

THE INTENTION TO USE SOCIAL MEDIA IN HIGHER LEARNING INSTITUTION

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ABSTRACT

The rapid evolution of technology and internet application has led to the expansion of social media. This social media are labelled as vital channel to connect and transmitted the knowledge between people and this tools has been utilized by educators and learners. This study investigated the factors that affecting student's intention to use social media for learning by using the social media acceptance model (SMAM) in a higher learning institution. By using convenience sampling technique, a total of 101 students has responded valid questionnaires via online survey and it gives an average response rate of 89% for the study. Data gathered were initially analyzed using SPSS version 22.0. The findings of Multiple Regression Analysis revealed the significant relationship between Self and Performance on students' intentions to use social media. However Effort and Communication Functionality has no significant relationship on students' intentions to use social media. Additionally, the analysis revealed that the most influence factor that affects toward students' intentions to use social media was Self.

Keywords: *Social Media, Learning, Social Media Acceptance Model, Intention to use, Higher Learning Institution*

INTRODUCTION

The rapid evolution of technology and internet application has led to the expansion of social media. The appearance of social media in globalized world has changed the way people communicate and interact to each other. Millions of people across the globe using the social media on their daily basis and students in higher education are among the highest contributor. It no surprise that instead of social connection affect so many aspects of our daily lives, it also can be applied in education and learning (King & Sen, 2013). The phenomenon of ubiquitously use mobile devices like smart phones, tablets and laptops has modified the way they interact with educators, other learners and how they access the online materials by using the social media. The increase use of these social networks are because of its convenience, flexibility and functionalities (Al-Rahimi, Othman, & Musa, 2013).

According to Global Digital Overview 2017, there are 3.77 billion which equaling to 50% of total population who are global internet users with 2.80 billion penetration of global social media users whereas

2.56 billion of them using mobile devices to access these social application (Kemp, 2017). In addition, in Global Social Media Research Summary 2017, among worldwide social network sites, Facebook has found as most popular social network sites with 1870 million active users followed by WhatsApp application with 1000 million users (Chaffey, 2017). This trend has shown that social media has become an exceptionally important communication platform of the present day. (Al-Rahimi et al., 2013).

Higher education has shifted their attention on the globalized online learning of late. Malaysia Education Blueprint 2015-2025 (Higher education) outlines 10 Shifts that will induce continued outstanding quality in the higher education system. As Malaysia presently stands the seventh highest internet penetration rate at 67% in Asia, it place Malaysia in a good position to exploit the online learning to support National e-learning Policy (Dasar e-Pembelajaran Negara or DePAN) enhance the quality of teaching and learning. The 9th Shift of this blueprint has highlighted the importance globalized online learning as it focus more on offering personalised learning experiences to all students (Malaysia, 2015). This is in line with National Transformation (TN50) which supported the ideas to enhance the higher education system by applying technology in education especially for learning (Mahidin, 2017).

In recent survey, it is reported that 41% of Malaysia university students agreed that having an always-on learning experience that allows them to access to learning materials, anytime, anywhere, on any device is their number one educational experience (Martin, 2017). Moreover, according to an international survey it stated that social media has become a platform to enable less formal and two way communication between students, prospective students, educators and institution. Educators are using this tools as professional and learning communities which offering a medium to share interesting materials related to the topics that the students are studying in class (Parr, 2014). Additionally, it is proof that by using social annotation encouraging active collaborative learning and increase performance of learners in higher education (Novak, Razzouk, & Johnson, 2012). Substantially, by using these technologies it will encourage the flexible learning virtually everywhere across places such as in the classroom, off campus, and within the workplace (Thomas, Howard, & Thomas, 2012).

Despite the importance of social media in this day, the use of this applications in higher education is still in its infancy and very little empirical evidence obtainable on how it will impact on learning (Junco, Heiberger, & Loken, 2011). Yet, lack of evidence has been reported on the acceptance of social media tools and it's utility in educational setting especially in the classroom (Roblyer, McDaniel, Webb, Herman, & Witty, 2010). Additionally, researchers and practitioners have said that interaction in learning environment by using this tools cannot be easily established due to inappropriate course design (Brindley, Walti, & Blaschke, 2009). Moreover, educators are requires to be literate to media and information as it will intensify their capacities to empower the students with their efforts in learning to learn, learning independently, and pursuing lifelong learning (Wilson, Grizzle, Tuazon, Akyempong, & Cheung, 2011).

Hence, it is necessary to pay attention on the potential role of social media as facilitator and enhancer of learning since this arena as it's received an increased research interest among scholars and considered as worth investigating (Tess, 2013). The objective of this study is to investigate the relationship between self, efforts, performance and communication functionality on the intention to use social media for learning among undergraduates' students in a higher learning institution.

LITERATURE REVIEW

Social Media

Social media or social networking sites can be defined as “web-based services”, whereas these sites permit people to create a public or semi-public profile within a confined system, communicate with a list of other users within connection and let them view and interact with others within the same system (Boyd & Ellison, 2007). Further, this tool can be referred to as a tool that offers highly interactive platforms via which individuals and communities are able to share, co-create, discuss, and modify user-generated content by utilizing mobile and web-based technologies (Kietzmann, Hermkens, McCarthy, & Silvestre, 2011).

These applications are said to be a tool for teaching business administration courses and support user-generated content based on the versatility of Web 2.0 structures and some of the applications are Facebook, Google+, Orkut, LinkedIn and Twitter (Barczyk & Duncan, 2011). Further, the other social media that are available are included media sharing (i.e., YouTube and Flickr); bookmarking (i.e., Delicious and Pinterest); collaborative knowledge development (i.e., Wikipedia); creative works (i.e., podcasts, videocasts, blogs) and microblogs (i.e., Twitter, Blogger) (Everson, Gundlach, & Miller, 2013; Christine Greenhow & Robelia, 2009; Hertel & Wessman-Enzinger, 2017).

Intention to Use Social Media for Learning

Academics have urged the use of social media as one of educational tools that play a vital role in learning. Students and academics have adopted these tools such as Facebook, YouTube, Twitter, Pinterest and blogging as a platform to interact and share the information. It is proved that students enjoy using the social media tools in completing and enriching their learning activities (Thorpe & Wheaton, 2015; Veletsianos & Navarrete, 2012). Additionally, with the opportunities to connect and collaborate between both lecturer-student and student-student, social media tools are said to have more influence on this community as compared to the traditional education systems (Everson et al., 2013).

A study has found, by using Facebook students in a university are able to find information such as course venue, assignment details and suggest potential subjects that they would like to discuss with their instructor (Bosch, 2009). Moreover, Facebook has become an attractive social network for learning as it increases the interaction between students and instructor by providing a forum to discuss upcoming assignments and events, useful links and students' work samples (Muñoz & Towner, 2009).

YouTube has been discovered as a beneficial tool for students as a study has revealed that they were satisfied with their overall experience in using it and considered the YouTube videos allowed the students to have more personalized learning experiences (Franz, 2012). In addition, YouTube was also revealed as the most frequently referred social network utilized in education as it allows upload, share, view and rate videos with comments (Everson et al., 2013).

Twitter has been found as an excellent tool as it can engage the instructors with students via discussion boards within a learning management system and through e-mail (Billiot, 2011). In addition, Twitter was considered as a good tool to create group knowledge as the students performed better on quizzes (Kassens-Noor, 2012). Furthermore, a study has revealed that Twitter has contributed to significant higher GPAs for students in an experimental group as they engaged in continuous discussion outside of class, offering students

with “low-stress” way to ask, providing assignment’s due date reminder, organizing study group and help the students collaborate to each other (Junco et al., 2011).

Recent study has revealed that Pinterest has become a popular resource for educators at all levels of learning (Hertel & Wessman-Enzinger, 2017; Opfer, Kaufman, & Thompson, 2017). On the contrary to social networking sites which offering individuals to interact and exchange the information to each other, Pinterest offering a social bookmarking site that allows users to create, organize and share content through creation of visual bookmarks that called as pin. On the other hand, this tools permit to link to numerous online resources such as webpages, pictures and videos and this visual bookmarks link can be discovered by other users via keyword searches when the contents are saved to a collection of similar pins called a board (Hertel & Wessman-Enzinger, 2017). It can be concluded that, due to the huge popularity of social networking sites (SNS) has led educators adopt these tools into the learning and teaching activities (Balakrishnan, 2016; Dumpit & Fernandez, 2017; Hertel & Wessman-Enzinger, 2017; Moran, Seaman, & Tinti-Kane, 2011).

Social Media Acceptance Model (SMAM)

The SMAM was developed based on the e-Learning Acceptance Model (ELAM), a model extended from Unified Theory of Acceptance and Use of Technology (UTAUT) model. ELAM are used to assess e-learning acceptance among students besides lecturers which contains several predictors such as Performance Expectancy (i.e., perceived usefulness, interactivity, and flexibility); Effort Expectancy (i.e., ease of learning, perceived ease of use, and self-efficacy); Social Influence (subjective norm and image), and Facilitating Conditions (institutional support). (Balakrishnan & Gan, 2016; Teo, 2010; Umrani-Khan & Iyer, 2009). In addition, SMAM model has been introduced as it said to be more comprehensive that can measure the flexibility, interactivity and self-efficacy that are not existed in UTAUT (Poungtong Udomsil & Pankham, 2016).

SMAM are characterized in four predictor such as Performance (i.e., perceived usefulness, perceived flexibility); Effort (i.e., perceived ease of use, perceived ease of learning); Communication Functionality (i.e., collaboration, sharing, interaction), and Self (i.e., social media efficacy, attitude, enjoyment) (Balakrishnan, Liew, & Pourgholaminejad, 2015).

Performance can be defined as the degree to which the student and educator confidence that by using the system they will gains in teaching-learning process. This predictor is based on beliefs about perceived usefulness and flexibility. Perceived usefulness focus on the degree to which students and educators believe that using e-learning will enhance understanding, greater achievement, and efficiency and decreased study/teaching burden. In addition, flexibility can be refer to the degree to which e-learning tools and content to suit the preference of students and educators. (Umrani-Khan & Iyer, 2009). Many studies has shown that Performance has significant effect toward the intention of use social media for learning among students as it proved that this tool can improve their reading and writing skills (Balakrishnan, 2016; Clark & Dugdale, 2009; C. Greenhow, Robelia, & Hughes, 2009). In addition, Performance was reported to have a significant influence on the intention to use social media as it revealed this tool significantly improves the engagement and semester grade point averages (GPA) of the students (Balakrishnan & Gan, 2016; Junco et al., 2011; Poungtong Udomsil & Pankham, 2016).

Moreover, Effort can be refer to the degree to which the student and educators trust that the e-learning tool requires effort. It includes perceived of use which refer to the extent that users assumes that the system are free from effort. In addition, ease of learning also are measured in Effort as it refer to the

degree the user discover the e-learning tool is easy to be learn (Umrani-Khan & Iyer, 2009). In recent study of google site usage for learning among higher learning student in Thailand, Effort has found to have direct effect toward intention to use social media for learning (Poungtong Udomsil & Pankham, 2016). Further, Effort was also found has insignificant affect toward the intention to use social media for learning among students due to their familiarity and requires less effort in using with this tools despite the influence of their peers (Balakrishnan, 2016; Moran et al., 2011; Roblyer et al., 2010).

Self is constructed by three dimension which are social media efficacy, attitude, and enjoyment. Self can be relate to enjoyment experience by the students as they having fun using the tools as existing e-learning method are too academically oriented. For students to excel, it is very important to have the element of enjoyment in learning as it let the student enthusiast, focus and motivated to learn (Crook, Ketchen, Combs, & Todd, 2008). Moreover, Self-efficacy also is one of element that measured in Self which can refer to users' self-assurance of their skills in using computing technology and to the extent of student's confidence that they have the ability to use the social media for learning. (Balakrishnan & Gan, 2016; Balakrishnan et al., 2015). In recent study has revealed that students who have eagerness and responsible on their own learning may become more engaged with social media as they use these tools during their learning activities which contrast with those students that are more prefer to working with their teammates (Balakrishnan, 2016; Balakrishnan & Gan, 2016; Balakrishnan et al., 2015; Umrani-Khan & Iyer, 2009). Moreover, Self has become the strongest effect on the intention to use social media for learning (Balakrishnan, 2016).

Communication Functionality introduced the useful function of social media for interaction, collaboration, and sharing (Balakrishnan & Gan, 2016). A study has revealed that social media tools are used to collaborate and share ideas and learning resources in active manner. For instance, Google Sites will demonstrate a collaboration in learning, sharing idea and stress-free to access the learning materials (Franz, 2012). Further, a study has revealed that Communication Functionality was found affect significantly students who are independent and collaborative toward their intention to use social media for learning. With minimal guidance, independent students can work and learn from their lecturers and may feel comfortable and easier to communicate with their peer via social media (Balakrishnan & Gan, 2016). In addition, social media has found as an effective tools for learning as it empower and permit the students the opportunities to share the material related to their courses (i.e., videos) which most of the existing learning platforms do not emphasizes on this features. Most of it are fully controlled by the lecturers in the activities of uploading and downloading the relevant materials for learning (Balakrishnan, 2016; Balakrishnan et al., 2015).

RESEARCH METHODOLOGY

Research Design

This study is inquire the roles of SMAM (Performance, Self, Effort and Communication Functionality) toward the intention to use social media for learning. This is quantitative study which incorporates a scientific research inquiry that intended to study the relationship between the independent and dependent variables. The research instruments comprise of self-administered questionnaires (primary source). A set electronic questionnaire using Likert type scale (1-5) were distributed to respondents by the researcher. The Cronbach alpha values at the pre-test and actual test are above 0.85. It is found that the cronbach's alpha value for this study is reliable. Data collected were analyzed using SPSS software (version 22.0).

Measurement

The questionnaire used in this study to measure all the variables implicate in this study have been adapted from previous researchers. The survey consisting of two sections as the first section is to depict the demographic profiles while the second section of the survey is contained of Likert type scale (1-5). To measure intention to use social media for learning (Balakrishnan & Gan, 2016), SMAM (Performance, Self, Effort and Communication Functionality) (Balakrishnan & Gan, 2016); 3-item, 9-item, 7-item, 5-item, and 10-item have been adopted respectively.

Sampling

The sample of target population was drawn from all undergraduate students that has experienced in using social media tools for learning, UiTM Cawangan Melaka mainly in Kampus Bandaraya. This study are conducted by using convenient sampling method and 103 respondents from Business and Management Faculty are involved in the survey. As recommended by scholars, a good sample size for statistical analysis at least 10-20 times more than variables is needed (Hair, Sarstedt, & Ringle, 2011)

Data Analysis

Data analysis of the study has been analyzed using SPSS version 22. In order to identify the relationships between variables, multiple regression analysis was performed to test the hypotheses and to identify the most significant predictor that influenced the intention to use social media for learning among the undergraduate's students.

FINDINGS

In this section, the relationship between independent variables and dependent variable were analysed. There are four (4) hypotheses that have been hypothesized in this study. There are H1, H2, and H3 and H4. As presented in Table 1, Self shows a significant relationship with intention to use social media for learning ($\beta=0.204$, $p=0.000$) and this variable become the most influential factor toward intention to use social media for learning. This finding is consistent with previous studies by (Balakrishnan, 2016). In addition, performance also shows a significant relationship with intention to use social media for learning ($\beta=0.015$, $p=0.011$). This finding is consistent with previous studies by (Balakrishnan & Gan, 2016; Junco et al., 2011). However, effort and communication functionality revealed no significant relationship with intention to use social media for learning ($\beta=0.015$, $p=0.853$) and ($\beta=-0.047$, $p=0.253$) respectively. This finding is consistent with previous studies which explained that students who are claimed familiar with social media are not considered Effort as a factor that can influence their intention to use this tool for learning (Balakrishnan, 2016; Moran et al., 2011; Roblyer et al., 2010). Futher, the finding on Communication Functionality explained that the respondents on this study has not independent and collaborative enough to use social media for learning as they received minimal guidance from the lecturers (Balakrishnan & Gan, 2016).

In addition, Table 1 also shows that the R-square 44.3% variations in dependent variable (intention to use social media for learning) are explained by all four independent variables which includes performance, self, effort and communication functionality. Hence, the other 55.7% variations are explained by the other independent variable(s) that is not covered in this study.

Model	Beta (β)	t	Sig.
Self	.204	3.883	.000
Effort	.015	.186	.853
Performance	.143	2.604	.011
Communication Functionality	-.047	-1.149	.253
R square	.443		
Adjusted R square	.419		

Dependent variable: Intention to Use Social Media for Learning

CONCLUSION

The findings provide new insight to the field of study of the intention to use social media for learning specifically in higher learning institution. Generally, the findings of the study explained the factors of SMAM (Performance, Self, Effort and Communication Functionality) able to influence the intention to use social media for learning among the undergraduates students. Further, Self revealed has significant effect and become the most influential factor toward Intention to use social media for learning. This is can be explained by the enjoyment and self-assurance in using computing technology experienced by the students while they are using the tools for learning. Additionally, students who have eagerness and responsible on their own learning found using social media tools are easy to use.

Moreover, Performance has been found to have significant effect on Intention to use social media for learning. I can be explained that students believed that by using this tools they will gains in learning that will enhance their understanding, greater achievement, and efficiency and decreased their study burden. Therefore, higher institution particularly in Malaysia are recommended to utilize the social media tools as one of learning techniques in their curriculum as student enjoyed using this tools and perceived that it will improve their learning process.

However, Effort and Communication Functionality revealed no significant relationship with Intention to use social media for learning. This finding has shown that respondents who has high familiarity with social media tools are not consider that Effort is a factor that will affect the intention to use this tools for leaning. Meanwhile, Communication Functionality has become insignificantly effect to Intention to use social media for learning as majority of the respondent are not ready yet to utilize the social media in their learning as this tools required them to be independent while using it and collaborate with other peers with minimal guidance from the lecturers.

Further, future research can also be extended by conducting comparison study between private and public higher learning institution. In addition, future study also can analyze other factors in order to fully understand the relationships between variables as learning styles are said may influence on the Intention to use social media for learning (Balakrishnan & Gan, 2016).

REFERENCES

- Al-Rahimi, W. M., Othman, M. S., & Musa, M. A. (2013). Using TAM Model To Measure The Use Of Social Media For Collaborative Learning. *International Journal of Engineering Trends and Technology (IJETT)*, 5(2), 90-95.
- Balakrishnan, V. (2016). Key determinants for intention to use social media for learning in higher education institutions. *Universal Access in the Information Society*, 16(2), 289-301. doi:10.1007/s10209-016-0457-0
- Balakrishnan, V., & Gan, C. L. (2016). Students' learning styles and their effects on the use of social media technology for learning. *Telematics and Informatics*, 33(3), 808-821. doi:10.1016/j.tele.2015.12.004
- Balakrishnan, V., Liew, T. K., & Pourgholaminejad, S. (2015). Fun learning with Edooware – A social media enabled tool. *Computers & Education*, 80, 39-47. doi:10.1016/j.compedu.2014.08.008
- Barczyk, C. C., & Duncan, D. G. (2011). Social Networking Media as a Tool for Teaching Business Administration Courses. *International Journal of Humanities and Social Science*, 1(17), 267-276.
- Billiot, T. (2011). In One Online Class, Twitter Brings Students Together - The Chronicle of Higher Education.
- Bosch, T. E. (2009). Using online social networking for teaching and learning: Facebook use at the University of Cape Town. *Communicatio*, 35(2), 185-200. doi:10.1080/02500160903250648
- Boyd, D. M., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230. doi:10.1111/j.1083-6101.2007.00393.x
- Brindley, J. E., Walti, C., & Blaschke, L. M. (2009). Creating Effective Collaborative Learning Groups in an Online Environment. *The International Review of Research in Open and Distributed Learning*, 10(3), 1-9.
- Chaffey, D. (2017). *Global Social Media Statistics Summary 2017*.
- Clark, C., & Dugdale, G. (2009). *Young People's Writing: Attitudes, behaviour and the role of technology*. Retrieved from England and Wales:
- Crook, T. R., Ketchen, D. J., Combs, J. G., & Todd, S. Y. (2008). Strategic resources and performance: a meta-analysis. *Strategic Management Journal*, 29(11), 1141-1154. doi:10.1002/smj.703

- Dumpit, D. Z., & Fernandez, C. J. (2017). Analysis of the use of social media in Higher Education Institutions (HEIs) using the Technology Acceptance Model. *International Journal of Educational Technology in Higher Education*, 14(1). doi:10.1186/s41239-017-0045-2
- Everson, M., Gundlach, E., & Miller, J. (2013). Social media and the introductory statistics course. *Computers in Human Behavior*, 29(5), A69-A81. doi:10.1016/j.chb.2012.12.033
- Franz, A. K. (2012). Organic Chemistry YouTube Writing Assignment for Large Lecture Classes. *Journal of Chemical Education*, 89(4), 497-501. doi:10.1021/ed100589h
- Greenhow, C., & Robelia, B. (2009). Informal learning and identity formation in online social networks. *Learning, Media and Technology*, 34(2), 119-140. doi:10.1080/17439880902923580
- Greenhow, C., Robelia, B., & Hughes, J. E. (2009). Learning, Teaching, and Scholarship in a Digital Age: Web 2.0 and Classroom Research: What Path Should We Take Now? *Educational Researcher*, 38(4), 246-259. doi:10.3102/0013189x09336671
- Hair, J. F., Sarstedt, M., & Ringle, C. M. (2011). PLS-SEM: Indeed a Silver Bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139-152. doi:10.2753/mtp1069-6679190202
- Hertel, J., & Wessman-Enzinger, N. (2017). Examining Pinterest as a Curriculum Resource for Negative Integers: An Initial Investigation. *Education Sciences*, 7(2). doi:10.3390/educsci7020045
- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27(2), 119-132. doi:10.1111/j.1365-2729.2010.00387.x
- Kassens-Noor, E. (2012). Twitter as a teaching practice to enhance active and informal learning in higher education: The case of sustainable tweets. *Active Learning in Higher Education*, 13(1), 9-21. doi:10.1177/1469787411429190
- Kemp, S. (2017). Digital in 2017: Global Overview.
- Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251. doi:10.1016/j.bushor.2011.01.005
- King, G., & Sen, M. (2013). How Social Science Research Can Improve Teaching. *PS: Political Science & Politics*, 46(03), 621-629. doi:10.1017/s1049096513000619
- Mahidin, N. (2017). TN50 Dialogue Session Between Higher Education Minister And Academics.
- Malaysia, M. o. E. (2015). *Malaysia Education Blueprint 2015-2025 (Higher Education)*. Ministry of Education Malaysia.
- Martin, T. (2017). Shift to student-centred learning. *The Star online*, pp. 1-3.
- Moran, M., Seaman, J., & Tinti-Kane, H. (2011). Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media. Retrieved from

- Muñoz, C. L., & Towner, T. L. (2009). *Opening Facebook: How to Use Facebook in the College Classroom*.
- Novak, E., Razzouk, R., & Johnson, T. E. (2012). The educational use of social annotation tools in higher education: A literature review. *Internet & Higher Education*, 15(1), 39-49.
- Opfer, V. D., Kaufman, J. H., & Thompson, L. E. (2017). Implementation of K–12 State Standards for Mathematics and English Language Arts and Literacy. In.
- Parr, C. (2014). 6 trends that will accelerate the adoption of technology in higher education in 2014.
- Poungtong Udomsil, & Pankham, S. (2016). A Development of Causal Relationship Model of the Google Sites Usage for Learning at Rangsit University. Paper presented at the Knowledge Management International Conference (KMICe), Chiang Mai, Thailand.
- Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and Higher Education*, 13(3), 134-140. doi:10.1016/j.iheduc.2010.03.002
- Teo, T. (2010). Development and validation of the E-learning Acceptance Measure (EIAM). *The Internet and Higher Education*, 13(3), 148-152. doi:10.1016/j.iheduc.2010.02.001
- Tess, P. A. (2013). The role of social media in higher education classes (real and virtual) – A literature review. *Computers in Human Behavior*, 29(5), A60-A68. doi:10.1016/j.chb.2012.12.032
- Thomas, M., Howard, T., & Thomas, H. (2012). Using new social media and Web 2.0 technologies in business school teaching and learning. *Journal of Management Development*, 31(4), 358-367. doi:10.1108/02621711211219013
- Thorpe, H., & Wheaton, B. (2015). *Spotlight on Digital Technologies*. Retrieved from
- Umrani-Khan, F., & Iyer, S. (2009). ELAM: A Model for Acceptance and Use of E-learning by Teachers and Students. Paper presented at the International Conference on e-Learning, Institute of Technology, Bombay, Mumbai, India.
- Veletsianos, G., & Navarrete, C. C. (2012). Online Social Networks as Formal Learning Environments: Learner Experiences and Activities. *International Review of Research Open and Distance Learning*, 13(1), 1-12.
- Wilson, C., Grizzle, A., Tuazon, R., Akyempong, K., & Cheung, C.-K. (2011). *Media and Information Literacy Curriculum for Teachers*. Retrieved from