

***The Impact of Students' Participation to a Facebook
Group on Their Learning Motivation and Scores***

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Abstract

The development of Information and communications technology (ICT) has brought rapid and profound changes in the field of Education. Nowadays, teachers and students alike are engaging on social networks such as Facebook. This study discusses the benefits of using social network in the classroom. It aims at assessing the impact of Facebook on students' motivation and scores in a course of European Literature in a university of central Taiwan. A class of students was taught during the first semester of academic year 2013-2014 (September-January) using a traditional way of teaching. During the second semester (February-June 2014), the teacher used multimedia and Facebook to teach to the same students. They joined a "secret group", that is a group in which only students from the class can join, post, view posts, like, and comment.

This research compares various data from the first and second semester to measure students' improvement in motivation, their participation to the group and their scores. The data collected from the Facebook group during the whole second semester and students' evaluation of the educator at the end of each semester. Students are expected to make some progress and teacher's evaluation should improve. Even though Taiwanese students generally read and write in Chinese on Facebook, it is expected that they exclusively use English to read, share, and comment texts and information concerning the books studied during the second semester, thus increasing their chances to improve their reading and writing skills.

Keywords: Facebook; European Literature; Learning performance; Motivation; Scores.

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Introduction

Facebook, the world most popular online social networking service, was founded ten years ago by Mark Zuckerberg. As of March 2013, Facebook claimed having 1.1 billion monthly active users (Facebook, 2013). Taiwan ranks 19 worldwide for the number of Facebook accounts (6,992,040 on a population of 23,359,928 in 2014; Berry, 2014). Even though there is already a large number of studies concerning the use of Facebook as an educational tool, few articles have been published on the impact of the social network on students motivation and scores as well as on the teacher's evaluation by students. As far as we know, there are scarce studies on the usage of Facebook in courses of literature.

This paper focuses on a course of European Literature offered to English majors at a university in central Taiwan. During the second semester (February-June 2014), all students in the class joined a secret Facebook group in which the teacher as well as the students can post, view, like, comment, and share information, links, pictures, videos concerning the books studied during the semester. Research data consist of students' evaluation of teaching (SET) at the end of the semester, the number of posts, views, likes and comments in the Facebook group during the all semester and students' scores. This study will answer the following research questions:

1. What is the impact of Facebook on teacher's evaluation by students?
2. Is participation to a Facebook group helping students make progress a regard to their scores?
3. Can participating to a Facebook group help students increase their learning motivation?
4. What type of posts students like the most? Can it help teachers in the preparation of the teaching material?

1. Literature review

1.1. Student evaluation of teaching

This article notably analyzes student evaluation of teaching (SET) to highlight how using Facebook during and outside the classroom might have an impact on teacher's evaluation and on students' learning motivation. SET has become a common measure of teaching and learning quality in higher education (Zabaleta, 2007). During the 20th century, no less than 2,000 studies were published on SET (Wilson, 1997). The main purpose of SET is to provide feedback for the improvement of teaching (Marsh, 1987). Student evaluation can also be used to identify indicators of teaching improvement and to provide concrete advice to educators (Montoneri et al., 2012). A growing number of higher education institutions (HEIs) tend to prefer online, anonymous and confidential end-of-term course evaluation (Harrington & Reasons, 2005).

1.2. Education and networking: the use of Facebook for educational purpose

Al-Hammody (2014) analyzed the use of a Facebook group created for a group of students from the University of Mosul, Iraq, for English pedagogic purposes. This study used online questionnaire and phone interviews to examine students' perceptions of the benefits resulting from interacting in the Facebook group.

According to Al-Hammody (2014), 54.3% of the participants mostly used the Facebook page for socializing in English, 48.6% used it for vocabulary learning, and 25.7% used it for seeking feedback and for improving translation skills. Manca and Ranieri (2013) attempted to identify the pedagogical potential of Facebook and presented a detailed review of the literature concerning the world most successful social network. They showed that students do not always feel comfortable with Facebook and they do not wish to use social networking as a unique teaching tool for learning.

However, a large number of studies demonstrated that Facebook can be used as an English Language Training (ELT) supportive tool. According to Baran (2010), educators can open and administer Facebook groups for their students to share knowledge, post, comments and dialogue with other members of the groups. Facebook may be used for teaching and learning (Anderson, 2009; Greenhow, 2011); it provides students with extracurricular content resources (Bahner et al., 2012; Pilgrim & Bledsoe, 2011). The educational use of Facebook was found motivating by Backer (2010) who also stated like other scholars that Facebook should be one element among many others in teaching and learning. Çoklar (2012) also observed that Facebook was considered motivating and interesting by students. Shams (2014) investigated the role and effectiveness of using Facebook in tertiary level English language classrooms in Bangladesh. She showed that a decreased direct class contact offsets the motivational factors and positive impacts of using Facebook, notably for students with poor English skills.

2. Methodology

The Data Source

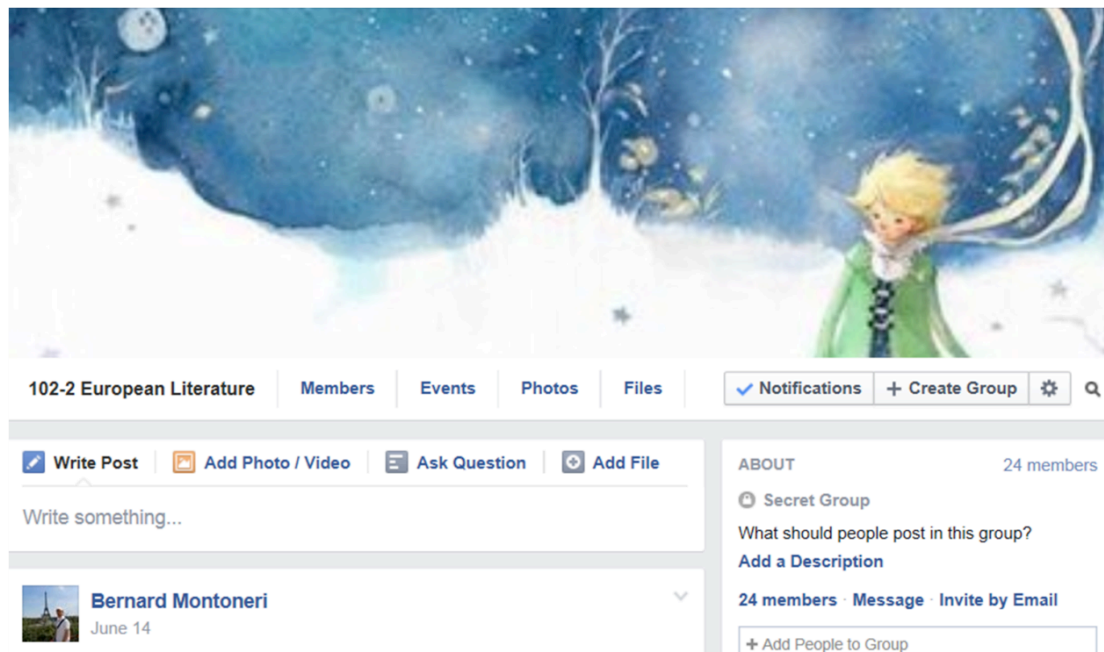
The study case is a private university established in 1956 in central Taiwan. The data comes from the university's online student rating system, which provides student feedback to professors at the end of each semester. Participants were English majors in a Department of English. The characteristics of the data source and research object are as follows:

1. European Literature is an optional, three-credit course for junior students from the Department of English (three hours/week).
2. There were 19 students during the first semester (September 2013-January 2014) and 23 students during the second semester (February 2014-June 2014). 14 students have been selected for this study as they were registered during the two consecutive semesters. Other students dropped, were failed or followed only one semester (exchange students from China can only stay one semester in Taiwan).
3. The data are based on questionnaires (11 questions) filled out by the students at the end of each semester. Each question is rated from one (very unsatisfied) to five (very satisfied).
4. All the students are required by the university to fill out the questionnaires online if they want their grades to be validated. So it is assumed they all did it.

3. Empirical study

The Facebook secret group was officially opened on February 18, 2014. All the students registered in the class quickly joined and the first post uploaded by the teacher was made on February 25, 2014 (post 1); the last one was made on June 14, 2014 (post 24).

Picture 1. Secret Facebook group: European Literature 102-2.



All the students registered in European Literature joined the Facebook secret group (24 members: 23 + the teacher). “Secret group” means that only students in the class of European Literature can join, post, view, like, comment, and share.

Picture 2. European Literature 102-2: example of teacher's post.



This post consists mainly of picture of The Little Prince. It was uploaded on May 24 and viewed by 21 students. 12 students liked the post (their names are hidden on picture 2).

3.1 Analysis of teacher's Evaluation

Table 1 shows the evaluation score for each question between the first semester using traditional classroom instruction and the second semester using traditional classroom instruction and Facebook. We find that the average score for all the questions has progressed by 1.87% and the average students' final score at the end of semester has progressed by 2.0%. Figure 1 indicates improvement for most of the questions, notably question 3 (4.10%), 6 (5.18%), 9 (5.18%), and 10 (5.57%). The progress of question 3 and 6 implies that the posts provided on Facebook give extra information helping students to better understand teacher's curriculum content; as a result, teacher's performance assessment methods are more fair and open. The progress of question 9 and 10 implies that students are more confident to obtain better professional knowledge and core competencies.

However, the scores of question 7 (-2.62%) and 11 (-1.09%) have decreased. According to the detailed data, more students appreciate teacher's open attitude to

communicate with students by using Facebook during the second semester. Nevertheless, several students refused to participate to group discussions via Facebook and without mentioning it during the entire semester. By consequence, these few students gave lower score to question 7 and reduced the average score. The score of question 11 and students' final score show that students need less time and effort to obtain better performance: this is an important encouragement for teachers using social network during and outside the classroom.

Table 1. Evaluation score for each question for the first and second semester using Facebook.

Scores Questions	Semester 1	Semester 2	Progress (in %)
1. Teacher was able to properly answer students' questions.	4.35	4.36	0.25%
2. Course curriculum structure was complete and covered all the important concepts of the discipline.	4.35	4.36	0.25%
3. Teacher fully grasped curriculum content and gave detailed explanation.	4.24	4.41	4.10%
4. The teaching expression was logical and organized which helped students to easily assimilate.	4.24	4.27	0.88%
5. Performance assessment covered important parts of the course.	4.29	4.36	1.62%
6. Performance assessment methods followed fair and open principles.	4.24	4.45	5.18%
7. Teacher used an open attitude to communicate with students.	4.29	4.18	-2.62%
8. Teacher concerned about students' learning conditions and gave timely counseling.	4.12	4.18	1.56%
9. I think this course has increased my professional knowledge.	4.24	4.45	5.18%
10. The completion of this course has improved my core competencies.	4.18	4.41	5.57%
11. The percentage of my attendance and invested effort in this course: (1) 0-20% (2) 20-40% (3) 40-60% (4) 60-80% (5) 80-100%.	4.41	4.36	-1.09%
Average score of questionnaires	4.27	4.35	1.87%
Student's final score at the end of semester	74.86	76.36	2.00%

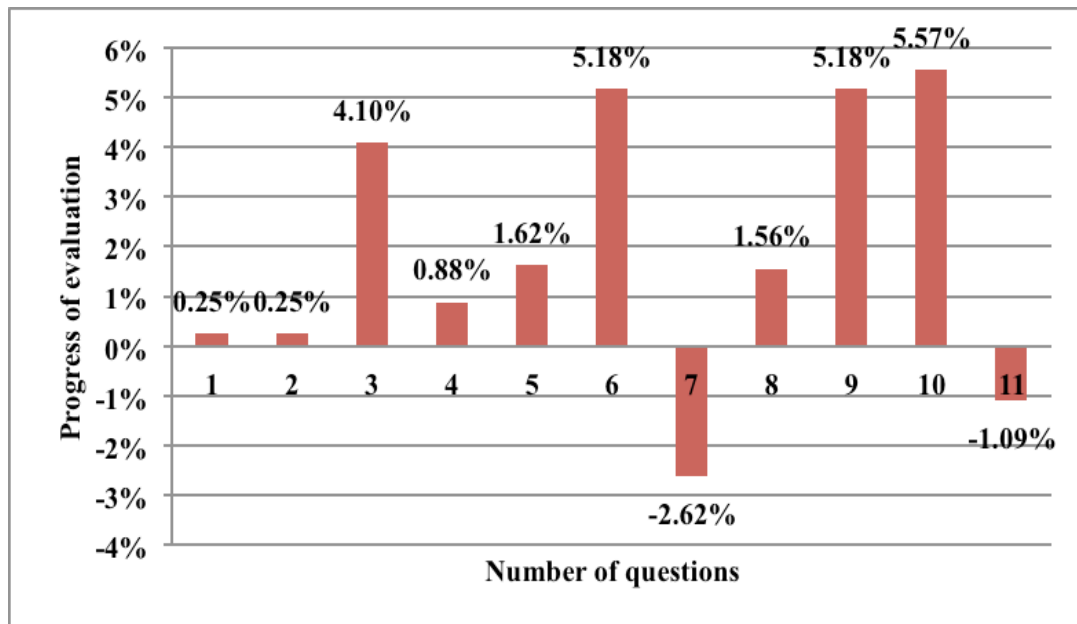


Figure 1. Progress of evaluation score for the semester using Facebook.

3.2 Analysis of Various Types of Teacher's Posts

The analysis in the previous section demonstrates that the use of social network as teaching and learning auxiliary does improve students' learning motivation and performance. In order to effectively enhance this improvement, an analysis of students' preference concerning the types of posts is proceeded. We define six types, such as quotation of texts (quote), power point files (ppt), pictures or photos (photo), information of movies (movie) and music (song) adapted from books, and external links (link).

It is important for students to realize that most famous movies and musicals for example are adaptations of European Literature (Les Misérables, The Phantom of the Opera, The Lord of the Rings and so many others). Table 2 and Figure 2 show that almost all the students participating to group discussion on Facebook have viewed all teacher's posts. Moreover, students are more interested in the posts with external links, pictures or photos, and information concerning movies; Power Point files seem to be less attractive to students, no matter how closely related to the class and how well designed they might be...

Picture 3. Examples of PPT files for European Literature 102-2.
King Arthur PPT



20,000 Leagues under the Sea PPT

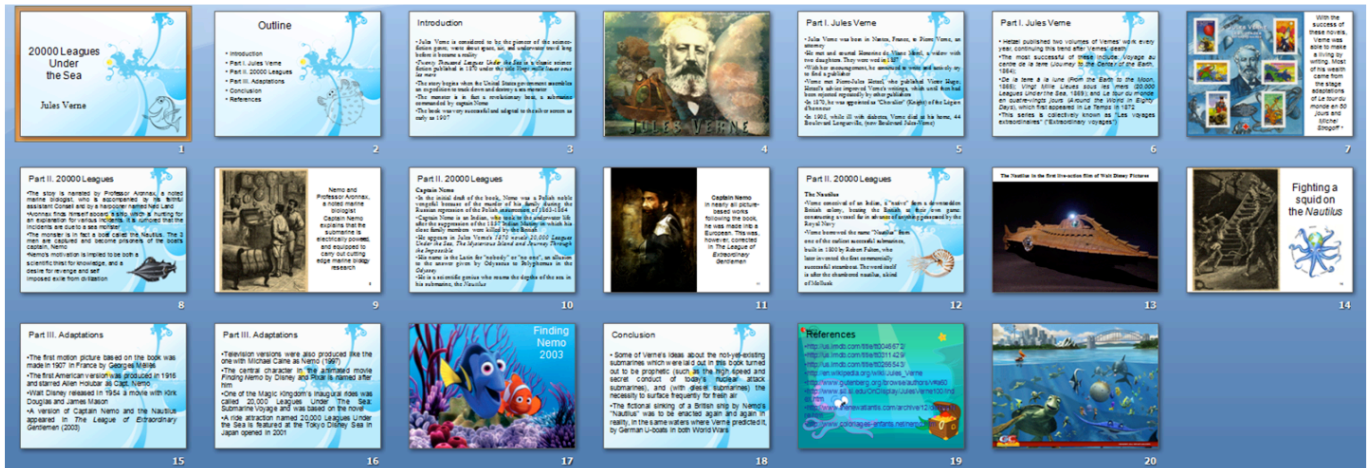


Table 2. Average number of views and likes for different types of posts.

Type of posts	Number of views	Number of likes
Quote	21	4
PPT	21	2
Photo	21	7
Movie	21.2	4.8
Song	21	3
Link	20.8	7.5

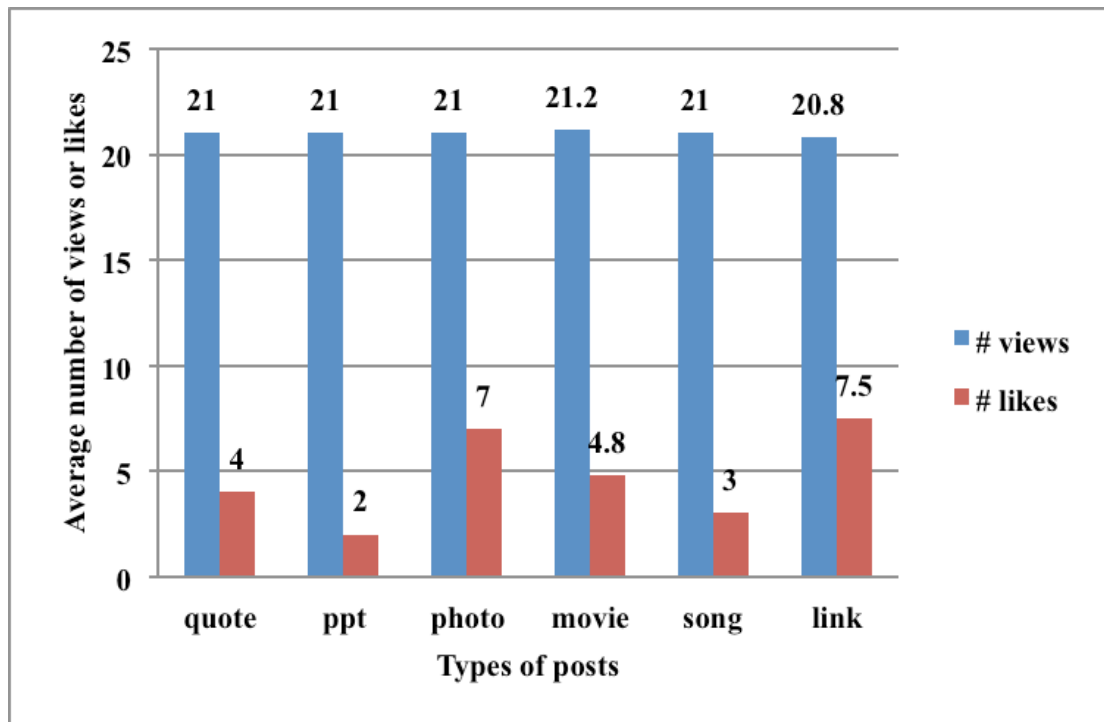


Figure 2. Comparison of different types of posts.

3.3 Analysis of students' learning behavior

Table 3 and Figure 3 show that more than half of the students viewed teacher's weekly posts in one week (viewed immediately or during the 7 days after the post was uploaded), notably for weeks 3, 4, 8, 14, and 17. Because week 2 is the opening of this group, only part of students had already joined the group. Weeks 3 and 4 were posted at the beginning of semester; probably students were surprised and more attracted by teacher's new teaching methods by using Facebook. Week 8 and 17 are the weeks just before midterm and final examinations.

Table 3 also indicates that more than 80% or even 90% of students have viewed teacher's weekly posts in the first two weeks; the proportion of view time in week 9 is only 62% since students are busy passing midterm exams for all their courses. The proportion during week 12 is also 62%, because 6 students attended other activities and viewed posts later. Consequently, we suggest that teachers post external links, pictures or photos at the opening of the Facebook group and the weeks before the midterm and final examinations in order to enhance students' learning interest and motivation. On the contrary, during week 5 and 12, teachers may diversify course contents and teaching methods by applying multimedia materials in order to attract students' attention.

Table 3. Students' Views Time by Week.

Weeks View time	2	3	4	5	8	9	10	12	14	17
1d	0.8	6	14	9.7	11.5	13	7	11	8.7	13
2-3d	1.9	2.5	3	1.3	4.5	0	3	1	5.0	7
4d-1w	10.6	8.5	1	1.0	1.0	0	4	0	4.0	0
1-2w	5.5	2	1	4.0	1.0	0	3	1	0.3	0
3-4w	1.0	0	0	2.3	3.0	5	0	6	3.0	0
1m~	1.3	2	2	2.7	0.5	3	4	2	0.0	0
Proportion in first week (%)	63%	81%	86%	57%	79%	62%	67%	57%	84%	100%
Proportion in first two weeks (%)	89%	90%	90%	76%	84%	62%	81%	62%	86%	100%
Proportion in first month (%)	94%	90%	90%	87%	98%	86%	81%	90%	100%	100%

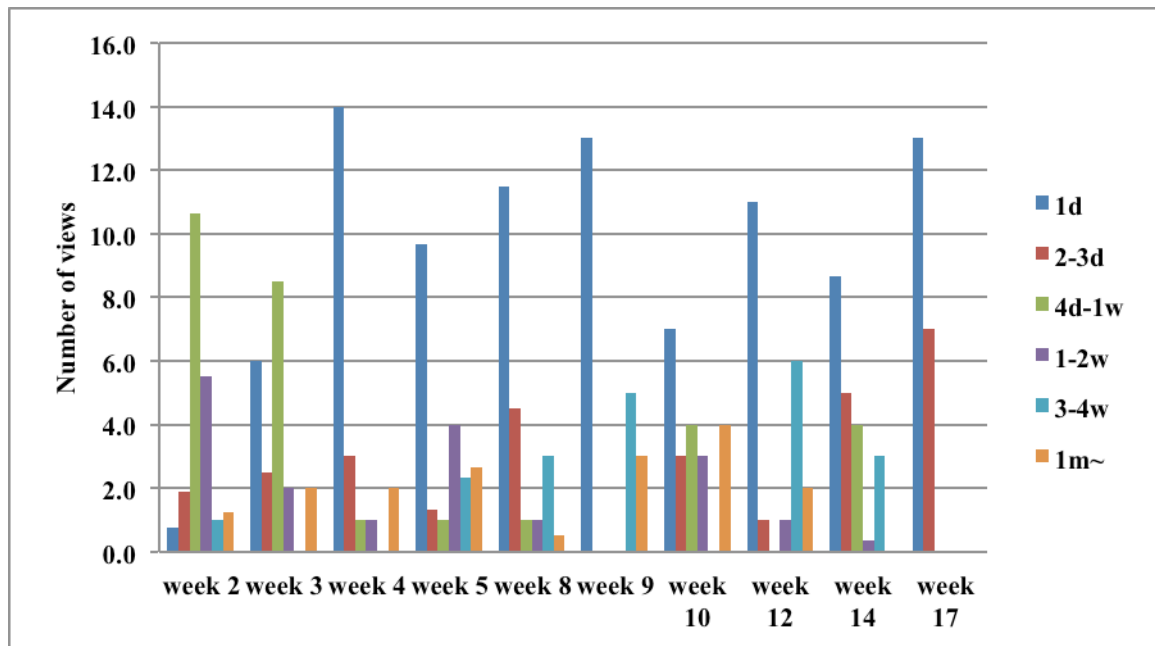


Figure 3. Students' views time to see whether students follow program every week.

4. Conclusion

Facebook can help educators to present and organize their courses, notably their teaching materials. Teachers can be administrators of a Facebook group, set up some rules and moderate the posts and comments. They can also be members of a Facebook group and interact with students. As administrators and members, they have the opportunity to observe students' improvement, their motivation, and their needs. As they can see which post students prefer and plan their lessons accordingly.

5. Conclusion

The present paper addresses the issue of improving classroom teaching by creating and managing a Facebook group in a class of European Literature in Taiwan. Online students' ratings of teachers at the end of each semester can help teachers to analyze students' motivation and any improvement in their evaluation by students. The four main contributions of this study are:

What is the impact of Facebook on teacher's evaluation by students? According to this study, teacher evaluation is higher during the second semester. The average score for all the questions has progressed by 1.87%.

Is participation to a Facebook group helping students make progress a regard to their scores? The average students' final score at the end of the second semester has progressed by 2.0%.

Can participating to a Facebook group help students increase their learning motivation? Students tend to view posts more at the beginning of the semester because they are surprised and interested by the new teaching method. They regularly and constantly participated to the group until the end of the semester.

What type of posts students like the most? Can it help teachers in the preparation of the teaching material? Almost all the students participating to group discussion on Facebook have viewed all teacher's posts. They are more interested in the posts with external links, pictures or photos, and information concerning movies.

The score of question 11 and students' final score show that students need less time and effort to obtain a better learning performance.

Future directions

Opening Facebook groups is time consuming and demands constant effort during the entire semester to record all the data necessary for analyzing any improvement in students' scores, motivation, and in teachers' evaluation. It would probably be easier to create a team of scholars to collect data for more and bigger classes to verify whether the conclusions are the same as in a small class.

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