, C. H. (2019). From reflective observation to active learning: A mobile experiential learning approach for environmental science education. *British Journal of Educational Technology*.
- Christensen, R. (2002). Effects of technology integration education on the attitudes of teachers and students. *Journal of Research on technology in Education*, 34(4), 411-433.
- Christensen, R., & Knezek, G. (2018). Reprint of Readiness for integrating mobile learning in the classroom: Challenges, preferences and possibilities. *Computers in Human Behavior*, 78, 379-388.
- Eckersley, B., Tobin, K., & Windsor, S. (2018). Professional Experience and Project-Based Learning as Service Learning. In *Educating Future Teachers: Innovative Perspectives in Professional Experience* (pp. 175-192). Springer, Singapore.
- Hoyer, J. (2005). Technology Integration in Education. *International Journal of Learning*, 12(6).
- Kapoor, R., & Datir, G. (2019). An Empirical Study On Effectiveness Of Using Mobile As A Resource For Learning In Education In Rural Area. *Journal of Global Economy*, 15(1 (Special)), 96-103.
- Kareem, A. A. (2018). Comparative Study Of The Effects Of Computer Assisted Instruction On Students'academic Achievement In Science Subjects In High Schools In Osun State, Nigeria. *International Journal for Innovative Technology Integration in Education*, 1(1), 15-22.
- Kale, U. (2018). Technology valued? Observation and review activities to enhance future teachers' utility value toward technology integration. *Computers & Education*, 117, 160-174.
- Kearney, M. D., & Maher, D. (2018). Mobile learning in pre-service teacher education: Examining the use of professional learning networks. *Australasian Journal of Educational Technology*.
- Kolog, E. A., Tweneboah, S. N. A., Devine, S. N. O., & Adusei, A. K. (2018). Investigating the Use of Mobile Devices in Schools: A Case of the Ghanaian Senior High Schools. In *Mobile Technologies and Socio-Economic Development in Emerging Nations* (pp. 81-108). IGI Global.
- Lall, P., Rees, R., Law, G. C. Y., Dunleavy, G., Cotič, Ž., & Car, J. (2019). Influences on the implementation of mobile learning for medical and nursing education: Qualitative systematic review by the Digital Health Education Collaboration. *Journal of medical Internet research*, 21(2), e12895.
- Leem, J., & Sung, E. (2019). Teachers' beliefs and technology acceptance concerning smart mobile devices for SMART education in South Korea. *British Journal of Educational Technology*, 50(2), 601-613.
- Maruyama, G., Furco, A., & Song, W. (2018). Enhancing Underrepresented Students' Success Through Participation in Community Engagement. In *Educating for Citizenship and Social Justice* (pp. 221-235). Palgrave Macmillan, Cham.
- MacCallum, K., & Bell, H. R. (2019). Improving teaching practice in early childhood supported by mobile technology. In *Early Childhood Development: Concepts, Methodologies, Tools, and Applications* (pp. 1066-1082). IGI Global.

- McMullen, J., Hannula-Sormunen, M. M., Kainulainen, M., Kiili, K., & Lehtinen, E. (2019). Moving mathematics out of the classroom: Using mobile technology to enhance spontaneous focusing on quantitative relations. *British Journal of Educational Technology*, 50(2), 562-573.
- Niederhauser, D. S., & Lindstrom, D. L. (2018). Instructional Technology Integration Models and Frameworks: Diffusion, Competencies, Attitudes, and Dispositions. *Handbook of Information Technology in Primary and Secondary Education*, 1-21
- Ott, T., Magnusson, A. G., Weilenmann, A., & af Segerstad, Y. H. (2018). "It must not disturb, it's as simple as that": Students' voices on mobile phones in the infrastructure for learning in Swedish upper secondary school. *Education and Information Technologies*, 23(1), 517-536.
- Perry, N. D. (2018). Teacher attitudes and Beliefs about Successfully Integrating Technology in their Classroom During a 1: 1 Technology Initiative and the Factors that Lead to Adaptations in their Instructional Practice and Possible Influence on Standardized Test Achievement (Doctoral dissertation, Youngstown State University).
- Sarker, M. N. I., Wu, M., Cao, Q., Alam, G. M., & Li, D. (2019). Leveraging Digital Technology for Better Learning and Education: A Systematic Literature Review. *International Journal of Information and Education Technology*, 9(7), 453-461.
- Saylor, J., Hertsenberg, L., McQuillan, M., O'Connell, A., Shoe, K., & Calamaro, C. J. (2018). Effects of a service learning experience on confidence and clinical skills in baccalaureate nursing students. *Nurse education today*, 61, 43-48.
- Shyr, W. J., & Chen, C. H. (2018). Designing a technology-enhanced flipped learning system to facilitate students' self-regulation and performance. *Journal of Computer Assisted Learning*, 34(1), 53-62.
- Soria, K. M., & Mitchell, T. D. (2018). Community Service and Social Justice at Research Universities. In *Educating for Citizenship and Social Justice* (pp. 239-249). Palgrave Macmillan, Cham.
- Tadesse, T., Gillies, R. M., & Campbell, C. (2018). Assessing the dimensionality and educational impacts of integrated ICT literacy in the higher education context. *Australasian Journal of Educational Technology*, 34(1), 88-101.
- Tourón, J., Navarro-Asencio, E., Lizasoain, L., López-González, E., & García-San Pedro, M. J. (2018). How teachers' practices and students' attitudes towards technology affect mathematics achievement: results and insights from PISA 2012. *Research Papers in Education*, 1-13.
- Tsai, C. Y. (2018). The effect of online argumentation of socio-scientific issues on students' scientific competencies and sustainability attitudes. *Computers & Education*, 116, 14-27.
- Vannatta, R. A., & Beyerbach, B. (2000). Facilitating a constructivist vision of technology integration among education faculty and preservice teachers. *Journal of Research on Computing in Education*, 33(2), 132-148.
- Vongkulluksn, V. W., Xie, K., & Bowman, M. A. (2018). The role of value on teachers' internalization of external barriers and externalization of personal beliefs for classroom technology integration. *Computers & Education*, 118, 70-81.
- Zhai, X., Li, M., & Chen, S. (2019). Examining the Uses of Student-Led, Teacher-Led, and Collaborative Functions of Mobile Technology and Their Impacts on Physics Achievement and Interest. *Journal*

of Science Education and Technol-
ogy, 1-11.