Strategic use of Social Media in e-Learning

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Abstract: The problem of using social media in e-learning has been widely discussed in the literature. Undoubtedly, they are now an integral part of e-learning courses, thus each course must incorporate them into their curriculum. These platforms allow communication between participants of the course and are mainly used for this purpose. Their role in the transfer of knowledge, however, seems to be a more important aspect. In this respect, their potential is often not fully exploited. To change this, a strategic approach should be incorporated. It requires determining appropriate goals and tools that will determine the types, scope and ways of using social media in a given e-learning course. It is necessary to develop a specific model illustrating various stages of planning, operation and control of the effectiveness of using social media in e-learning. As a result, these media can expand knowledge of the course participants, shape their skills and social competences, which can contribute to the educational goals of individual e-learning courses. The aim of the article is to present the strategic model of using social media in e-learning. As a research method the author used a survey addressed to students of the Pedagogical University of Krakow, who were participants in e-learning courses.

Keywords: social media, e-learning, social media strategy, social media in e-learning, new technologies in e-learning

1. Introduction

Young people spend many hours browsing through social media every day. These platforms strongly engage students. Therefore it is important to fully tap into the potential of these media to achieve the objectives of elearning courses. However, there should be a strategic approach implemented that will make it possible to utilize the opportunities offered by social media in education to the greatest extent.

The aim of the article is to present the strategic model of using social media in e-learning. The main hypothesis was assumed that social media have enormous potential in e-learning courses, which is not used to a sufficient degree, especially in the field of knowledge transfer and cooperation. As a research method the author used a survey addressed to students of the Pedagogical University of Krakow, who were participants in e-learning courses.

The article consists of four parts. The first is a literature review of the subject. The second part of the article introduces the research methodology. The last two parts are the presentation of research results and conclusions.

2. Literature review

The problem of using social media in e-learning is widely discussed in the literature. There are many types of platforms that enable online/social bookmarking, blogging or microblogging (e.g. Twitter). Many platforms enable the creation of collaborative workspaces (wiki). Many allow to share tools (e.g. YouTube), enable social networking sites (e.g. Facebook, LinkedIn), assist in social networking and enable document and calendar sharing as well as editing among other things (like Google Apps) (Dabbagh & Kitsantas, 2012). In 2009, Bosch wrote about using Facebook for teaching and learning at the University of Cape Town (Bosch, 2009). However the impact of new technologies on knowledge management has already been investigated by Alavi & Leidner (2001). Kaplan & Michael (2010), among others, wrote on the use of social media in this process in the context of enterprises. An interesting study on this topic was also conducted by Zhang et al (2015). They pointed out the great potential in the use of social media in knowledge management. These and other studies show that social media can extensively support the e-learning process. At the same time, however, they pose challenges for universities, teachers and students, which were noted, among others by Selwyn (2012). The author claimed as follows: "social media tools and applications present a challenge to the concept of the formal educational establishment as it currently exists. In this sense, social media are also significant in terms of their implications for the nature and form of higher education provision. Social media in any form sit uncomfortably with some of the central tenets of the formal provision of education. The use of social media implies, for example, that learners should be 'active co-producers' of knowledge rather than 'passive consumers' of content, and that

learning should be a 'participatory, social process' supporting personal life goals and needs (Lee and McLoughlin, 2010)".

Popescu (2014) described the problem of providing collaborative learning support with social media in an integrated environment. Also Tay & Allen (2011) explored how social media might be used effectively in higher education. One should also note that Silius et al (2010) drew attention to the problem of student motivation for social media enhanced studying and learning. These issues will also be addressed in this article.

3. Methodology

The aim of the research was to investigate the use of social media in e-learning and create a strategic model of using social media in e-learning. The following sub-objectives have been set:

- specification of the types of social media used in e-learning courses,
- presenting the purposes of using social media in e-learning courses,
- presenting students' attitudes towards the use of social media in e-learning courses,
- determining incentives that can effectively motivate students to use social media in e-learning courses.

The main hypothesis was assumed that social media have enormous potential in e-learning courses, which is not used to a sufficient extent, especially in the field of knowledge transfer and cooperation.

The following specific hypotheses were formulated:

- H1: Chats and forums are mainly used in e-learning courses. The potential of other social media, which can also support the transfer of knowledge and shape hard and soft skills, have not been exploited.
- H2: Social media in e-learning courses are mainly used for communication purposes and less frequently for the exchange of knowledge and cooperation between course participants.
- H3: Social media should be used to transfer knowledge and experience in a greater scope.
- H4: Social media adds value to the e-learning course to a significant extent.
- H5: Teachers should motivate students to use social media to greater lengths during an e-learning course using positive incentives (e.g. extra points).
- H6: Students expect to increase the use of social media in e-learning courses.

The survey was used to verify the hypotheses. The questionnaire consisted of 13 questions regarding the attitude of respondents to the use of social media in e-learning. In addition, the questionnaire contained three metrics questions about gender and age of the respondents. The questionnaire was sent in electronic form to students of the Pedagogical University of Krakow (Poland). The research sample included 92 people. Respondents were mainly women (79%). Men constituted a clear minority (21%). The respondents were mainly aged 18-25 (96%). They were students of law (59%) and administration (41%). The research was carried out in June 2019.

4. Findings

To verify the hypotheses, the author needed information about the use of social media in e-learning courses in which the surveyed students have participated. First, they were asked what social media they use and how often they use it (Figure 1).

Among the surveyed students, the most popular was Messenger (99% of respondents use it daily) and Facebook (91%). In addition, the majority of respondents use Instagram (65%), YouTube (60%) and Snapchat (51%) on a daily basis. Students are also willing to use Wikipedia (49% of respondents do it several times a month) or blogs (34% read them several times a week). Most students have never used LinkedIn (73%), SlideShare (73%), Wykop (63%) or WhatsApp (53%). As one might suppose, students use many social media on a daily basis. They constitute a natural environment for them allowing them to experience comfort and happiness.

The surveyed students mostly participated in four or more e-learning courses (64%) (Figure 2). Therefore, they have relatively good background in this area.

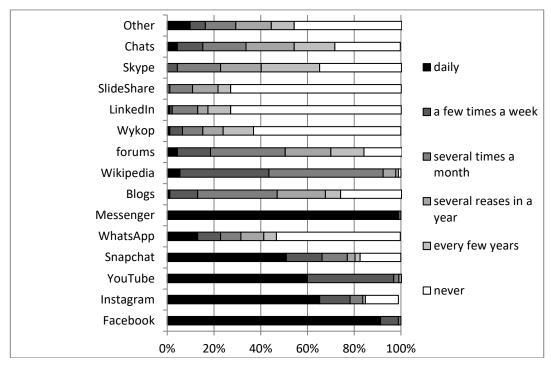


Figure 1: Frequency of using social media by the surveyed students (N=92)

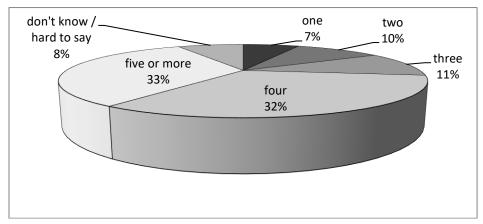


Figure 2: Number of completed e-learning courses studied by students (N=92)

It turns out that in the e-learning courses, in which the respondents participated, forums (65%), chats (64%) and YouTube (47%) were the social media used most often. They have also frequented Facebook (36%), and the other social media were visited rarely (Figure 3).

Meanwhile, students expect other social media to be used in e-learning courses (see Figure 4). They use Messenger and Facebook every day, therefore they would be inclined to use it during e-learning courses as well (58% - Messenger, 50% - Facebook). In addition, chat rooms (46%), forums (41%) and YouTube (40%) are also useful in e-learning according to the surveyed students.

As one can see, the H1 hypothesis was proven as chats and forums are in fact mainly used in e-learning courses. The potential of other social media, which can also support the transfer of knowledge and shape hard and soft skills have not been exploited.

In general, social media in e-learning courses are used to contact the teacher (40%) or other course participants (39%). They also play an important role in the current transmission of information and reference to current events (38%). Another use involves the transfer of knowledge and exchange of experience (35%), as well as sharing of resources (e.g. notes) (27%). To a lesser extent they are used for publication (presentation) of their

opinions (19%), co-creation of content and cooperation (17%), or communication and discussion with the remaining participants of the course (15%) (Figure 5).

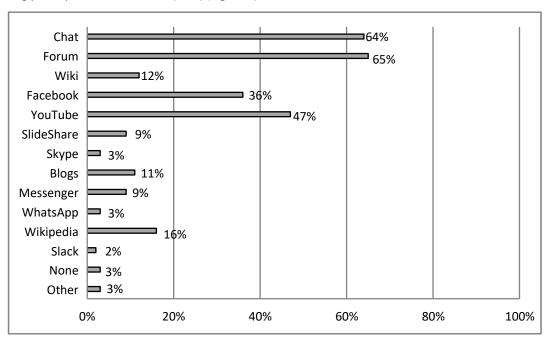


Figure 3: Types of social media used in e-learning courses in which the surveyed students participated (N=92)

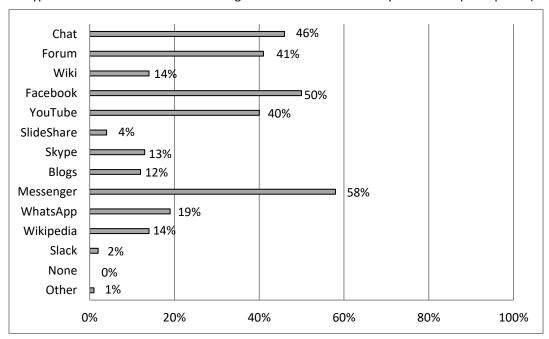


Figure 4: Expectations of the surveyed students regarding the types of social media that should be used in elearning courses to increase their effectiveness (N=92)

Meanwhile, most students notice the important role of social media in establishing contact with the teacher (73%) and other course participants (75%), but would also use the media in the exchange of knowledge and experience (71%), sharing resources (59%), whether presenting their opinions (47%) and co-creating content or cooperation (35%) (see Figure 6).

It seems that - with some caution - one can accept the H2 and H3 hypotheses, according to which social media in e-learning courses are mainly used for communication purposes and less frequently for the exchange of knowledge and cooperation between course participants. Social media should be used to transfer knowledge and experience to a greater extent.

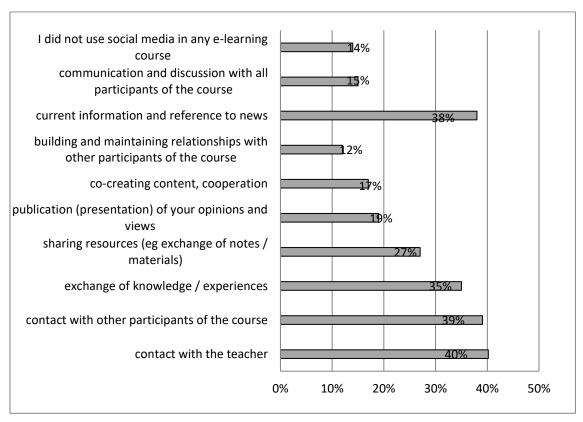


Figure 5: The goals of using social media in e-learning courses by the surveyed students (N=92)

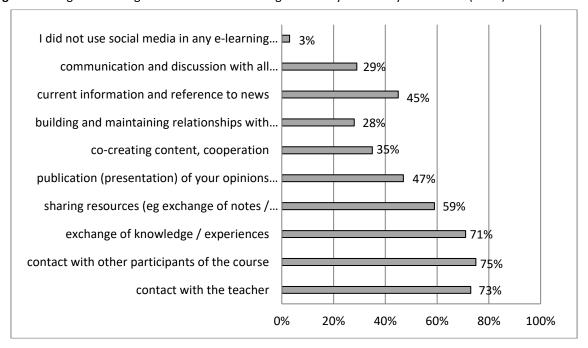


Figure 6: The goals to which social media should be used in e-learning courses, according to the surveyed students (N=92)

Students agree that social media enhance the versatility of an e-learning course (92%), increase the appeal of the course (86%), broaden the knowledge of the course participants (82%), have great potential in e-learning (80%), as well as further integrate the course participants (79%). In addition, 68% of respondents agree that they are not used enough in e-learning (Figure 7). These results allow to accept the H4 hypothesis that social media adds value to the e-learning course to a significant extent.

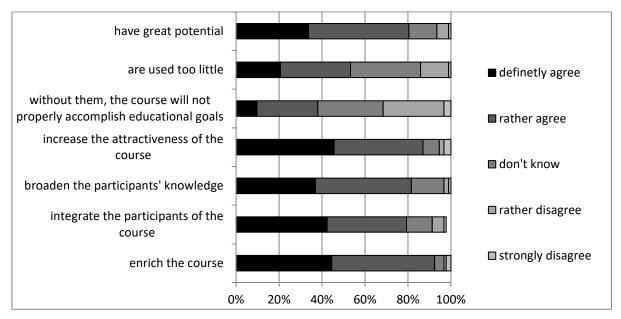


Figure 7: The importance of social media in e-learning courses, according to the surveyed students (N=92)

At the same time, students were asked about how often they use social media in e-learning courses, they answered that they only used it sometimes (30%). Moreover, many of them indicated that they use them rarely (19%) (see Figure 8).

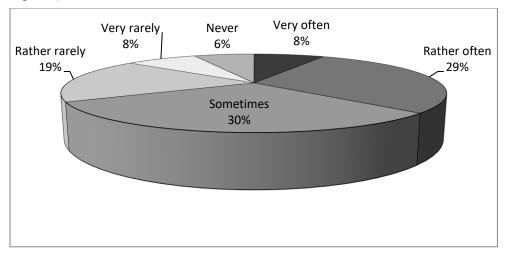


Figure 8: Frequency of using social media in e-learning courses by the surveyed students (N=92)

Therefore, there is a need to motivate students to be more active in these media. The data presented in Figure 9 shows methods of implementing the latter.

The following incentives should be considered to motivate students to use social media in e-learning courses to a greater extent: extra points for activity in social media (13%), brain teasers and puzzles in social media (11%), additional tasks for additional points (10%), social gaming (9%), help in solving tasks (9%), organizing interesting debates (9%) and additional materials to help in tasks (8%). The following tools may also help: chat consultation (6%), releasing individual tasks for activity in social media (6%), organising social media content in a playful and fun way (5%) or performing surveys in social media (5%).

The above research results allow us to accept the H5 hypothesis that teachers should motivate students to use social media to a greater extent during the e-learning course using positive incentives (e.g. extra points).

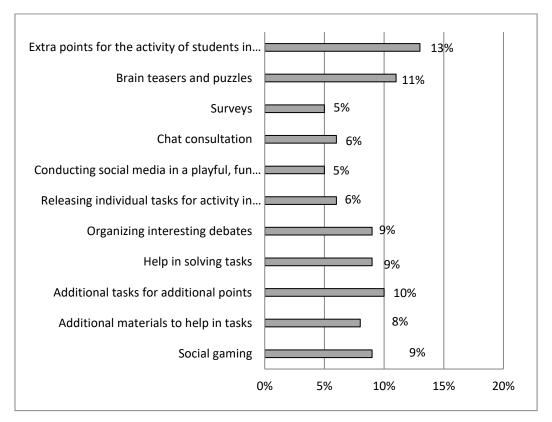


Figure 9: Factors motivating students to use social media during e-learning courses (N=92)

Students notice the potential of social media in e-learning courses. The vast majority are of the opinion that the use of these media in e-learning courses should increase (90%) (Figure 10). Sample opinions of respondents are as follows:

"I think it is a very good idea to increase the use of social media in e-learning courses, because everyone uses all the benefits of social media every day, and thanks to their use, courses would become more attractive for students."

"I think it is a very good idea because it will increase the attractiveness of the course and, above all, its mobility."

"I think that a more convenient form would be e.g. Messenger, which is now widely available, mobile and easy to use."

"In an era where many screens disperse us, it's worth thinking about engaging forms in e-learning. It's worth implementing" community networking in such courses".

"I believe that the use of social media in courses should be increased because it is an interesting form of conducting courses, it allows making contact with other participants of the course, and to express their opinion on various topics and exchange knowledge with other course participants and easy and quick contact with the teacher."

"It is certainly a very good idea, because young people spend many hours every day in social media, so if they are so involved, why would they not be able to participate in such courses?".

In summary, according to respondents, social media increase the attractiveness of e-learning courses and engage participants to a greater extent. This is due to the fact that students know the social media environment well and feel good in it. Thus, the H6 hypothesis has been proven.

All the stated hypotheses have been proven, and therefore the main hypothesis should be adopted that social media have enormous, and so far unused to a sufficient degree, potential in e-learning courses, especially in the field of knowledge transfer and cooperation.

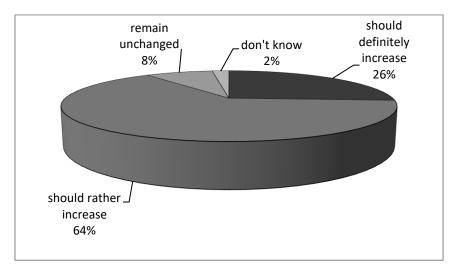


Figure 10: The extent to which social media should be used in e-learning in the future, according to students (N=92)

A strategic approach is proposed to change these circumstances. The teachers are expected to take the following steps (Figure 11):

- Defining the objectives to be achieved through the use of social media in the e-learning course (e.g. increasing cooperation between students, increasing knowledge transfer, greater integration, etc.).
- Selection of a social media mix selection of social channels that will make it possible to achieve goals in the best possible way; here, the diversity of social media and their various uses should be emphasized (see Kaplan & Haenlein 2010), for example: to increase cooperation it is proposed to use Wiki tools for sharing resources or, for example, Slack, which helps in organizing teamwork. Conversely, Messenger would be more helpful in terms of integration.
- Selection of motivational tools for students that will make them more eager to use social media in an elearning course there may be additional points for activity, interesting puzzles, social games, etc. In order for tools to be effective and attractive, they should contain as many elements of a game as possible (extra points, riddles, discretionary awards, etc.). For example, the teacher can promise important information in chat rooms, which will make students more willing to enter it and start a discussion. One can also publish interesting student statements and, in this way, reward them. Effective motivational tools should also encourage students to express their own opinions. As a result, they will feel more involved.
- Defining rules all motivational tools should be well-planned, and the rules of using them should be formulated in a clear way, understandable for all participants of the course.
- Control of the effects it should be checked on an ongoing basis, to what extent individual social media
 accomplish the set goals and what is the attitude of students towards the use of social media. Depending
 on the results, some modifications should be introduced if the situation requires it.

Tay & Allen (2011) came to the conclusion that "ultimately, success with social media in higher education probably depends on exploring and validating students' choices of the tools to hand, with which they are comfortable and familiar and that make sense for the task". The author's research confirms these conclusions and allows to state that in the case of students of the Pedagogical University of Krakow, social media (like Messenger, Facebook, YouTube, chats) will be an excellent tool to support e-learning courses. Students are very familiar with these media. They believe that using them increases the attractiveness and effectiveness of such courses. However, it is important to use a strategic approach.

5. Conclusions

The obtained research results have achieved the purpose of the article, which was the presentation of the strategic model of using social media in e-learning. As a research method the author used a survey addressed to students of the Pedagogical University of Krakow, who were participants in e-learning courses. The research proved the main hypothesis that social media have enormous potential in e-learning courses, which is not used to a sufficient degree, especially in the field of knowledge transfer and cooperation.

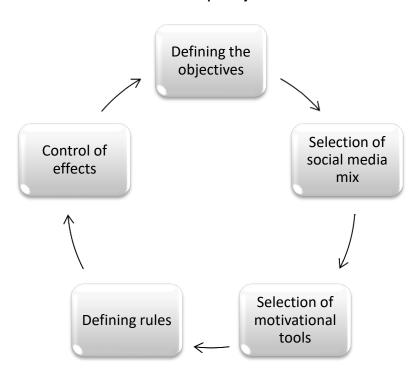


Figure 11: Model of the strategic use of social media in e-learning

Studies have shown that the e-learning courses mainly take advantage of chats and forums. The potential of other social media, which can also support the transfer of knowledge and shape hard and soft skills, have often not been exploited (H1). Social media in e-learning courses are mainly used for communication purposes and less frequently for the exchange of knowledge and cooperation among course participants (H2). They should be used to transfer knowledge and experience to a greater extent (H3). They have been proven to add value to the e-learning course (H4). However it is necessary for the teacher to motivate students to use social media to a greater extent during the e-learning course using positive incentives (e.g. extra points) (H5). Students expect to increase the use of social media in e-learning courses (H6), with the appropriate tools they should be more willing to tap into the potential of social media. Based on the conducted research, the author developed a specific model illustrating various stages of planning, operation and control of the strategic use of social media in e-learning. Owing to this model, social media can expand the knowledge of course participants, shape their skills and social competences, which can contribute to achieving the educational goals of individual e-learning courses.

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