

## Social Networking Sites as an Educational Tool: The Facebook Group Feature as an Alternative to Learning Management Systems in Teaching and Learning

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**ABSTRACT** The ever-growing use of social networking sites (SNSs) can make them potentially effective for meaningful learning in higher education. Accordingly, this paper investigates faculty members' perceptions of the Facebook Group (FG) feature as a possible alternative to the current learning management system (LMS) at Prince Sattam bin Abdulaziz University (PSAU), Saudi Arabia. Data on faculty members' perceptions was collected via an online survey. The findings from this study indicated that FG was perceived by faculty members as a convenient learning environment that could be used in lieu of a traditional LMS. The findings also showed that some FG features display a close affinity to an LMS. However, some FG drawbacks are also noted. This study draws the attention of faculty members to FG as an alternative to the LMS, as well as the attention of the university administrators who are interested in cutting on expenditure to use free products.

### INTRODUCTION

In recent years, SNSs, including Twitter, Instagram, Facebook, LinkedIn, MySpace and others, have rapidly reached out to a large number of users, especially young adults. Boyd and Ellison (2007) specified SNSs as online platforms that permit users to maintain a visible or invisible profile, share connections with different people and display and traverse the networks of connected users within the system. SNSs are online communication tools that allow individuals to maintain their social relationships on the Internet by viewing, commenting, messaging, and sharing their content with other members. Research indicates that SNSs are rapidly increasing in popularity and are offering innovative ways for individuals to communicate (Samad et al. 2019).

Today, students spend an appreciable amount of time on SNSs. The eminence of SNSs in the life of students of any age has stimulated extraordinary enthusiasm among certain instructors who

believe SNSs can contribute to boosting students' engagement with their college studies (Selwyn 2009). Numerous recent studies have investigated the merits of SNSs in education, especially the way in which educators and students use them, by highlighting the ability of SNSs to:

1. Facilitate interaction and communication amongst learners as well as learners and their instructors (Madge et al. 2009)
2. Develop collaboration in such a way as to create a sense of community (Hew 2011)
3. Encourage participation and exchange of knowledge (Mazman and Usluel 2010)
4. Enable content sharing
5. Allow students to follow announcements about courses (Mazman and Usluel 2010)
6. Enable instant feedback (Kalelioglu 2017)
7. Improve motivation and promote student satisfaction (Razali et al. 2017)

The most popular SNS nowadays is Facebook. Facebook can be defined as a free virtual SNS in which users can create their own profiles and use them to share photos, videos, personal information, and join groups with friends (Hew 2011; Mazman and Usluel 2010). In accordance with data from Zephoria (2019) as of June 2019, Facebook has more active users on a monthly basis than Twitter (330 million) and Ins-

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stagram (500 million). The total number of Facebook monthly active users is over 2.41 billion worldwide. More than 1.59 billion users log onto Facebook daily. The percentage of female Facebook users is seventy-six percent against sixty-six percent male, and between them, they spend 700 billion minutes per month on the site. Fifty percent of 18- to 24-year-old users have a look at their Facebook profiles when they wake up. The total time they spend each time they visit the site is 20 minutes. Five new Facebook accounts are created every second. Every minute, users upload 136,000 photos, post 510,000 comments and update 293,000 statuses. Every day, 4.75 billion pieces of content is shared.

The greater part of university staff and students utilise Facebook on a daily basis (Irwin et al. 2012). Overwhelming evidence indicates that university students and faculty use Facebook for social communication (Madge et al. 2009; Mazman and Usluel 2010; O'Bannon et al. 2013). Only a small proportion of them use Facebook for academic reasons (Hew 2011; Madge et al. 2009). Thus, if Facebook could be used as an alternative to LMSs, educators who make use of the online resources are now faced with the need to assess the value of using FG in place of LMS.

Research associated with using Facebook in educational contexts has yielded conflicting results. Some studies suggest that the utilisation of Facebook as a learning tool could pave the way for new options to promote academic instruction and enhance learning outcomes. These studies posit that Facebook can increase student involvement in classroom discussions and boost interaction among instructors and students. By contrast, some studies argue that Facebook is not a serious atmosphere for teaching and learning. Donlan (2014) noted that students who used an FG to complete some educational tasks did not deem it an official learning context. Donlan (2014) noted that students envision Facebook as their personal communication realm, and redress in student mind-sets is necessary to exploit Facebook's informal learning situations.

Higher education institutions use a plethora of methods for communication between faculty and students, including newsletters, e-mail, and LMSs such as Moodle, Blackboard and Learn. An LMS provides registered university staff and students with numerous benefits for online and

face-to-face learning (Trevathan and Myers 2013). However, a single LMS cannot be seen as a "silver bullet" that can provide multiple requirements necessary for teaching and learning (Trevathan and Myers 2013). LMSs have their limitations. For example, an LMS tends to be expensive (Meishar-Tal et al. 2012), hinges on the teacher-centered approach (Chang et al. 2017), has an uninteresting interface (Razali et al. 2017), and does not promote meaningful interaction between students and instructors.

The emergence of FG has created the opportunity for teachers and students to communicate without sharing their personal lives. Any Facebook user could create an FG for specific purposes and invite other members to join. The group administrator can create a group, which can be open to all so that anyone can share content on the wall of the group, or the FG can be restricted to a particular group of people, so that it is out of bounds to non-members. An instant notification appears on all members' homepages when someone posts on the group's page. Comments are listed chronologically so that the newly added posts always appear on top of a discussion thread (Georgalou 2015). There is a special symbol to signify those presently available on Facebook.

Facebook is popular amongst people in general, and university students and educators who are the focus group of people in this paper, as well as it has several pedagogical and social features, which provide advantages very similar to an LMS. Alongside the conflicting results reported in the literature, it highlights the need for further investigation of the potential of the FG feature as an LMS. Therefore, this study aims to investigate the perceptions of faculty members regarding whether the FG feature can successfully be utilised as a potential alternative to the current LMS, and to compare possible links between perceptions and demographic characteristics. The paper further compares FG functionalities against the traditional LMS. In this context, the coming questions will be discussed:

RQ1: What are the faculty members' perceptions about utilising the FG feature as an alternative to LMS?

RQ2: Are there any significant variations on the faculty's perceptions of utilising the FG feature as an alternative to LMS due to demographic variables?

RQ3: What are the main similarities and differences between the FG feature as a learning tool and the features of a traditional LMS?

Despite plentiful research studies conducted on Facebook to this point, little data exist on the utilisation of the FG feature as an alternative to the current LMS, and findings are inconclusive. Since much of the research has focused on student perception, few studies have compared features and functions of FG and LMS within the university setting based on faculty members' perceptions. Furthermore, the potential of FG as a learning tool in a university context merits further investigation, and thus the current paper aims to extend the existing literature by addressing this area. Findings from this study may be valuable not only to faculty members because they draw their attention to FG as an alternative to the LMS, especially when it is not available in the institution, but also to university administrators who are interested in cutting on expenditure by using free products. Finally, this paper provides insight into the willingness of faculty members to adopt such technology in their educational career.

### Objectives

This paper investigates faculty members' perceptions of the Facebook Group (FG) feature as a possible alternative to the current learning management system (LMS) at Prince Sattam bin Abdulaziz University.

## MATERIAL AND METHODS

### Participants

The population for the present study using a survey method consisted of faculty members from PSAU, Saudi Arabia. The link to the online survey was forwarded to a total of 1,793 faculty members via Deanship of IT and Distance Learning. 243 responded. Data was collected over the spring semester of 2019 from a mix of full-time teaching staff from different departments and colleges. The demographic variables of the participants included their gender, age, teaching experience, reason(s) for using Facebook, and being part of a Facebook study group. The sample was nearly balanced in terms of gender

(54.7% males and 45.3% females), but they were not balanced for age. The purposeful selection of the university was due to the existence of an LMS service since 2011 and that the participants were familiar with the system.

### Instrument

An online survey, using the free online tool 'Google Form,' was produced to collect the statistics required for this paper. The survey was specifically aimed at gathering data on the faculty's perceptions about whether the FG feature can successfully be utilised as an alternative to the current traditional LMS. This instrument was split into two divisions. The first division was aimed at gathering the demographic data. The second part listed 37 items, divided into five subscales, namely, Facebook usage features, FG as an educational tool, assessment tool, privacy, and interest in adopting FG as an LMS.

The online survey was bilingual (Arabic and English) because most of the faculty at PSAU were native Arabic speakers, and most also had a working knowledge of English. Participants were given the opportunity to opt for the language with which they felt more comfortable. The participants were instructed to read each item mindfully and then select the answer that most accurately reflected their perceptions by placing a mark in the right place on a five-level Likert-scale, with choices spanning from strongly disagree (1) to strongly agree (5).

### Validity and Reliability

The validity of the survey was achieved through a group of English language specialists who were asked to give their suggestions and comments for the improvement of the instrument. They were requested to independently assess the survey regarding its clarity, appropriateness, and content suitability for the purpose of the study. The original survey items were produced in English and then translated into Arabic. Following that, four specialists in the Arabic language were also presented with the Arabic version and were asked to examine it for linguistic accuracy and lexical appropriacy. The survey was then given to a specialist in translation to ensure that the two versions faithfully mirrored

each other. In accordance with the experts' comments and suggestions, the two versions were modified before they were put into practice.

To maximise face validity and ensure the reliability of the survey, the instrument was piloted with a group of faculty volunteers ( $n = 11$ ) that were excluded from the actual study. The purpose was to examine the usefulness of the survey and to determine if any changes would be needed prior to the main implementation. Based on the responses, the phrasings of two areas in the Arabic version had to be clarified, and a final, modified survey was produced. The internal reliability of the subscales was proven using Cronbach's alpha. The reliability of the subscales were as follows. Facebook usage features (0.96), FG as an educational tool (0.93), FG as an assessment tool (0.95), and interest in adopting FG as an LMS (0.90). The values indicated high reliability.

#### Data Collection

For the implementation of the survey, the researchers obtained approval from the Vice Deanship for Academic and Educational Affairs. Upon receiving a letter from the Vice-rector of the University, the Deanship of IT and Distance Learning sent emails enclosing the link of the online survey to all faculty staff. Participants were assured that their contribution to the survey was anonymous and voluntary. No missing data was reported in the 243 faculty members who were involved in the analysis. A useful electronic feature of the survey was the prevention of item skipping. This feature did not permit the participants to skip an item. Accordingly, missing data due to participants' item skipping was eliminated by this type of survey.

#### Data Analysis

After gathering the required qualitative data from the participants, the obtained data was coded and processed, employing the "Statistical Package for Social Science (SPSS, version 20)." Descriptive statistics, namely means, standard deviations, effect size, frequencies, and percentages, were computed to report a statistical summary of results. In addition, t-test and Levene's test for equality of variances, and ANOVA with

the Scheffe's post hoc test for multiple comparisons were exercised to compare variances of mean scores.

Responses were processed as continuous (interval) data because the items were assessed with a Likert-type scale of five possible alternatives spanning from 1 to 5 (strongly disagree to strongly agree) separated by equal-appearing intervals. In such cases, each of the Likert-type scale items had means and variances, which could be statistically analysed. Blunch (2008) explained that treating discrete data from the very popular five-point Likert-scale with equally spaced intervals "is most realistic... if a scale has at least five possible values".

## RESULTS AND DISCUSSION

Participants were invited to respond to five basic demographic questions. The demographic questions consisted of gender, age, teaching experience, reason(s) for using Facebook, and being part of a study group on Facebook.

With respect to gender, the means value for males was slightly lower than for females, as shown in Table 1.

**Table 1: Means, SDs, frequencies and percentages of faculty according to gender**

	<i>Frequency</i>	<i>Percentage</i>	<i>Mean</i>	<i>SD</i>
Male	131	53.9	3.89	.811
Female	112	46.1	3.94	.673
Total	243	100.0		

Results from Levene's test demonstrate that homogeneity of variances could be assumed at  $p = .659$ , with a  $p$ -value  $> 0.05$ . Thus, a t-test for equality of variances was applied to analyse differences in scores. The t-test findings in Table 2 demonstrate no statistically significant difference based on gender, with  $t(241) = -.477$ ,  $p = .634$ ,  $d = .001$ , representing an extremely small effect size. This indicates that both male and female faculty perceive FG in a similar way.

Faculty members were asked to select their age range from one of four categories. As summarised in Table 3, and results revealed differences in mean scores of the participants based on age.

**Table 2: Levene's test and t-test results of 'faculty according to gender'**

	<i>Levene's test</i>		<i>t-test</i>		
	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig.</i>
Equal variances assumed	.196	.659	-.477	241	.634
Equal variances not assumed			-.484	240.801	.629

**Table 3: Means, SDs, frequencies and percentages of faculty according to age**

	<i>Frequ- ency</i>	<i>Percen- tage</i>	<i>Mean</i>	<i>Std. deviation</i>
Less than 30	12	4.9	2.96	1.594
30-40	88	36.2	4.13	.424
41-50	95	39.1	3.93	.712
Above 50	48	19.8	3.72	.775
Total	243	100.0	3.91	.750

The ANOVA test was carried out to examine if the variations that existed amongst mean scores of the four age groups were statistically significant. Based on the results in Table 4, statistically significant differences amongst the age categories were found, with  $F(3, 239) = 11.049$ ,  $p = .000$ ,  $\eta^2 = .122$ , indicating a moderate effect size.

**Table 4: ANOVA results of 'faculty according to age'**

	<i>Sum of squares</i>	<i>df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
Between groups	16.566	3	5.522	11.049	.000
Within groups	119.444	239	.500		
Total	136.010	242			

Scheffe's post hoc test was then employed for multiple comparisons to determine the direction of the differences between the age categories. Results revealed a significant difference ( $p < .05$ ) between faculty members aged less than 30 and all other age categories. This indicates that faculty members under 30 years of age perceived FG as a less useful educational tool than other age groups.

**Teaching Experience**

The teaching faculty who took part in this study were also asked for their number of years of experience. Table 5 displays variations in the mean values of faculty members based on teaching experience.

**Table 5: Means, SDs, frequencies and percentages of 'faculty according to teaching experience'**

	<i>Frequ- ency</i>	<i>Percen- tage</i>	<i>Mean</i>	<i>Std. deviation</i>
Less than 5	29	11.9	3.48	1.086
5-10	88	36.2	4.18	.390
11-15	32	13.2	3.82	.821
More than 15	94	38.7	3.82	.776
Total	243	100.0	3.91	.750

The ANOVA test was carried out to examine if the variances that existed between mean scores of the four categories were statistically significant. Based on the results in Table 6, there were statistically significant differences across the categories of teaching experience, with  $F(3, 239) = 8.279$ ,  $p = .000$ ,  $\eta^2 = .094$ , indicating a moderate effect size.

**Table 6: ANOVA results of 'faculty according to teaching experience'**

	<i>Sum of squares</i>	<i>df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
Between groups	12.804	3	4.268	8.279	.000
Within groups	123.207	239	.516		
Total	136.010	242			

Scheffe's post hoc test was then employed for multiple comparisons to determine the direction of the differences between the four teaching experience categories. Results revealed that the category of faculty members with the least educational experience was significantly different from the other experience brackets ( $p < .05$ ). Similarly, faculty members with the most experience were significantly different from the other categories ( $p < .05$ ). This implies that faculty members with the least and most experiences perceived FG as a less useful educational tool than those in the middle ranges of experience.

### Reason(s) for Using Facebook

Faculty members were asked an open-ended question about their main reason(s) for using Facebook. The reasons are categorised in Table 7.

**Table 7: Reason(s) for using Facebook**

	<i>Frequency</i>	<i>Percentage</i>
Communication with students	46	18.94
Social interactions	116	47.73
Keep up with general knowledge in their field	52	21.39
Others	29	11.94
Total	243	100

### Being Part of a Study Group on Facebook

Faculty members were asked whether they belonged to a study group on Facebook (Table 8). displays variations in mean values of faculty members based on who said 'Yes' (they belonged to a study group on Facebook) and those who said 'No'.

**Table 8: Means, SDs, frequencies and percentages of 'faculty according to membership of a study group on Facebook'**

	<i>Frequency</i>	<i>Percentage</i>	<i>Mean</i>	<i>Std. deviation</i>
Yes	154	63.4	4.05	.683
No	89	36.6	3.67	.801
Total	243	100.0		

**Table 9: Levene's test and t-test results of 'faculty according to membership of a study group on Facebook'**

	<i>Levene's test</i>		<i>t-test</i>		
	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig.</i>
Equal variances assumed	1.917	.168	3.945	241	.000
Equal variances not assumed			3.781	161.116	.000

**Table 10: Means and standard deviations of survey sections**

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>SD</i>
Facebook usage features	243	1	5	4.22	.734
Assessment tools	243	1	5	4.05	.846
FG as an educational tool	243	1	5	3.83	.789
Interest in adopting FG	243	1	5	3.44	1.066
Privacy	243	1	5	3.07	1.190
Total score	243	1	5	3.91	.750

Results from Levene's test demonstrate that homogeneity of variances could be assumed at  $p = .168$ , with a  $p$ -value  $> .05$ . Thus, a  $t$ -test for equality of variances was applied to analyse differences in scores. The  $t$ -test findings in Table 9 demonstrate a statistically significant difference based on whether a faculty member was part of a study group on Facebook, with  $t(241) = 3.945$ ,  $p = .000$ ,  $d = .061$ , representing a medium effect size. This indicates that faculty members who are part of a study group on Facebook perceive FG as a beneficial tool for learning.

### FG Compared to an LMS

The survey items were divided into five subscales, namely, Facebook usage features, FG as an educational tool, assessment tools, privacy, and interest in adopting FG as an LMS. Table 10 displays the findings of the faculty's perceptions according to the five subscales in descending sequence according to the number of mean scores.

Table 10 shows that faculty members' perceived Facebook usage features as the most valuable in facilitating the use of FG as a learning tool. Assessment tools ranked second. The category of FG as an educational tool ranked third, and interest in adopting FG as an LMS ranked fourth, while privacy got the lowest ranking.

The overriding focus of this paper was to probe perceptions of the faculty members (at university) about the potential of using the FG feature as an LMS. A second purpose was to

compare the differences in perceptions with reference to demographic characteristics, which included gender, age, teaching experience, reason(s) for using Facebook, and being part of a study group. Furthermore, the study aimed to compare FG functionalities to the LMS. The results of this research affirm that the FG feature has the potential to be utilised as a traditional LMS. This finding is parallel to previous research, which shows that utilising FG as an LMS has beneficial effects on the teaching process (Irwin et al. 2012; Lambic 2016; Kalelioglu 2017).

There seems to be ground for using the FG in a similar way to a traditional LMS. In the survey, the category 'Facebook features' obtained the highest mean score ( $M = 4.22$ ) among the categories. According to the participants' views, features of FG probably reflect features of LMS in terms of the ability to post educational content (91.4%), share educational content (90.7%), interact individually or in groups (89.1%), receive instant notification (88%), reply to and comment on content (84.8%), invite peers to participate in discussions (83.1%), communicate synchronously and asynchronously (81.5%), promote interaction between students and their instructors (80.9%), support learning activities inside and outside the classroom (79.8%), see who is active online and available for chat (79.6%), and create a closed academic FG, accessible only to the members (86.8%).

Perhaps the most surprising result that qualifies for FG to be used as an LMS was that 63.4 percent of the respondents reported that they were members of an educational FG. Participants were also asked about the main reason(s) for using Facebook. 18.94 percent said they used it to communicate with students, and 21.39 percent stated that they used it to keep up with general knowledge in their field. This finding indicates that a significant proportion of faculty members use FG for academic purposes. Research on utilising Facebook has shown that Facebook use has shifted from being a social media to also include elements for educational purposes (Aaen and Dalsgaard 2016; Menzies et al. 2017). This result is significantly inconsistent with the result from Everson et al. (2013), who report that less than five percent of the participants had used FG for educational purposes. Similarly, Madge et al. (2009) posit that

ten percent of students' FG utilisation pivots on student-student communication, in comparison to less than one percent for communicating with faculty members.

Another interesting finding was that 59.9 percent of the participants reported that they were motivated to use the FG feature as an LMS to enhance students' engagement and learning in the future. This level of acceptance among faculty to adopt the FG feature as an LMS provides sufficient ground for considering FG a useful educational tool similar to LMS. This finding is consistent with outcomes reported by Forkosh-Baruch and Hershkovitz (2018), who also found evidence of teacher willingness to utilise Facebook for learning purposes, with over eighty percent who believed that it could be utilised for learning. The positive willingness to use closed FGs as an educational tool may be explained in accordance with the "Technology Acceptance Model (TAM)," proposed by Davis (1989), which asserts that "perceived usefulness and perceived ease of use" are central ingredients impacting users' acceptance of the technology.

#### **Faculty's Perceptions with Reference to Demographic Information**

This study revealed that gender does not affect faculty perceptions in using FG for educational purposes. This finding is in harmony with earlier research (Abbas and Mesch 2018; Donlan 2014). However, previous studies have indicated significant differences in the ways males and females use Facebook and the amount of time they spend on Facebook (Koc and Gulyagci 2013).

Age may be a crucial factor influencing the perceptions of faculty members. In this study, younger faculty members under the age of 30 perceived FG as a less useful educational tool than other age groups. Apparently, the participants from this age had concerns about the survey subdivisions of 'interest in adopting FG as an LMS' and 'privacy'. A possible explanation may be that this age group is more active in using Facebook for social interactions rather than for educational reasons (Madge et al. 2009). Another explanation could be that older ages are positively more influenced by the workshops and seminars on technology integration organ-

ised by the University for faculty development. This finding is not in agreement with former studies that concluded that younger faculty members use Facebook in their teaching more than older faculty do (Koc and Gulyagci 2013; Manca and Ranieri 2016).

There were mixed findings with regard to the faculty members' years of experience. Multiple comparisons revealed that faculty members with the least and most educational experience were significantly different from those who fell in between. Those categories with less than five and more than 15 years of experience had lower mean scores than those in the middle range of experience. This means that the perceptions of lower and higher experienced faculty tended to be negative about utilising FG as an alternative to LMS. What brings the less and more experienced faculty together could be resistance to change. Perhaps experienced faculty were less willing to utilise FG, as they were reluctant to change their instruction methods without a deep understanding of why and how, and they could be tired of continually emerging new approaches. New faculty members probably view the use of FG as just additional effort.

### **Comparison Between the FG Feature and an LMS**

An in-depth look at the functionalities of the FG feature and an LMS reveals intrinsic differences between the two. The FG feature has a number of unique characteristics compared to an LMS. However, faculty members saw some significant drawbacks to it.

#### ***Characteristics of FG Compared to an LMS***

Most of the participants (88%) thought positively about the ability to receive instant notification of any newly added content. Facebook is the most accessible platform for many students than a "walled-off" and "disconnected" LMS with its immediate notification system (Lee and Akcaoglu 2017). The instant notification function is regarded as the strength of Facebook "for not letting users miss a single update and information." In LMS, users must repeatedly check their course page to see if there is any new content posted, a process that students

may see as cumbersome (Irwin et al. 2012). The notification system on Facebook keeps instructors and students involved with the course posts and comments, so they continue to interact with the educational group inside and outside the classroom (Lambic 2016).

Among all respondents, 84.8 percent of the participants confirmed that Facebook supports synchronous and asynchronous learning, where synchronous communication is the primary mode of interaction. In LMS, synchronous interaction is limited among students. Although LMSs provide the user with an array of tools capable of improving the learning process, they do not "allow the interaction among students, and only offer services, which the instructor can use to interact with them". The Facebook ability to provide synchronous and asynchronous communication in an academic course allows students and instructors to toggle between real-time and non-real-time communication, with students favoring engagement in discussions with their instructors synchronously in a closed FG (Kalelioglu 2017).

A clear majority of faculty (79.8%) agreed that students and instructors are already familiar with Facebook, but they need to be trained to use an LMS. Facebook is a networking site familiar to most college professors, and a high percentage of them already have active Facebook accounts (Akçayir 2017). In this study, 89.7 percent of the participants who filled in the survey indicated that they have a Facebook account. The familiarity and widespread popularity of Facebook among educators and students have been researched in a number of studies (Segool et al. 2016).

In the present study, the participants perceived Facebook as a free of charge platform that can save the cost of a commercial LMS that tends to be costly and that not every institution can afford (79.8%). Due to the high cost of a commercial LMS, institutions, especially small ones, interested in cutting on expenditure by using free products can use the FG feature as an alternative to an LMS. This finding agrees with findings obtained by research showing that Facebook is useful for sharing course materials, as it comes at no cost and offers usable functionalities (Keles 2018).

In LMS, the management of content is the prerogative of the institution and the instructor. There is not plenty of room for the student “to manage and maintain the learning space and to facilitate his own activities”. Students in an LMS context “are allowed to consume the content” (Meishar-Tal et al. 2012). Also, LMSs attempt to privilege the educator as the center of learning. On Facebook, there is a close similarity in the privileges between faculty and students (74.9%). Both instructors and students can share information, post comments, like, create and delete content, invite participants, and a lot more (Wang et al. 2012). Thus, the mutual exchange of privileges allows educators and students to share resources and develop the learning plan to better meet individual learning needs.

The comparisons revealed that 71.1 percent of faculty members agreed that Facebook does not require technical expertise from the users as all services are hosted externally. SNSs, such as Facebook, facilitate connectivity with limited technical skills needed on the users’ behalf (Trevathan and Myers 2013). Many institutions do not have their own LMS because of the lack of technical expertise. Developing an LMS is not a simple job and involves high expenses (Meishar-Tal et al. 2012). Even the option of purchasing a commercial LMS is expensive and hard to manage and maintain. So, regardless of whether the institution uses a commercial or own-developed LMS, technical staff that is trained to provide support is essential.

In this study, seventy percent of the respondents reported that Facebook retains content for future use. However, an LMS limits accessing the learning material to a designated duration of time or a course. Often, the course content in the LMS is no longer accessible to students and educators after a short while (Wang et al. 2012). In the same spirit, Meishar-Tal et al. (2012) state that a disadvantage of an LMS is that “in many institutions, the course is deleted from the LMS server after the end of a course in order to save storage space” and speed up the system.

According to 66.7 percent of the participants, FG is more user-friendly and more attractive (has a better user interface) than LMS. Facebook combines text and images, and this makes it more vivid and interactive than LMS. According to Ji

et al. (2019), “content combining text and images is more vivid than textual content because images present a richer visual sensory cue”. In a study conducted by Trevathan and Myers (2013), students found Facebook interface simple and familiar, and that it is easy to share ideas, comment on others’ posts, get instant feedback, and that it is a more relaxed environment than a university LMS. By contrast, studies show that numerous students and educators have a hard time “navigating on the blackboard interface due to links and buttons appearing in the wrong position and lack of graphics”.

### *Drawbacks of FG Compared to an LMS*

Most faculty members (90.1%) agreed that FG does not support documents in any format, such as Word Processor, Excel, PPT, and PDF files for direct upload. In contrast, an LMS does permit users to upload content in any format. Kalelioglu (2017) suggests that in order to overcome this limitation and enhance the capability of FG as an LMS, Facebook users should upload and access documents on a third-party website such as Google Docs. This result is in agreement with most earlier studies considering the inability of Facebook to allow the upload of any document format as the main limitation that can have a clear adverse effect on students’ learning (Wang et al. 2012; O’Bannon et al. 2013).

The responses to the survey show that eighty-three percent of the faculty stressed that the limited ability to manage and control Facebook is a great detriment limiting the potential of FG as a replacement of LMS. In contrast, the LMS gives great freedom to the institution and the educator to control the system. Tandoc et al. (2015) argue that depending on Facebook raises questions about privacy, deception, and content backup, as the posted content is beyond the control of users. Also, the lack of easily managed content would mean that tracking discussions on Facebook may become a complicated issue, where posts emerge in reverse chronological order. Similarly, Wang et al. (2012) confirm that “discussions are not listed in a threaded structure but in a chronological order only, which makes giving replies and responses unnatural”.

According to the participants, tools for the assessment of students’ coursework appear to

be a serious shortcoming ( $M = 4.05$ ). 81.4 percent of the faculty members either agreed or strongly agreed that Facebook does not have most of the assessment tools. Irwin et al. (2012) state that amongst the challenges facing educators is discovering new avenues to integrate assessment tools into FG. Some studies suggest that peer assessment could be integrated into FG as an assessment tool, which is interesting and useful for college students. Other studies support the results of this study and confirm that the FG feature does not have most of the assessment tools (Meishar-Tal et al. 2012).

Another important limitation raised by the participants (61.3%) was that there is no time limitation to submit assignments on Facebook, while assignments can be timed on an LMS. In the LMS, “the system locks the option to upload if the students cannot upload their files by the given date, which blocks students from uploading their files” (Kalelioglu 2017). However, it is worth a mention that 38.3 percent of participants marked the ‘undecided’ response related to this item, indicating that they might not have used the FG feature, and that is why they were unable to judge time limitation to submit assignments as a significant restriction.

Faculty members recognised that learning via FG could be affected by distracting elements, including commercial advertisements (69.6%) and other online friends (56.4%). The LMS outperforms Facebook in this area. Donlan (2014) found that several students report that “they avoid Facebook when studying, stating that on Facebook, there is so much to click on,” resulting in too many distractions. Several studies have shed light on distracting components of Facebook that could easily divert student’s attention, such as online friends, advertisements, and games (Kalelioglu 2017; Tosun 2017).

Finally, the FG feature was not perceived by some faculty members as a safe environment for data sharing (36.6%). Wang et al. (2012) discovered that even though the students who participated in their study interacted in a closed FG, they were still worried that the privacy of their performance or their private lives could be infringed by their fellow students or their instructor. This emphasises that privacy is a critical issue in the minds of many faculty and students, which influences their use of FG. However, Hew

(2011) argues that users can control the level of their privacy and limit the visibility of their profile to friends and non-friends by adjusting their Facebook privacy settings so that they can choose who can see their future posts.

## CONCLUSION

This study has explored faculty members’ perceptions of the potential of implementing the FG feature as an LMS. It has been proven that blending FG in an academic context can successfully provide an environment that enhances teaching and learning. FG has multiple pedagogical affordances, which allow posting and sharing educational content, commenting on content, receiving instant notification, inviting peers to participate in discussions, promoting interaction among students and their instructors, supporting synchronous and asynchronous learning inside and outside the classroom, creating closed academic groups and far more. Survey findings indicate that FG has various distinct merits over a university LMS, including the instant notification system, familiarity and reach, free access, attractiveness and user-friendliness, need for no technical expertise, and retaining content for future use. However, FG has certain constraints compared to an LMS such as privacy issues, distracting elements, lack of easily managed content, not supporting documents in any format, not having most of the assessment tools, and the lack of time limitation to submit assignments.

## RECOMMENDATIONS

Although an increasing amount of studies on the utilisation of FG as an educational tool appear in the literature, the picture is far from clear as to the potential of FG as an alternative to LMS, and there remains a dearth of studies on the matter. The findings of this paper complement the available studies on the utilisation of FG in teaching and learning. Getting faculty members to perceive FG as another channel for communication with students is going to take some time, and it requires further research. Continued exploration of FG usage in higher education may provide a broader perspective into this realm in the near future.

### LIMITATIONS AND FUTURE RESEARCH

The findings of the present paper may be susceptible to particular limitations that should be acknowledged for the benefit of future research. First of all, the study only investigates the perceptions of faculty members. Future research could collect data from the students' perspective, and the findings can be compared. Secondly, the participants were limited to a sample at Prince Sattam bin Abdulaziz University. Therefore, the demographic information is not representative of the general population. Similar future work could include faculty from different universities, resulting in a more representative sample. Thirdly, the perceptions of faculty members were obtained based mainly on self-report via survey. Additional research should test the effectiveness of using Facebook as an LMS through experimental research. Despite these limitations, it is hoped that this research will contribute to scholarly knowledge and serve as a basis for further research.

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