# ACCEPTANCE OF USING SOCIAL MEDIA IN TEACHING IN KUWAIT



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#### **Introduction:**

Social media networks are emerging trends in facilitating student learning. Various social websites enhance distance learning and improve interactions between students, instructors, and peers. Students have experienced online learning or applied technology to access learning materials via the internet. Post-secondary students in Kuwait have utilized technology to access learning experiences in one way or another. The resolutions to engage in distance learning depended on the student's choice. Nevertheless, in current years unexpected World-Wide disasters have changed students, teachers, and parents' perceptions of online learning. Therefore, the likelihood of accepting social media in teaching has the potential of transforming online learning into a compulsory system rather than an optional one.

The outbreak of the global pandemic of coronavirus disease of 2019 (Covid-19) posed great challenges to preparedness in dealing

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with disasters affecting social lifestyles. Covid-19 started as a mass pneumonia infection identified and recorded in Wuhan China around December 2019. Correspondingly, the quick spreading of the Covid-19 virus across the world led to World Health Organization declaring it a global disaster and pandemic (World Health Organization, 2020). Notably, education, among other vital sectors in growth and development were highly hit by the Covid-19 disaster. By end of March 2020, over 87% of all schools in world had closed. Consequently, more than 1.5 billion learners went home for the undetermined period (Winthrop, 2020). With each country focusing on aligning strategies to contain the rapidly spreading viral infections, Kuwait implemented various strategies including closing down schools. Actions taken to mitigate further infections included reducing gatherings of large crowds. As a strategy of maintaining reduced physical social distances, Kuwait's government-imposed quarantine stopped traditional face-to-face education. measures that Consequently, learning systems started adopting new criteria to ensure continuity of learning. The pandemic forced policymakers, education panels, and higher education leaders to define response plans that guarantee continuous learning programs even in event of disasters. Google virtual classroom, Zoom, Teams, YouTube, Facebook, and WhatsApp among others became an alternative way to a traditional

based learning system that transformed physical classrooms to online interactive centers. The situations of health disasters have proved social network sites as major mediums for communicating with students. Various institutions and their faculties established official pages on Facebook to connect with students. Course facilitators and deans created accounts in WhatsApp to link with learners from various geographical locations. The desire for the continuous education system, that generates informed elites and professionals to fill daily demands, has triggered the opening of official online platforms to fulfill academic-related purposes. The acceptance of social platforms among students and the academic staff depends on various factors to promote distance learning and enhances access to education material experiences.

This study focuses on student and instructors' experience on using social platforms such as Google virtual classroom, Zoom, Teams, YouTube, Facebook, and WhatsApp among others as tools for mediating the transition from the classroom to home-based learning. Research focuses on investigating social media application in maintaining official academic, interactions, instruction delivery, and passing information. Ideally, the research intends to discuss meaningful formal academic aspects using social media platforms as

tools for supporting academic-related objectives (Dutot, 2014). The purposes targeted include learning, teaching, and student support.

Therefore, the purpose of this study is to examine student perceptions on using social media platforms such as Google virtual classroom, Zoom, Teams, YouTube, Facebook, and WhatsApp among others in learning (Alfadda & Mahdi, 2021). Specifically, the research investigates elements such as behavior intentions, activities, perceived ease of use (PEU), attitude, and perceived usefulness (PU).

#### Literature Review:

The impacts of Covid-19 triggered the unexpected closure of schools across the world. By end of May 2020, most countries had issued orders mandating the closure of schools (Aina & Nzegwu, 2020). The sudden closure marked the beginning of a transformational change aiming to alter culture and system of learning. The shift to online learning becomes a persistent pattern in institutions of learning with every concerned individual trying to encounter the indefinite termination of classroom learning with an alternative solution. From history, online learning had advantages and corresponding disadvantages. However, a tragic disaster buried negative consequences that hindered quick transformation to online learning. Notably, in some nations, public online schools existed before the 2020 pandemic. According to Fitzpatrick et al. (2020), learners who

had online learning institutions revealed a decrease in math, art, and language learning. Moreover, negligible improvements hindered the majority from compromising education standards in name of automating teaching and learning. Nevertheless, as outlined by the authors there are variations among learners in online institutions and learners migrating to online learning because of pandemic (Aina & Nzegwu, 2020). In that regard, current shifts to online learning various factors have triggered the corresponding adoption of internet tools. First, parents, and individual teaching staffs consider health as paramount thus preferring virtual learning to the face-to-face classroom setting. Another factor promoting a quick shift to online learning includes the lack of an acceptable student-to-teacher ratio in traditional classroom learning. According to Li and Lalani (2020), factors triggering switchover to modern technologies of learning include better retention of learning materials by students and decreased time for students learning. Although the majority of schools, aspire to run traditional classroom learning in parallel to online learning lack of good infrastructures in public and private institutions hinders the introduction of new structures. Lack of enough time for designing and implement internet-learning systems before the closure of school has challenged adoption of change to social network learning.

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Students' and teaching staff's process of shifting to online learning in the Covid-19 pandemic in Kuwait was abrupt and unexpected. The transition triggered a dilemma in learning-related aspects due to a lack of assurance of the most appropriate technologies to support school curriculums. Designing internet materials and mechanisms to deliver information required skills. Therefore, adequate time for preparing teachers was the only essential to overcome the persistent dangers associated with the termination of classroom learning. On the other hand, students would encounter unequal learning opportunities. On the same note, students have no equal chances of accessing technology and not all parents would support online learning at home due to infrastructure and financial challenges (Choi & Chung, 2013).

## Theoretical Background and Hypothesis Development: Technology Acceptance Model (TAM):

Literature has various theories and models that attempt to explain factors affecting individual's levels of accepting, rejecting, or continuing using new technologies (Venkatesh & Davis, 2000). For this research, the most suitable model is the technology acceptance model (TAM), because it has the potential of explaining relationships, attitudes, and behaviors related to shifting to new technology (Davis, 1989). Moreover, the TAM model gets support from the theory of

reasoned action (TRA) by Ajzen and Fishbein. According to Dixit and Prakash (2018), researchers and scholars support TAM because of its robust ways of determining commitment to new technology. TAM concepts and principles express individual reactions and behavior depends on perception to complete specific responsibilities. The model measures performance based on two independent variables namely perceived ease of use (PEU) and perceived usefulness (PU) as shown in Figure 1. The study has applied the variables to establish major factors influencing use acceptance. Notably, the TAM model will help in predicting the probability of individuals adopting new technology. The research integrates concepts of reasoned action theory to explain behaviors associated with intentions to endorse a particular practice. The significance of the TAM model in research is to determine attitude towards change and levels of committing to new cultural practices. The model guides in assessing social pressure associated with embracing new technology (Sheldon, 2016). TAM technology is a proved essential for accessing acceptance at the first time of introducing technology.

TAM has five major attributes used for measuring acceptance of the technology. The variables include perceived usefulness, perceived ease of use, attitude towards use, behavior intentions on use, and actual use of technology. Table 1 indicates the definitions of these

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variables. According to (Dhume, et al., 2012), the most significant elements in the model include perceived usefulness (PU) and perceived ease of use (PEU). The former implies that the user belief that the change enhances job performance through interactive platforms characterized by user-friendly attributes. The latter describes the belief that the system does not require technical knowledge and explanations to interact and navigate functionalities. (Dumpit & Fernandez, 2017) argues that, perceived attitudes on the application of innovation contribute towards the acceptability of a change. That implies that outcome elements such as behavior intention towards use and actual use are essential in measuring acceptance. TAM elements are essential variables for evaluating relationships associated with user experience corresponding behaviors. The dependent variables that play essential contributions include subjective norm, facilitating conditions, and efficiency in using computers (Scherer et al., 2019).

Several studies have concluded that experiences with social media and networking helped improved educational achievement, students' engagement, and collaboration (Greenhow & Robelia, 2009). However, the instructors' and learners' experiences and their acceptance of–information technology in online courses could enhance the quality of instruction and student learning (Deutsch 2010;

Donnelly 2010; Kaleta et al. 2007; Fillion et al. 2009). Szajna (1996) revised TAM with the addition of an experience component to the original TAM and found a significant enhancement in the model. In this study, experience was used as an external variable in TAM model to examine its influence student's acceptance of using social media platform in learning (Jimenez et al. 2021).

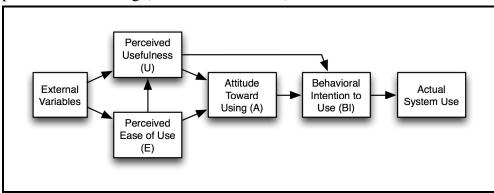


Figure 1: Technology Acceptance Model (Davis, 1989)

Table 1: Definitions of Variables

Variables	Definitions					
External Variables						
Computer efficiency	Believing in individual abilities to complete particular operation using automated technologies (Holden & Rada, 2011)					
Facilitating conditions	Refers to believing that there is availability of adequate infrastructures for supporting					

Variables	Definitions					
	application of technologies. various infrastructural					
	structures include organization, knowledge,					
	technical support and administration, (Nikou &					
	Economides, 2017)					
Subjective norm	Refers to social influence exerted by relatives,					
	and peers to participate in a specific behavior					
	(Agudo-peregrina et al. 2014).					
Experience	Past interactions or exposure of an individual to a					
	system and the accumulated knowledge gained by					
	usage (Karahanna et al., 1999).					
	Core Variables					
Perceived ease	Conviction that no effort is needed in applying					
of use (PEU)	particular technology (Scherer et al. 2019)					
Perceived	Having a conviction that innovation makes work					
usefulness (PU)	easier and enhances improved performances of					
	various tasks ((Scherer et al. 2019)					
Attitude towards	An individual evaluation and decisions towards					
technology	application of technology in performing daily					
	activities (Lee and Lehto, 2013)					

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Variables	Definitions
Outcome Variable	s
Behavioral	Personal patterns and conditional expressions
intention	towards applying a particular innovation (Turner
	et al. 2010)
Actual use	The individual natural way of interacting with technology in implementing daily operations
	based on functionalities embedded in the system
	(Scherer et al. 2019).

### Research Questions and Hypothesis:

- What are learners' perceptions towards using social media teaching technology?
- What are perceived activities, usefulness (PU), attitude, perceived ease of use (PEU), behavior intentions for applying social media teaching technology?

To answer the above questions the research applies five specific hypotheses using based on TAM elements as the following:

1. Hypothesis 1: Efficiency in computer skills have a positive and significant influence on social media technology acceptance.

- 2. Hypothesis 2: Perceived usefulness on use of social media platforms has a positive and significant influence on students' attitude towards using a computer in the learning.
- 3. Hypothesis 3: Perceived ease of use on interacting with teaching platforms has a positive and significant influence on student's attitude towards the use of learning tools.
- 4. Hypothesis 4: Perceived ease of use on computer tools has a significant and positive influence on attitude towards social media teaching technology.
- 5. Hypothesis 5: The experience of students has a significant and positive influence on student's acceptance of using social media platform in learning.

#### Research Methods

Research has applied TAM in exploring the application of social media in teaching. According to information obtained from literature reviews and findings of exploratory studies the most appropriate methodology in research is a conceptual framework. The conceptual framework involved manipulating perceived usefulness, computer efficiency, perceived ease of use, actual use of social media platforms, behavioral intention, and attitude of teaching to explore the implementation of social media platforms in teaching activities.

#### **Participants:**

The research involved the college students enrolled in the school of education believed to have learned part of the course syllabus using Google virtual classroom, Zoom, Teams, YouTube, Facebook, and WhatsApp during to graduate in 2019/2020 academic year. The group is currently college alumni from Kuwait who acted as participants in the study. The research involved a survey using a questionnaire methodology. Consent was a basic principle with participation based on the willingness of individual students. Out of 275 students, 200 participants responded to online questionnaires concerning the perception of using social media in teaching.

The sample comprised 50.6% male and 49.4% female students. The assessment regarding experience in using social media in teaching tested five platforms namely Google virtual classroom, Zoom, Teams, YouTube, Facebook, and WhatsApp. About 20% of participants reported having excellent skills. Other 40% revealed that they had very good skills. Also, 30% reported they have good skills. Only 10% of participants reported having fair skills in using social media in learning.

#### Research Tools:

The primary method for collecting data involved a questionnaire. The questionnaire applied in the survey involved a

modified survey developed by Yang and Wang (2019). The design of the questionnaire had two parts with the first section focusing on demographics and the other part testing research variable. The demographic section collected information about age, gender, and experience on social media platforms. In the second section of the survey questions, participants recorded responses based on 5-point Likert Scale. The sections evaluated various variables based on items collected from literature reviewed articles confirmed validity and reliability. The Likert scale applied 1 to represent "strongly disagree", 2 represented "disagree", 3 represented "neutral", 4, represented "agree", and 5 represented "strongly agree" (Rauniar et al., 2014). The attached detailed questionnaires and their characteristics are in the appendix. The design structure of the questionnaire had six parts. The first part was computer skills and efficiency with 3 items. The second part had perceived usefulness with 7 questions, actual use of Google virtual classroom, Zoom, Teams, YouTube, Facebook, and WhatsApp has 3 questions. Perceived ease of use had 4 questions, the attitude had 4 questions, and behavioral intentions of using Google virtual classroom, Zoom, Teams, YouTube, Facebook, and WhatsApp had 5 items. Reliability and validity of questionnaire-involved verification using Cronbach's alpha (a) based on statistical package for the social sciences (SPSS) analysis.

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#### Data Collection and Research Procedures:

The methodology applied in collecting data involved survey questionnaires. Specifically, 200 college alumni from Kuwait responded to the questionnaire. The model for collecting data involved two methods. First, measuring assessed data to determine reliability and validity of variables. The second approach involved a structural model applied in the testing significance of the relationship between variables (Anderson and Gerbing, 1988). The research used SPSS version 22.0 to compute data involving descriptive statistics and Cronbach alphas coefficients. Computed information generated data used to evaluate relationships in structural models. Table 2 shows the result of questionnaire reliability.

Table 2: Questionnaire reliability

Cronbach's alpha	No. of items		
0.933	26		

## Data Analysis:

The research applied a computerized system of analyzing data. Specifically, the system used SPSS version 22.0 software for analyzing collected through questionnaires. The analytical procedures involved using Pearson's correlation coefficients (r) between

efficiency skills of using a computer, perceived usefulness, actual use of social media platform, perceived ease of use, attitude, and behavioral intention. Pearson's correlation coefficients ranging from 0.68 and 1.0 were considered high Taylor (1990). In the process of determining the strength of relationships between six elements, the study performed correlation coefficient analysis. According to Pellant (2011), a correlation coefficient analysis expresses the strength and direction of the linear relationship between two variables. At the same time, the degree of correlation suggests the strength of association between variables. Positive correlation as indicated by positive sign indicates that if the independent variable increases corresponding dependent variable increases. On the other hand, a negative correlation as indicated by the minus sign implies that the increase in independent variable dependent variables decreases (Pellant, 2011). Value of 1 or -1 indicates a perfect correlation coefficient by simply saying that value is determined by understanding the value of corresponding variable. Therefore, the correlation coefficient values helped in determining the effects of dependent and independent variables. Therefore, the values helped in defining the strength of relationships among six variables to establish results and findings.

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#### **Results and Discussions**

According to the results obtained in Table 3 which shows the correlation between variables, a summary of various hypotheses provides the following inferences.

Table 3: Correlation between variables

Variables	Computer efficiency	PU	Actua l use	PEU	Attitude	Behavior intention
Computer	1	0.519	0.286	0.341	0.421	0.494
efficiency		0.000	0.13	0.003	0.000	0.000
	200	200	200	200	200	200
PU	1	0.519	0.444	0.677	0.829	0.812
Actual use	0.000		0.000	0.000	0.000	0.000
	200	200	200	200	200	200
PEU	0.286	0.444	1	0.539	0.459	0.606
	0.13	0.000		0.000	0.000	0.000
Attitude	200	200	200	200	200	200
	0.341	0.677	0.539	1	0.835	0.757
Behavior	0.003	0.000	0.000		0.000	0.000
intention	200	200	200	200	200	200

### Hypothesis 1

Based on results analyzed using SPSS there is a supportive statistical relationship between efficient skills of using a computer and perceived usefulness (PU) of social media platforms with a coefficient of 0.51. The analysis shows a statistical significant relationship between an individual having efficient computer skills and actual use of social media platforms with a correlating value of 0.28. Moreover, there is a considerable statistical significance between possessing computer skills perceived ease of use with a score of 0.34. Results indicated a positive relationship between efficiency skills of using computer and attitude with a value of 0.42 while computer use and behavioral intention had 0.42. In that regard, results confirm efficiency in computer skills will have a positive and significant influence on social media technology acceptance. Other studies supporting findings include (Ariff 2012, and Reid and Levy 2008).

## Hypothesis 2

Results indicated statistical significance between perceived use and computer efficiency skills with a correlation score of 0.51. Results confirmed a statistical significant relationship between perceived use and actual use with a correlation value of 0.44. The results reveal a statistical significant relationship between perceived use and perceived ease of use with a correlation value of 0.67. A strong

statistical significance occurred between perceived use and attitude with a correlation value of 0.82. Similarly, perceived use has a positive relationship with behavioral intentions. The results support the second hypothesis revealing that perceived use and other variables have a positive statistical relationship. The findings reveal that perceived usefulness on the use of social media platforms has a positive and significant impact on students' attitude towards using technology in learning. Research by Lin (2011) indicated similar findings on the existence of positive and strong relationships among perceived usefulness, behavior intention, and attitude towards supporting technology.

## Hypothesis 3

Results reflected a substantial statistical significance between perceived ease of use and efficiency in using a computer with a correlation value of 0.28. The analysis revealed a statistical significance between perceived ease of use and perceived usefulness with a correlation of 0.44. Furthermore, results indicated a statistical significance between perceived ease of use and attitude with a correlation of 0.45. The results also reveal remarkable statistical significance between perceived ease of use and behavior intentions with a score of 0.60. The results confirm true on the hypothesis that perceived ease of use on interacting with teaching platforms has a

positive and significant influence on student's attitude towards the use of learning tools. A research report compiled by Weng and Tsai (2015) indicated similar results and findings as this research.

## **Hypothesis 4**

Study results have revealed that there is a statistical significance between perceived ease of using technological tools and personal attitude on using social media platforms with a score of 0.34. Moreover, study research found a statistical significance between attitude and perceived use scoring a value of 0.67. Notably, there is a statistical significance between attitude and activities with a correlation value of 0.53. Further research indicated statistical significance between attitude and behavioral intention with a score of 0.75. Therefore, results support the hypothesis on perceived ease of use on computer tools has a significant and positive influence on attitude towards social media teaching technology. Results of findings correspond with Campeau and Higgins's (1995) findings.

## Hypothesis 5

Table 4: The correlation between student experience and other variables

Variable	Computer Efficiency	PU	Actual use	PEU	Attitude	Behaviora l intention
Experience	0.1	0.259	0.101	0.346	0.332	0.310

Variable	Computer Efficiency	PU	Actual use	PEU	Attitude	Behaviora l intention
	0.393	0.025	0.0389	0.002	0.004	0.007
	200	200	200	200	200	200

According in Table 4, Student's experience in using technology and their acceptance in using social media platforms is a significant determinant of perceived usefulness. Increasing experiences in using technologies increase perceptions of usefulness. The findings support hypothesis that the experience of students has a significant and positive on student's acceptance of using social media platforms in learning. The findings and results of Castaneda et al. (2007) revealed that users with good experience have positive attitudes towards technologies. Other supporting evidence includes research by (Ali, et al. 2017) that identified that social issues and experiences predict user's acceptance concerning online games. According to Hsu and Lu (2004), social norms, the flow of experiences, and attitude contributed to about 80% of the chances of playing games.

#### Conclusion

The study has provided answers to the research question. The TAM model has helped in conducting research-involving acceptance of using social media in teaching. The shift towards online

technologies has indicated a strong positive correlation and statistical significance between actual uses of social media platforms in teaching and student's attitudes, and behavioral intentions. The study has revealed that there are a positive correlation and statistical significance of personal efficiency on use of computers and perceived use, perceived ease of use, actual use attitude, and behavior intentions towards learning using social media platforms. Notably, experience in using social media networks has statistical significance and a strong positive correlation with TAM variables.

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#### Reference:

- Agudo-Peregrina, Á. F., Hernández-García, Á., & Pascual-Miguel, F.

  J. (2014). Behavioral intention, use behavior and the acceptance of electronic learning systems: Differences between higher education and lifelong learning. *Computers in Human Behavior*, 34, 301–314.

  <a href="https://doi.org/10.1016/j.chb.2013.10.035">https://doi.org/10.1016/j.chb.2013.10.035</a>
- Aina, T., & Nzegwu, B. (2020). Twelve tips for transitioning your didactic curriculum to the online platform in the current COVID-19 era and beyond (Preprint). <a href="https://doi.org/10.2196/preprints.21182">https://doi.org/10.2196/preprints.21182</a>
- Alfadda, H. A., & Mahdi, H. S. (2021). Measuring students' use of Zoom application in language course based on the technology acceptance model (TAM). Journal of Psycholinguistic Research. <a href="https://doi.org/10.1007/s10936-020-09752-1">https://doi.org/10.1007/s10936-020-09752-1</a>
- Ali, Murad & Yaacob, Raja & Endut, Nuri & Makki, Bilal. (2017).

  Determining the academic Use of Social

  Media with Technology Acceptance Models.

  NFC-IEFR Journal of Engineering &

Scientific Research. 05. 10.24081/nijesr.2017.1.0013.

- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach.

  \*Psychological Bulletin, 103(3), 411.

  https://doi.org/10.1037/0033-2909.103.3.411.
- Ariff, M. S. (2012). The effect of computer self-efficacy and technology acceptance model on behavioral intention in internet banking system. *Social and Behavioral* Sciences, 57(2012), 448–452. <a href="https://doi.org/10.1016/j.sbspro.2012.09.1210">https://doi.org/10.1016/j.sbspro.2012.09.1210</a>
- Castañeda, J. A., Muñoz-Leiva, F., & Luque, T. (2007). Web acceptance model (WAM): Moderating effects of user experience. *Information & Management*, 44(4), 384–396. https://doi.org/10.1016/j.im.2007.02.003.
- Castiblanco Jimenez, I.A.; Cepeda García, L.C.; Violante, M.G.;

  Marcolin, F.; Vezzetti, E. Commonly Used

  External TAM Variables in e-Learning,

  Agriculture and Virtual Reality Applications.

Future Internet 2021, 13, 7. https://doi.org/10.3390/ fi13010007

Choi, G., & Chung, H. (2013). Applying the technology acceptance model to social networking sites (SNS):

Impact of subjective norm and social capital on the acceptance of SNS. International Journal of Human-Computer Interaction, 29(10), 619-628.

https://doi.org/10.1080/10447318.2012.756333

- Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy:

  Development of a measure and initial test. *MIS Quarterly*, 19(2), 189–211.

  <a href="https://doi.org/10.2307/249688">https://doi.org/10.2307/249688</a>.
- Davis, F. D. (1989). Perceived usefulness: Perceived ease of use and user acceptance of information technology. Management Information Systems Quarterly., 13(3), 983–1003.
- Deutsch, N. (2010). Instructor experiences with implementing technology in blended learning courses in higher education. (Doctoral dissertation, University of Phoenix, 2010). Dissertation Abstracts International, 71(11), 463. (UMI No. 3114720).

- Dhume, S. M., Pattanshetti, M. Y., Kamble, S. S., & Prasad, T. (2012). Adoption of social media by business education students: Application of technology acceptance model (TAM). 2012 IEEE International Conference on Technology Enhanced Education (ICTEE). https://doi.org/10.1109/ictee.2012.6208609
- Dixit, R. V., & Prakash, G. (2018). Intentions to use social networking sites (SNS) using technology acceptance model (TAM). *Paradigm*, 22(1), 65-79. <a href="https://doi.org/10.1177/0971890718758201">https://doi.org/10.1177/0971890718758201</a>
- Donnelly, R. (2010). Harmonizing technology with interaction in blended problem-based learning. Computers & Education, 54(2), 350–359.
- 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). https://doi.org/10.1186/s412 39-017-0045-2

Dutot, V. (2014). Adoption of social media using technology acceptance model. *International Journal of Technology and Human Interaction*, 10(4), 18-35.

## https://doi.org/10.4018/ijthi.2014100102

- Fillion, G., Limayem, M., LaFerriere, T., & Mantha, R. (2009).

  Integrating ICT into higher education: investigating onsite and online professors' points of view. International Journal on E-Learning, 8(1), 17–55.
- Fitzpatrick, B., Berends, M., Ferrare, J. J., & Waddington, R. J. (2020). Virtual charter schools and online learning during COVID-19. *The Brookings Institute*. Retrieved from <a href="https://www.brookings.edu/blog/brown-center-chalkboard/2020/06/02/virtual-charter-schools-and-online-learning-during-covid-19/">https://www.brookings.edu/blog/brown-center-chalkboard/2020/06/02/virtual-charter-schools-and-online-learning-during-covid-19/</a>.
- Greenhow, C., Hughes, J.E., & Robelia, B. (2009). Learning, teaching, and scholarship in a digital age:

  Web 2.0 and classroom research—What path we take now? Educational Researcher, 38(4), 246-259.

- Holden, H., & Rada, R. (2011). Understanding the influence of perceived usability and technology self-efficacy on teachers' technology acceptance. *Journal of Research on Technology in Education*, 43(4), 343–367. <a href="https://doi.org/10.1080/15391523.2011.1078">https://doi.org/10.1080/15391523.2011.1078</a>
- Hsu, C. L., & Lu, H. P. (2004). Why do people play on-line games?

  An extended TAM with social influences and flow experience. *Information* & *Management*, 41(7), 853–868.

  <a href="https://doi.org/10.1016/j.im.2003.08.014">https://doi.org/10.1016/j.im.2003.08.014</a>.
- Kaleta, R., Skibba, K., & Joosten, T. (2007). Discovering, designing and delivering hybrid courses. In A. G. Picciano & C. D. Dziuban (Eds.), Blended learning: Research perspectives (pp. 111–143). Needham: Sloan Center for Online Education.
- Karahanna, E.; Straub, D.W.; Chervany, N.L. Information technology adoption across time: A cross-sectional comparison of pre-adoption and post-adoption beliefs. MIS Q. 1999, 23, 183–213.

(36) Volume 28

- Lee, D. Y., & Lehto, M. R. (2013). User acceptance of YouTube for procedural learning: An extension of the technology acceptance model. *Computers & Education*, 61, 193–208

  https://doi.org/10.1016/j.compedu.2012.10.001.
- Li, C., & Lalani, F. (2020). The COVID-19 pandemic has changed education forever. This is how. World Economic Forum. Retrieved from <a href="https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/">https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/</a>.
- Lin, K. (2011). E-Learning continuance intention: Moderating effects of user E-learning experience. *Computer & Education*, 56(2), 515–526. https://doi.org/10.1016/j.compedu.2010.09.017.
- Nikou, S. A., & Economides, A. A. (2017). Mobile-based assessment:

  Investigating the factors that influence behavioral intention to use. *Computers & Education*, 109, 56-73

  <a href="https://doi.org/10.1016/j.compedu.2017.02.005">https://doi.org/10.1016/j.compedu.2017.02.005</a>.
- Pallant, J. (2011). Survival manual. In A step-by-step guide to data analysis using SPSS.

Rauniar, Rupak & Rawski, Greg & Jei, Yang & Johnson, Ben. (2014).

Technology acceptance model (TAM) and social media usage: An empirical study on Facebook. *Journal of Enterprise Information Management*. 27. 10.1108/JEIM-04-2012-0011.

Reid, M., & Levy, R. (2008). Integrating trust and computer self-efficacy with TAM: An empirical assessment of customer acceptance of banking information system (BIS) in Jamaica. *Journal of Internet Banking and Commerce.*, 12(3), 1–18.

Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers & Education*, 128, 13–35.

https://doi.org/10.1016/j.compedu.2018.09.00

Sheldon, P. (2016). Facebook friend request: Applying the theory of reasoned action to student-teacher relationships on Facebook. *Journal of* 

Broadcasting & Electronic Media, 60(2), 269–285.

https://doi.org/10.1080/08838151.2016.1164

Szajna, B. (1996). Empirical evaluation of the revised technology acceptance model. Management Science, 42 (1), 85-92.

Taylor, R. (1990). Interpretation of the correlation coefficient: A basic review. Journal of diagnostic medical sonography, 6(1), 35–39. https://doi.org/10.1177/875647939000600106.

Turner, M., Kitchenham, B., Brereton, P., Charters, S., & Budgen, D. (2010). Does the technology acceptance model predict actual use? A systematic literature review. *Information and Software Technology*, 52(5), 463–479. https://doi.org/10.1016/j.infsof.2009.11.005.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of technology acceptance model: Four longitudinal field studies. *Management Science*, 46, 186–

204. https://doi.org/10.1287/mnsc.46.2.186.11926

- Weng, C., & Tsai, C. (2015). Social support as a neglected e-learning motivator affecting trainee's decisions of continuous intentions of usage. *Australasian Journal of Educational Technology*, 31(2), 177–192. https://doi.org/10.14742/ajet.1311.
- Winthrop, R. (2020). COVID-19 and school closures: What can countries learn from past emergencies? Brookings Institute. Retrieved from <a href="https://www.brookings.edu/research/covid-19-and-school-closures-what-can-countries-learn-from-past-emergencies/">https://www.brookings.edu/research/covid-19-and-school-closures-what-can-countries-learn-from-past-emergencies/</a>.
- World Health Organization. (2020). WHO timeline—COVID-19.

  Retrieved from <a href="https://www.who.int/news-room/detail/27-04-2020-who-timeline—covid-19?gclid=EAIaIQobChMIif-8lrCh6gIVgY3ICh1x3gZPEAAYASAAEgJ24vD\_BwE">https://www.who.int/news-room/detail/27-04-2020-who-timeline—covid-19?gclid=EAIaIQobChMIif-8lrCh6gIVgY3ICh1x3gZPEAAYASAAEgJ24vD\_BwE</a>.

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