

**Integrating Facebook Into Distance Education and Online Learning Environments:  
To Promote Interactive Online Learning Communities**

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**Abstract:** Enrollment in distance Education (DE) and online learning environments (OLE) has increased because of advances in information and communications technologies (ICT), changing economic times, and the desire to improve skills. Simultaneously, completion rates of DE and online learning have seen a decline (Xu & Jagers, 2011). According to Xu and Jagers (2011), this may be due to feelings of isolation and lack of support, motivation, and time. DE and online learning require high levels of interactivity and good social presence, modeling face-to-face (F2F) environments. Facebook was examined because of its enormous user base, ease of use, and its potential to build online communities. An online instructional module about integrating a Facebook Group Page was developed for university-level educators of DE and OLE. Keller's ARCS Model of Motivation informed the design. Findings revealed that educators are interested in Facebook, but remain skeptical about its place in education. Many enjoyed the module and performed well, but suggested more interactivity, examples of successful classroom implementation, and information about privacy and self-disclosure. Further research about educators' attitudes of social media in education is needed, as well as, a better understanding of the factors required for a social media to be more appealing and education-worthy.

**Introduction**

Distance education (DE) and online learning environments (OLE) has grown exponentially. Advances in educational technology have made DE and OLE more flexible and accessible to a wider population, from working professionals to at-home parents. Their motivations range from seeking an additional degree to improving skill sets. While DE and OLE enrollment is increasing, actual completion rates have seen a slight decline. What may account for the decrease include a variety of factors, such as student dissatisfaction, feelings of isolation or lack of motivation and time (Xu & Jagers, 2011). The challenge for educators is to improve the 21<sup>st</sup> century student learning experience. Educators must be equipped and trained on new tools and teaching strategies

to address changes in student attitudes, performance, satisfaction, and student retention (Simonson, Smaldino, Albright & Zvacek, 2012).

One major component of student satisfaction is the level of interaction. Higher levels of interaction result from highly cooperative learning environments (Simonson et al., 2012). There are a variety of social media tools that may help to emulate interaction and cooperation that are typical of face-to-face (F2F) classroom environments. Specifically, Facebook will be examined. Exploring the integration of social media tools will be discussed in this paper, as well as, the importance of social presence. Additionally, it is critical that educators are provided with resources on how to implement new technologies and teaching strategies into their curriculum. Therefore, the purpose of this instructional design project was to develop and evaluate a web-based instructional module on integrating Facebook into DE and OLE to promote interactive online learning communities for university educators at the undergraduate and graduate level.

## **Background**

From 2003 to 2009, there was an 11% increase in educational institutions stating that online learning is integral in their long-term planning. According to the latest Sloan Survey of Online Learning (2010), enrollments in online learning grew from 1.6 million students each enrolled in at least one online course in Fall of 2002 to 5.6 million enrolled in the Fall of 2009. This 19% growth rate of online learning far exceeds that of overall higher education enrollment for the same time frame, which was only 2%. At the same time, online enrollments have seen a decrease in completion rates. According to Xu and Jagers (2011), students who took an online course withdrew at a 10 to 15% higher rate than students enrolled in a hybrid or F2F course. Low completion rates may be attributed to “technical difficulties, a sense of isolation, a relative lack of structure, and a general lack of support” (Xu & Jagers, 2011, p. 1). Clearly, there is a need for educators to address these concerns. They need to implement new, creative tools and strategies into their DE courses and OLE in order to promote more human, interactive online learning communities and to increase student retention.

Educators are challenged to seek and implement tools and strategies that recreate F2F human elements of cooperation, immediacy, intimacy, and interaction that model physical classroom experiences. Immediacy and intimacy are characteristics of social presence (Gunawardena & Zittle, 1997). Social presence is the awareness of interaction partners over a communications medium (Short, Williams & Christie, 1976). Good social presence is a heightened awareness of instructors and other students with a very low awareness of the technology medium being used to facilitate the communication. There are many information and communications technologies (ICT) that may assist with creating social presence. ICT selections can be any media that an educator wishes it to be, as long as it is used effectively and supports learning objectives. Media-based instruction does not necessarily enhance learning. “Rather, the content of the instruction, the method used to promote learning, and the involvement of the learner in the instructional experience were what, in part, influenced learning” (Simonson et al., 2012, p. 12). It is

important that learning objectives are determined prior to selecting teaching tools and strategies.

The success of DE and OLE also depend on a high degree of interactivity among educators, the course content, and students. The interaction of these three components is necessary for reaching learning outcomes (Simonson et al., 2012). Social media tools were created with the purposes of connecting people, sharing information, and building communities online.

Facebook is particularly noteworthy because of its enormous user base, which is over 800 million users and over 450 million daily active users, with over 400 million accessing Facebook via mobile devices (according to Facebook.com statistics retrieved in February, 2012). Ninety-five percent of students at a mid-sized southern university had a Facebook account (Roblyer, McDaniel, Webb, Herman & Witty, 2010). Additionally, students are very comfortable and open to the idea of faculty on Facebook and felt that Facebook creates opportunities for students to become better acquainted with their instructors and peers (Hewitt & Forte, 2006). Educators should take advantage of such a tool because students are already a “captive audience” (Pollara & Zhu, 2011, p. 3330).

From all the social media tools that are currently available, it is very plausible for Facebook to be adopted by higher education. Students are already familiar with it and use it daily. The educational adoption of Facebook is positively influenced by its strength in communication, collaboration, and the sharing of resources and materials. Mazman and Usluel (2010) found that Facebook adoption has a positive relationship because of its usefulness, ease of use, social influence, facilitating conditions, and community building. Usefulness is a large reason for Facebook’s rapid adoption by so many users; and maintaining social relations as the most common purpose for using Facebook. It provides an interesting channel for students to connect with their peers and instructors by giving each participant a face, a voice, within a unique space: a Facebook Group Page.

Although a Facebook Group Page lacks in some key learning management system (LMS) features, such as uploading documents and PDF files, a dynamic Facebook Group Page can be a visual alternative for students. They can post messages for discussion and videos and links related to the course or topic. The page can even be used as an “ice-breaker” activity, allowing students and instructors to informally become acquainted with one another. This can break up the monotony that typifies many DE courses and OLE. Additionally, when participants identify with a community, they become motivated to participate and interact with one another (Mazman & Usluel, 2010). Being part of an online community, such as a Facebook Group Page, helps to create social presence and build cohesion. This helps to elevate student attitudes, performance, satisfaction, and student retention.

There appears to be many online tutorials, mostly in non-interactive video formats, that introduces Facebook, or explains how to set-up a Facebook Group Page. However, not very many explain how a Facebook Group Page can be used effectively to encourage and

facilitate course discussions, participation, or serve as an alternative means of giving and receiving instructor and peer-to-peer feedback. Additionally, not many online tutorials discuss the purpose or place that Facebook would have in a classroom, let alone in DE or OLE. There is a need to assist educators to become literate in ICT, especially “socially-situated” tools, such as social media (Reid, 2011, p. 59). Although many educators may not see the academic value in using Facebook, according to Reid (2011), they should at least become more informed of Facebook’s social purpose to encourage students to develop their communicative competence.

## **Methods**

The participants of the instructional module were solicited via email that was sent to email listservs at the Department of Educational Technology at the University of Hawai‘i at Mānoa. An email was also sent to distance education faculty at the School of Social Work at UH Mānoa. Seventeen, anonymous university level educators, or persons with an interest in social media in higher education, volunteered. They were composed of eight males and nine females, with most ranging from 41 to 50 years of age. Most hold beyond a 4-year college degree and teach using a variety of modalities ranging from F2F instruction to online to hybrid, in a variety of disciplines and subjects at the university level. Ideally, participants are interested in creative ways to elevate student motivation, participation, interaction, and building online learning communities. It is also worth mentioning here that participants will also be referred to as “educators” and “instructors” interchangeably throughout this paper.

The demographic survey consisted of nine multiple-choice questions, three Likert scale questions, and one open-ended question (see Appendix A). It revealed that the majority of participants are very familiar with social media and have one or more accounts with Facebook or other social media sites. They are also somewhat comfortable to very comfortable using new technology in their instruction, classroom, or institution.

All participants of this research project were emailed a link to an online instructional module, a series of HTML web pages, created and hosted by Weebly.com. The researcher created an online module over a printed one because it allowed participants to easily access the module from anywhere, at anytime. Weebly.com was selected to develop the module because it is a free, simple drop and drag website creator and allowed the researcher much design flexibility and HTML customization (see Figure 1). It allowed the researcher to embed questionnaires and surveys using Google Forms. This helped to easily capture data automatically into online Google Spreadsheets. The module may be accessed and viewed by visiting the following URL:  
<http://integratingfacebook.weebly.com>.

Facebook has only been around since 2004, and consequently, there are minimal studies of its impact, or formal use, in higher education. What studies that do exist discuss its usage as mainly providing a platform for students to vent about their college experiences (Selwyn, 2009). There is little to no scholarly research that uses, or designs, instruction for educators on how to integrate popular social media tools effectively into their

instruction, let alone, into DE or OLE. Through this research project, the researcher aims to understand the attitudes and motivation of educators to adopt new ICT tools into their pedagogy.



Figure 1. Weebly.com drag and drop interface.

The ARCS model of motivation addressing attention, relevance, confidence, and satisfaction (Keller, 1983) provided a good framework for designing instruction that targeted university-level educators. Understanding that educators are free to select from a wide array of teaching tools, the researcher was challenged to design an effective module that would appeal, engage, and motivate educators to *want* to integrate Facebook into their DE or OLE. The module engaged educators' *attention* by incorporating positive quotes, embedded videos, and links about Facebook and social presence. It created *relevance* when it provided scholarly support for Facebook, educators' testimonials about using Facebook Group Pages, and links to popular ways Facebook can be integrated into the classroom. It created *confidence* by providing clear and obtainable objectives. It facilitated participants' *satisfaction* by providing guidelines for implementing Facebook into instruction. Successful integration of Facebook, or any new ICT tool or strategy, in DE and OLE means that each of these ARCS components are addressed and are working together to motivate educators to change their attitudes and behavior of using a new tool or strategy.

The quizzes were called “pre-test” and “post-test”. The pre-test consisted of 25 multiple-choice questions given at the beginning of the module to discern what participants already knew or understood of Facebook, the Group Page, and social presence (see Appendix B). Then, participants proceeded to learn the following four sections, sequentially and respectively: *What is Facebook?*, *Why Use Facebook?*, *What is Social Presence?*, and *Towards a “Technagogy.”* The module introduced Facebook and then focused on a specific feature, the Facebook Group Page, because it models after discussion forums commonly seen in LMS, such as in WebCT and Blackboard. It also does not require that educators and students “friend” one another and privacy settings can be tailored accordingly. The post-test listed the same questions that were asked in the pre-test. This is to observe the effectiveness of the module, to see if participants actually

learned the content. Then the module discussed social presence in the third section to emphasize the role that Facebook could play in a classroom to facilitate more interactive and cooperative conditions. Lastly, the module shared steps on how to change pedagogy using technology, hence the term “technagogy,” first coined in 2008 by the Multimedia Educational Resource For Learning and Online Teaching (MERLOT).

## Results

According to the demographic survey, participants were divided with less than half already using a social media tool in their course(s). This is a surprise considering how many of the participants had indicated that they are generally comfortable with using new technology in their instruction. The most interesting responses came from open-ended *question 13*, which asked participants of their opinion about using Facebook in higher education. One participant said, *“I don't think it's appropriate. It presents privacy concerns, requires students to obtain an account with a private company, and move the locus of control for the educational experience well outside that of the educational institution.”* Another said, *“I'm not sure how Facebook can be useful in higher education. It seems like it is more of a distraction.”* These are very valid concerns that the researcher hoped to address through the instructional module. Other similar participant opinions will be considered when incorporating new topics and issues for future module improvement, such as topics of confidentiality, privacy, self-disclosure, and efficacy. Lastly, the demographic survey should have asked participants to elaborate on the types of tools they are currently using, social media or otherwise, to facilitate their DE and online courses.

Overall, the module was well-received, as one participant said, *“Much more confident in using facebook in the teaching.”* Participants were familiar with Facebook and concepts of social presence. As evidenced by Figure 2, they performed well on the pre-test with an average score of 20.4 out of 25 questions. Scoring improved slightly with an average score of 21.5 on the post-test. Participants seemed to have difficulty with a few of the questions. They answered certain questions correctly during the pre-test and then answered the same questions incorrectly in the post-test. This led the researcher to believe that the module may need to improve, or reword, its instructional content to correlate with the participants' prior knowledge or experiences. Basically, “tweaking” what they already know in order to encourage their understanding and absorption of new ideas and concepts. Specifically, content related to *questions 3, 5, 11, 13, 15, 18, 22, and 23* (see Appendix B). For example, *question 3* needs to more clearly define the functions and features of a Facebook Fan Page and a Group Page. Participants were having difficulty remembering the differences between the two.

*Questions 1, 18, and 25* were especially difficult for participants. For example, *question 18* asked, *“Distance education and online learning environments are complex. What is a possible solution to design and instruct them?”* They scored very low in the pre-test and only made slight improvement in the post-test. This indicates that participants had little to no prior knowledge relating to those questions and concepts, or the questions were too subjective, broad, and had many possible answers. One participant said from the

attitudinal survey, “Had some trouble with the pre and post test questions since they appeared to be requesting an 'opinion' rather than based on an expert's analysis.” Either the module did not provide the necessary information and feedback to prepare them to answer the same questions again in the post-test, or the questions need to be scholarly cited and informed. As one participant said, “The ‘According to...’ questions were good,

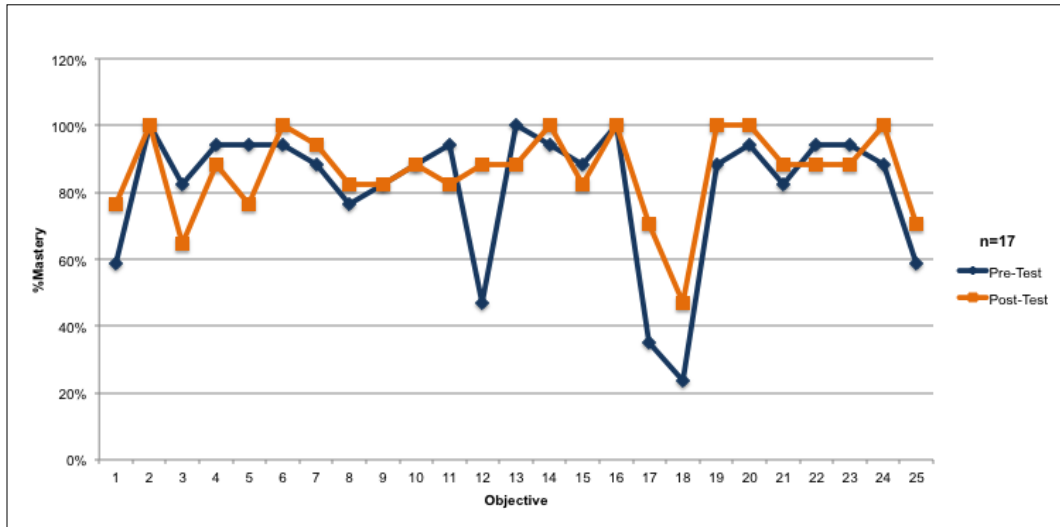


Figure 2. Summary of percent mastery by objective.

and I would not change or replace those.” This is something to consider when forming questions for future modules. Question 17 did this very well, where the improvement jumped significantly.

### Implications and Discussion

Quantitative and qualitative data from the pre- and post-test and the attitudinal survey were used to evaluate the effectiveness of the module. The attitudinal survey consisted of ten Likert scale questions and three open-ended questions. Participants’ views and attitudes from the Likert-scale questions are summarized in Table 1 (see Appendix C for open-ended responses). Given the background of the participants, they navigated through the module with no problems. Although they performed well on the pre- and post-test, instructional content relating to some of the questions needs to be modified to further coincide with participants' prior knowledge. Therefore, a more in-depth audience analysis is required for future module design. What are educators’ fears and concerns when adopting new ICT tools for their DE or online courses?

Table 1

*Summary of Likert scale data from attitudinal survey.*

Attitudinal Survey Question	Average
1. The module was clear and easy to understand.	4.8
2. The level of difficulty was about right for me.	4.6
3. The length of the module was manageable.	4.6
4. The examples in the module were helpful.	4.6
5. I learned a lot about Facebook from the module.	4.1
6. The module will help me to integrate Facebook into higher education.	3.9
7. The module motivates me to learn more about Facebook and other social media tools.	3.9
8. The questions and information in the module helped to prepare me for the post-test.	4.5
9. All of the test questions were well-written and straightforward.	4.4
10. I did better on the post-test because I worked through the module.	4.6

*Note.* The Likert scale ranged from 1 to 5, where 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree. See Appendix C for open-ended responses.

The majority of participants enjoyed the module, as one said, *“I think the module did an excellent job at explaining what one can do with Facebook Pages and how that can be integrated into education for positive results. I feel confident that when done correctly (with instructor trained in distance ed), Facebook can be an invaluable asset.”* It addressed all the ARCS components of *attention, relevance, confidence, and satisfaction* very well. Future modifications to the module may include incorporating an additional section that further targets educators' confidence. For example, demonstrating the ease of setting up a Facebook Group Page. An interactive “sandbox” feature may be incorporated for participants to experiment with how a Group Page is set up. This would be coupled with instant, positive feedback that informs them of their progress.

Additionally, the module needs to consider educators' learning needs. Qualitative data from the attitudinal survey revealed suggestions in this area, which included, providing more content relating to confidentiality, privacy, and self-disclosure. One participant suggested, *“Include more specific examples of how teachers are integrating Facebook Groups in their courses.”* Additionally, embedding optional practice questions and exercises in the module sections may aid participants' confidence and satisfaction. The researcher also considered this participant's comment for future module design: *“It is not interactive enough. Needs a more robust tool like HTML 5, Flash, or another animation approach.”*

Although there is an interest to learn more about Facebook and other social media tools and their place in higher education, there are still feelings of skepticism, hesitation, and uncertainty. This is evidenced from the attitudinal survey, as one participation said, *“I*



*still don't intend to use it.*” Another added that, *“The module itself is well done. Facebook, however, remains in my 'bad idea' pile.”* Further research is needed to determine and examine the factors that are necessary for social media tools, like Facebook, to be accepted for use in higher education, particularly in DE and OLE. And once educators are on-board, how does one maintain their interest and attention to stay motivated, current, and updated on the latest tools and teaching strategies?

## **Conclusion**

An online instructional module for university-level educators about how to integrate Facebook into DE and OLE was designed and evaluated by the researcher and was discussed in this paper. From the literature, feelings of isolation and the lack of support, interaction, community, and social presence generally typify DE and online learning experiences. The purpose of the module was to provide a resource and guide for educators, who desire to promote and create more interactive online learning communities through the use of social media tools, such as a Facebook Group Page. Facebook was selected because of its enormous user base, ease of use, social influence, facilitating conditions, and community building. It was found that maintaining social relations was the most common purpose for using Facebook. This is in relation to the importance of social presence in DE and OLE. Good social presence is a heightened awareness of instructors and other peers despite the use of ICT mediums. The challenge for educators is to create conditions for good social presence and to recreate essential F2F elements in DE and OLE to achieve higher levels of student interaction, participation, motivation, and student retention.

There are countless online resources about social media, but many do not seem to provide a support structure that targets educators of DE and OLE nor explains the need and place for them in higher education, let alone in DE and OLE. The module was informed by Keller's ARCS model of motivation to engage the attention, relevance, confidence, and satisfaction of educators. Understanding the ARCS of university-level educators assisted the researcher to analyze, design, and develop the module. The module's design and effectiveness were evaluated and whether it was successful in addressing the four components of the ARCS model. The researcher was interested in learning if the module motivated educators of DE and OLE to consider integrating Facebook into their pedagogy.

The researcher and the module do not claim that Facebook is superior to other social media or other ICT tools. Neither do they guarantee that social media integration will even increase interaction, student satisfaction, improve attitudes, participation, or to increase retention. Rather, the purpose of the module was to design a reusable template suitable for the instruction of other social media tool content. In addition, to springboard towards a discussion about social media's potential to create interactive online learning communities, to increase social presence in DE and OLE. This research project examined the need to improve and humanize pedagogy for 21<sup>st</sup> century learners of DE and OLE and suggests social media tools to be included in educators' tool kits.

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Appendix A

Demographic survey questions. Required questions indicated by \*.

1. Agreed to Consent Form? (Circle one) \* Yes    No
2. Are you Male or Female? (Circle one) \* Male    Female
3. What is your age? (Circle one) \*  
18-21, 22-25, 26-30, 31-40, 41-50, 51-60, 61 or over
4. What is the highest level of education you have completed? (Circle one) \*  
Less than high school  
High School/GED  
Some College  
2-Year College Degree (Associates)  
4-Year College Degree (BA, BS)  
Master's Degree  
Doctoral Degree  
Professional Degree (MD, JD)
5. What is your current marital status? (Circle one) \*  
Single, Never Married  
Married  
Partnered  
Separated  
Divorced  
Widowed
6. What type(s) of educational institution do you teach at? (Select all that apply) \*  
Community College  
University  
Vocational/Trade School  
Academy  
Seminary  
Other: Please list
7. What level(s) of higher education do you teach? (Select all that apply) \*  
Undergraduate  
Graduate  
Doctoral  
Other: Please list
8. What modality(ies) do you teach? (Select all that apply) \*  
Classroom learning (face-to-face, F2F)  
Online learning, synchronous (live, real-time)

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Online learning, asynchronous (no set time)

Hybrid, blended, mixed-mode (F2F, online, synchronous and asynchronous)

Other: Please list

9. In what discipline(s), or subject area(s) do you teach (ie. Education, Anthropology, History, etc.)? (Please list) \*
10. How familiar are you with social media tools, such as Twitter, Facebook, and Google+? (Circle one) \* 1 - Not Familiar (I don't know anything about them), 2 - Somewhat Familiar (I don't have any accounts, but have heard about them) , 3 - Familiar (I have an account with one), 4 - Very Familiar (I have accounts with one or more)
- 1    2    3    4
11. What is your comfort level when using new technology in your instruction, classroom or institution? (Circle one) \* 1 - Very Uncomfortable, 2 - Uncomfortable, 3 - Somewhat Uncomfortable, 4 – Somewhat Comfortable, 5 - Comfortable, 6 - Very Comfortable
- 1    2    3    4    5    6
12. How likely are you to integrate a tool like Facebook into your instruction, classroom or institution? (Circle one) \* 1 - Very Unlikely, 2 - Unlikely, 3 - Likely, 4 - Very Likely
- 1    2    3    4
13. What is your opinion about using Facebook in higher education? (Open-ended)
14. Do you already use a social media tool in your course(s)? (Select all that apply)  
Facebook, Myspace, Twitter, Diaspora, Google+, Other: Please list

Appendix B

Questions used for both the pre-test and post-test, including correct answers and feedback.

\* Indicates correct answer.

**1. What trend set Facebook apart from other social networking services?**

- A. the ability to customize profile pages
- B. the sharing of photos
- C. wall posts\*
- D. the sharing of videos

Feedback:

- A. Incorrect, unlike Myspace, Facebook does not allow customization of profile pages, such as changing background colors and font styles.
- B. Incorrect, Facebook was not the first social networking tool with photo-sharing features.
- C. Correct, Facebook was the first social networking site to roll out the wall post concept as the main activity stream, or news feed, of a user profile page.\*
- D. Incorrect, Facebook was not the first social networking tool with video-sharing features.

**2. What is Facebook?**

- A. a social bookmarking site
- B. a social networking site\*
- C. a wiki tool
- D. a course management system

Feedback:

- A. Incorrect, Facebook is not a social bookmarking site. Digg and Delicious are examples of social bookmarking services.
- B. Correct, Facebook is a social networking site.\*
- C. Incorrect, Facebook is not a wiki tool. Wikispaces and Wikipedia are examples of wiki tools.
- D. Incorrect, Facebook is not a course management system. Webct, Lualima, and Moodle are examples of course management systems.

**3. Facebook Fan Pages are best used for \_\_\_\_\_.**

- A. larger, public group discussions.
- B. marketing campaigns.
- C. sharing news and announcements.
- D. all of the above\*

Feedback:

- A. Incorrect, the answer is D.
- B. Incorrect, the answer is D.
- C. Incorrect, the answer is D.
- D. Correct, Facebook Fan Pages are best suited for larger, public group discussions, marketing campaigns, and sharing news and announcements. These are typically good for corporations, organizations and institutions wishing to gain an audience or fan base. Members can be more than 5000.\*

**4. Walls posts are \_\_\_\_\_.**

- A. email messages.
- B. comments on a profile page.\*
- C. the same as blog entries.
- D. can be edited like wiki entries.

Feedback:

- A. Incorrect, Facebook wall posts are not email messages. Email messages are communications exchanged between two or more people using email addresses and email client, such as Gmail or Microsoft Outlook.
- B. Correct, wall posts are comments on a profile page (a user's page, group page or fan page). Wall posts usually are status updates, links to external websites, comments from other users and replies to other users' comments or wall posts.\*
- C. Incorrect, wall posts are not the same as blog entries. A blog is usually a website or part of a website, where entries can be completely edited. Blog entries are a lot more dynamic in terms of allowing users to insert images and videos into the text, whereas, wall posts are usually small bits of texts and/or URL links. Blogger and Wordpress are good examples of blogs.
- D. Incorrect, wall posts cannot be edited like wiki entries. Once a wall post or comment is made, it cannot be edited by anyone else, but the original user. The only way to edit a wall post or comment is for the original user to delete the original comment and start over. Additionally, the style and formatting cannot be edited like wiki entries. Wikipedia and Wikispaces are good examples of wikis.

**5. Facebook Group Pages are best used for \_\_\_\_\_.**

- A. collaboration.
- B. smaller, private group discussions.
- C. sharing news and announcements.
- D. all of the above\*

Feedback:

- A. Incorrect, the answer is D.

- B. Incorrect, the answer is D.
- C. Incorrect, the answer is D.
- D. Correct, Facebook Group Pages are best suited collaboration, smaller, private group discussions and sharing news and announcements. Members cannot be more than 5000.\*

**6. When a Facebook Group Page is “secret”, it means that \_\_\_\_\_.**

- A. only members see the group, who is in it, and what members post.\*
- B. anyone can see the group, who is in it, and what members post.
- C. anyone can see the group, who is in it, and only members see posts.
- D. none of the above

Feedback:

- A. Correct, when members can see the group, who is in it, and what members post, the Facebook Group Page is “secret”. To allow your students to join a secret group page, send them the URL of your group page and they will “Ask to Join”.\*
- B. Incorrect, when anyone can see the group, who is in it, and what members post, the group page is “public”.
- C. Incorrect, when anyone can see the group, who is in it, and only members see posts, the group page is “closed”.
- D. Incorrect, the answer is A.

**7. Facebook Group Pages also include \_\_\_\_\_.**

- A. creating and sharing group events.
- B. going online to chat within Facebook.
- C. both a and b\*
- D. none of the above

Feedback:

- A. Incorrect, the answer is C, both A and B.
- B. Incorrect, the answer is C, both A and B.
- C. Correct, Facebook group pages also include creating and sharing events, as well as, going online to chat within Facebook.\*
- D. Incorrect, the answer is C.

**8. Facebook Group Pages allow users to \_\_\_\_\_.**

- A. write wall posts.
- B. create polls.
- C. create and share Facebook documents.
- D. all of the above\*



Feedback:

- A. Incorrect, the answer is D, all of the above.
- B. Incorrect, the answer is D, all of the above.
- C. Incorrect, the answer is D, all of the above.
- D. Correct, Facebook Group Pages allow users to write wall posts, create polls, and create and share Facebook documents.\*

**9. Which demographic adopted Facebook the most because of its ease of use?**

- A. teachers
- B. college students\*
- C. parents
- D. all of the above

Feedback:

- A. Incorrect, teachers was not the demographic that adopted Facebook the most because of its ease of use.
- B. Correct, college students was the demographic that adopted Facebook the most because of its ease of use.\*
- C. Incorrect, parents was not the demographic that adopted Facebook the most because of its ease of use.
- D. Incorrect, the answer is B.

**10. A Facebook Group Page \_\_\_\_\_.**

- A. adds variety to a course.
- B. creates more immediacy.
- C. contributes to social presence.
- D. all of the above\*

Feedback:

- A. Incorrect, the answer is D, all of the above.
- B. Incorrect, the answer is D, all of the above.
- C. Incorrect, the answer is D, all of the above.
- D. Correct, a Facebook Group Page adds variety to a course because most online and distance education courses tend utilize course management systems, which are not typically monotonous and are not user-friendly. Group Pages also create more immediacy because students will have an additional way of getting in touch with their instructor and peers, especially when Facebook is also accessible via mobile devices. Additionally, Group Pages help to contribute to social presence, offering students and the instructor a different channel of interaction and allowing everyone to become more aware of each other in and outside of classroom discussions.\*

**11. There are many reasons to invite Facebook into your classroom. Which of the following DOES NOT belong?**

- A. Students want to share beyond the classroom.
- B. Absent students stay in the loop.
- C. Students can stream music.\*
- D. Facebook creates a social bond.

Feedback:

- A. Incorrect, Facebook DOES help students who want to share beyond the classroom.
- B. Incorrect, Facebook DOES help absent students stay in the loop.
- C. Correct, students streaming music is NOT a reason to invite Facebook into the classroom; although, it could be, it is not one of the 50 reasons listed.\*
- D. Incorrect, Facebook DOES help to create a social bond among students in the class with each other and with the instructor, both socially and academically, as well as, professionally.

**12. A disadvantage of a Facebook Group Page is \_\_\_\_\_.**

- A. the lack of privacy.
- B. the inability to support and share other document file types, such as .DOC and .PDF.\*
- C. having to “friend” every member in the group.
- D. they cannot have more than 20 members.

Feedback:

- A. Incorrect, the lack of privacy is NOT a disadvantage of a Facebook Group Page because a page can be set to “secret” and only members see the group, who is in it, and what members post. Privacy settings may also be modified for individual profile pages and fan pages.
- B. Correct, although a Facebook Group Page allows users to create and share Facebook documents, it still does not have the ability to support or share other document file types, such as .DOC and .PDF files.\*
- C. Incorrect, members of a Facebook Group Page DO NOT have to “friend” other members of that group. This applies to Facebook Fan Pages as well.
- D. Incorrect, a Facebook Fan Page allows up to 1500 members.

**13. Student retention in online courses has seen a decline. What could be the reason for this?**

- A. technical difficulties
- B. lack of support
- C. sense of isolation

- D. all of the above\*

Feedback:

- A. Incorrect, the answer is D.
- B. Incorrect, the answer is D.
- C. Incorrect, the answer is D.
- D. Correct, all of the above could be reasons for the decline in student retention of online courses.\*

**14. According to Vygotsky, what plays a role in the development of cognition?**

- A. social interaction\*
- B. good study practices
- C. exceptional pedagogy
- D. none of the above

Feedback:

- A. A. Correct, this plays a role in the development of cognition, according to Vygotsky. The more social learning is, the more knowledge that is gained by all, adding to a collective consciousness.\*
- B. Incorrect, good study practices may help with the development of cognition, but this is not according to Vygotsky's social development theory.
- C. Incorrect, exceptional pedagogy, or teaching strategies, may assist with the development of cognition, but this is not according to Vygotsky's social development theory.
- D. Incorrect, the answer is A.

**15. What is a challenge for educators of distance education and online learning environments?**

- A. Developing appropriate pedagogy that effectively utilizes information communications technologies.
- B. Having to deal with students plagiarizing.
- C. Emulating real, face-to-face learning experiences online.
- D. Both A and C\*

Feedback:

- A. Incorrect, the answer is D.
- B. Incorrect, students plagiarizing is a challenge facing all educators, not just the ones in distance education and online learning environments.
- C. Incorrect, the answer is D.

- D. Correct, developing effective pedagogy that uses information communications technologies and emulating real, face-to-face learning experiences are both challenges for educators of distance education and online learning environments.\*

**16. According to Short, Williams and Christie, what is social presence?**

- A. Using the Internet to send and receive communications.
- B. A large, discussion forum for university educators and their students.
- C. A type of social networking tool that allows students to share information with one another.
- D. An awareness of interaction partners over a communications medium.\*

Feedback:

- A. Incorrect, social presence includes using the Internet to send and receive communications, but this is not according to Short, Williams and Christie.
- B. Incorrect, large, discussion forums does not describe what social presence is.
- C. Incorrect, social presence is not a type of social networking tool or application.
- D. Correct, it is an awareness of interaction partners over a communications medium. It is the sense that the person(s) you are communicating with is/are a real person(s).\*

**17. According to Gunawardena and Zittle, good social presence is associated with \_\_\_\_\_ and \_\_\_\_\_.**

- A. transparency; honesty
- B. immediacy; intimacy\*
- C. creativity; innovation
- D. openness; reciprocity

Feedback:

- A. Incorrect, good social presence may include the aspects of transparency and honesty, but these are not according to Gunawardena and Zittle.
- B. Correct, good social presence, according to Gunawardena and Zittle, is associated with immediacy (just-in-time learning) and intimacy (close, interpersonal relationships).\*
- C. Incorrect, good social presence may include the aspects of creativity and innovation, but these are not according to Gunawardena and Zittle.
- D. Incorrect, good social presence may include the aspects of openness and reciprocity, but these are not according to Gunawardena and Zittle.

**18. Distance education and online learning environments are complex. What is a possible solution to design and instruct them?**

- A. There is not one perfect tool or strategy to design and instruct them.\*

- B. Revert to traditional, lecture-based, instructor-centered instructional methods.
- C. The solution is based on the needs of learners and the content.
- D. none of the above

Feedback:

- A. Correct, there is not one perfect solution to the complexities of designing and instructing quality distance education and online learning environments. It depends on many factors, such as the instructor's comfort level with using new technologies and students' willingness to use the tools. Regardless, the quality of instruction should always be a priority over the technology.\*
- B. Incorrect, students of today are different learners because of advances in information communications technologies. Therefore, educators must adapt to the changing times, not revert to traditional practices of lecture-based, instructor-centered instructional methods.
- C. Incorrect, it may be based on the needs of learners and the content, but this is not the only solution possible.
- D. Incorrect, the answer is A.

**19. What is "technagogy"?**

- A. It is the latest social networking tool.
- B. It is a shift in teaching strategies that aims to utilize technology effectively and optimally.\*
- C. It is a professional development series for educators wishing to improve their technology skills.
- D. none of the above

Feedback:

- A. Incorrect, technagogy is not a tool, but more of a concept or strategy.
- B. Correct, it is a shift in pedagogy, or teaching strategies that aims to use technology effectively and optimally to assist students with reaching learning objectives and their highest potential.\*
- C. Incorrect, professional development may be an aspect of technagogy, but it is more about changing teaching strategies.
- D. Incorrect, the answer is B.

**20. Education has shifted because of technology. What is it now?**

- A. student-centered, lecture-based
- B. parent-centered, lecture-based
- C. instructor-centered, lecture-based
- D. student-centered, ubiquitous learning\*

Feedback:

- A. Incorrect, while education now is more student-centered, it is becoming less and less lecture-based and more project-based and self-directed, where students are much more responsible over their own learning.
- B. Incorrect, education now is not parent-centered and is becoming less and less lecture-based and more project-based and self-directed, where students are much more responsible over their own learning.
- C. Incorrect, education traditionally began as more instructor-centered and lecture-based. Education now is more student-centered, it is becoming less and less lecture-based and more project-based and self-directed, where students are much more responsible over their own learning.
- D. Correct, education now is more student-centered, it is becoming less and less lecture-based and more project-based and self-directed, where students are much more responsible over their own learning. Learning has become more ubiquitous, where it is happening anytime and anywhere.\*

**21. Instructors now have more of a \_\_\_\_\_ role.**

- A. facilitative\*
- B. supervisory
- C. back-seat
- D. all of the above

Feedback:

- A. Correct, instructors now have more of a facilitative role in that they are not lecturing so much as they are encouraging more self-directed learning and real-world projects for their students.\*
- B. Incorrect, instructors may have a supervisory role sometimes, but students are becoming more and more responsible for their own learning and development.
- C. Incorrect, instructors do not have a back-seat role, but more of a facilitative one because they are still an integral component in students reaching learning objectives.
- D. Incorrect, the correct answer is A.

**22. The purpose of Facebook use in your course should be stated clearly on your \_\_\_\_\_.**

- A. business card
- B. course syllabus\*
- C. personal homepage
- D. your Facebook page

Feedback:

- A. Incorrect, course information, such as the purpose of using Facebook, is not usually contained in a business card.
- B. Correct, any course information, such as the purpose of using Facebook, should always be clearly stated in your syllabus, online and in print.\*
- C. Incorrect, course information, such as the purpose of using Facebook, may be contained in a personal homepage of the instructor, but it should not be the only location. It should be stated in the course syllabus.
- D. Incorrect, course information, such as the purpose of using Facebook, may be contained in your Facebook profile page or the course Facebook Group Page itself, but it should not be the only location. It should be stated in the course syllabus.

**23. How can you set expectations of Facebook use?**

- A. Explain expectations to students early.
- B. Provide a list of best practices.
- C. Explain what is acceptable behavior and what is not.
- D. all of the above\*

Feedback:

- A. Incorrect, the answer is D, all of the above.
- B. Incorrect, the answer is D, all of the above.
- C. Incorrect, the answer is D, all of the above.
- D. Correct, you can set expectations of Facebook use by explaining them early, providing a list of best practices and explain what is acceptable behavior and what is not. All of these can be outlined in your course syllabus and in your course web page in your course management system. They can even be reiterated again in your Facebook Group Page.\*

**24. How can you demonstrate effective use of Facebook?**

- A. Comment on student wall posts.
- B. Actively participate.
- C. "Friend" your students on Facebook.
- D. both A and B\*

Feedback:

- A. Incorrect, the answer is D.
- B. Incorrect, the answer is D.
- C. Incorrect, it is advisable NOT to "friend" your students on Facebook, but to let them "friend" you first. This is because Facebook is still viewed as a social space and instructors who "friend" their students are seen as invading that space.
- D. Correct, both commenting on student wall posts and actively participating in Facebook demonstrates effective use of Facebook.\*

**25. How can you apply Facebook into your assessment?**

- A. Making Facebook participation mandatory.
- B. Do not include Facebook in a student's grade.
- C. Give points to those that are active participants on Facebook.\*
- D. none of the above

Feedback:

- A. Incorrect, making Facebook participation mandatory is not a good way to get students involved with using Facebook in education because Facebook is still viewed as a social space.
- B. Incorrect, it is advisable to provide extra points for those students who actively participate in Facebook.
- C. Correct, it is advisable to provide extra points for those students who actively participate in Facebook.\*
- D. Incorrect, the answer is C.



Appendix C

Attitudinal Survey (Open-Ended Questions 11-13)

**11. Based on what you learned in the module, do you feel more confident about Facebook? Please explain.**

“Yes”

“The most interesting parts of the module were the research that supports FB in the classroom. I already use FB in my classes so you didn't need to convince me of anything.”

“Yes, but I still don't intend to use it.”

“Much more confident in using facebook in the teaching.”

“a little”

“Yes, the explanations about pages versus groups was helpful.”

“Already confident. Module was solid.”

“I do. However, given its nature as a ‘voluntary’ activity that ‘supplements’ your main activities in your class (like posting announcements on CMS and Facebook) it seems like a lot of doubling up of the work on your CMS and then repeating it in Facebook. Not sure that I will use it in the future.”

“I would not say ‘more confident.’ However, it just provide good support, justification and reasons for using it.”

“I definitely learned about how to use Facebook Groups in my classe.”

"I think the module did an excellent job at explaining what one can do with Facebook Pages and how that can be integrated into education for positive results. I feel confident that when done correctly (with instructor trained in distance ed), Facebook can be an invaluable asset. (I mention teacher training because in order for any course to be successful at incorporating Facebook, Ning or another SNS tool(s), the teacher needs to know so much more -- all the other important things you addressed in the module- setting a good example, social presence, being active, etc.)"

“Yes. I did not know the difference between Facebook Fan and Facebook Group and now I understand.”

**12. If you were designing this module, what would you change? What would you keep the same?**

“I think it was well done. The content was great and your questions were great. I just felt like it was really long. I think you should maybe split up the questions in the post test into smaller review sections. Like after a section give 2-5 questions from the post test that were applicable to the section covered. Then give a full post test at the end. It was a little hard to retain all the information for the post test.”

“The module itself is well done. Facebook, however, remains in my ‘bad idea’ pile.”

“At the bottom of each section, click submit, there should be a note after to move on, it sorta is and works, but I’m easily confused. Keep everything the same!”

“I think the videos augmented the overall goal of the module and the sequencing of content was great, I would keep these the same. The only thing I may consider changing is the testimonials in section 2. Although this was a nice touch, I didn’t feel compelled to read them while doing an instructional module.”

“It is not interactive enough. Needs a more robust tool like HTML 5, Flash, or another animation approach.”

“I really like the Macy-narrated tutorial at the beginning. Very clear and easy to understand. “

"I would keep it pretty much the same. Had some trouble with the pre & post test questions since they appeared to be requesting an ‘opinion’ rather than based on an expert’s analysis. The ‘According to ...’ questions were good, and I would not change or replace those. It could also be that I have formed my own opinions in terms of the relative importance of issues relating to distance learning that may be a little different from the ‘experts.’ Not sure if I did better or worse on the post test. Did I miss seeing the score or results posted?"

“Include more specific examples of how teachers are integrating Facebook Groups in their courses.”

"I really like that you incorporated videos to help illustrate and substantiate your thesis. I also liked that you began each section with a quote-- that really helps to set the tone. I like it that the module is very stream-lined. The entire module is esthetically pleasing and easy to navigate; very clean. Loved the academic citations throughout the module. I would love to see you incorporate a couple of videos or resources in the end where participants can go and look for themselves real world successful models. These can be ‘testimonials’ from instructors and students who have used Facebook Pages successfully within a course - to help ‘closet the sale’ sort-to-speak."

**13. Please feel free to provide any other suggestions for improvement or other comments.**

“Good job Macy!! I really liked this!”

“Great teaching module on facebook, I learned lots! Thank you!”

“Overall, I felt this was an excellent instructional module. Very informative, nice pace, and well-designed.”

“good job!”

"Cite some 'best practices' or articles from instructions using it. Could be a 'linked bibliography.' An annotated bibliography would be helpful to college faculty. A few primary sources would be good if intended for college faculty. Personally, I don't like '50 ways' or '100 things to do' unless they are well documented, and provide links to further information resources. I prefer '5 or 7 things' type of articles that are well-written. Therefore, I did not bother to click on the 50, 100 things links. However, that's not to say they aren't useful for others. I liked your 'call out' design in the right column, so those links could be placed there. Enjoyed going through your module and hope that it will be available as a resource for other interested faculty. Good job! Keep up the good work."

“Overall, a well-designed instructional module.”

"I like the level of challenge in your test questions. Definitely for a few of them where there were 'all of the above' or 'only A & C' etc., made the questions more challenging. Some of those options are very close to one another, thus going through the module helped to differentiate between the choices.”

“I think it's really good that you had a option for participants to click and go back to review when already in your post-test page. Good thinking!”

“Loved the entire learning experience. Terrific module. Bravo!”