

## An Approach of Using Social Media for Educational Purposes in University of Ruse

Galina Ivanova

**Abstract:** *The paper reports on a research that examines how University of Ruse students use social media as part of the educational process. Students' skills that can be achieved through the use of social media are discussed. Learning and teaching practices in ten social media groups with regular and part-time students are summarized. Results gained from the questionnaire survey on student's use of social media for educational purposes are presented and discussed.*

**Key words:** *social media, personal learning environment (PLE), virtual learning*

### INTRODUCTION

In the past ten years many virtual learning environments (VLEs) - such as software e-learning platforms, virtual universities, virtual laboratories have been created. Nowadays, they are successfully used to support our teaching and learning process. In University of Ruse more than 360 teachers are educated to use and create distance learning materials in a platform called E-learning Shell [6]. More than 640 online learning courses and 23 044 learning resources are published. More than 11353 users use E-learning Shell. Most of the students find the platform very useful, but they are mainly use it as a virtual library – login and download learning content and tools. Students rarely use platform chat and forum tools to communicate with their classmates and teachers. They prefer to use social media for communication purposes.

Using, communicating, learning and sharing on social media become a type of lifestyle for the new generation learners. They prefer and use social media for everyday interactions with their friends, classmates and teachers. They organize and attend groups of interest in the social media. They plan and attend daily events using the social media event calendar.

Universities are still using mainly traditional VLEs, which are not connected with the social media. The learning process of today's new generation learners is not only in VLEs. Social Medias have also important role in their self-learning process. Recent years personal learning environment (PLE) appear as a new term – a framework that uses web 2.0 tools (such as social medias) to control and manage own learning space [4]. PLE integrate formal and informal learning into a personally-managed self learning space. Today's students are not just passive information consumers, they take advantages of social media to seek information and to share it – they are producers of learning content. They like to share ideas with the others, comment posts and present new discoveries.

According to the European Qualifications Framework for Lifelong Learning (EQF), adopted in 2008, the learning outcomes are specified in three categories – as knowledge, skills and competence. Today's learners need to have not only theoretical knowledge, practical and technical skills in specific subject, but also some social competences where the ability to work with others is crucial.

Some universities updated their course syllabus with new skills and competences according to the EQF. Is this syllabus update is only on a paper and how the teachers changed their teaching methods? How to increase learner's competences? Are the teachers using social media to become available for group or private communications with students? How to reach good outcomes for lifelong learning and what kinds of online learning environments could be used with the new generation students?

The answers for these questions are not simple. A research of using social media for educational purposes in University of Ruse with 270 students separated in ten closed social media groups is conducted for four semesters – two academic years 2014/2015 and 2015/2016. Some survey results and analysis will be presented in the paper. The research

introduces activity in ten social groups, which are created and moderated by the teacher.

### **SOCIAL MEDIA FOR EDUCATIONAL PURPOSES**

The use of social media sites is among the most interesting and common activity of today's young people. Social media tools allow social interactions and networking. The role of social media for educational purposes is discussed in many research papers [1, 2, 3, 4, 5]. Some problems and also many advantages are reported. Some researchers argue for the usage of social media tools as supportive educational space [4]. They are concerned with the time it requires and about privacy and integrity. Others report that social media sites, youtube videos and wikis are valuable tools for the educational activities and collaborative learning [4].

### **PERSONAL LEARNING ENVIRONMENT**

Since 1999, when the word “e-learning” was used for the first time and the e-learning revolution have started, significant shifts have occurred in the nature of online learning in Web 2.0 era. Whether universities have responded to the shifts? Some universities are still primarily relying on traditional e-learning platforms, which are mainly under the control of institutions and the learners have little possibilities to manage and maintain own learning space where to create or share learning resources and opinions with classmates and teachers.

Today's young people are born with technologies and prefer to use modern tools such as social media sites. They enter in the university and expect to meet modern teaching methods which correspond to their lifestyle. The younger generations expect more than books and assignments in the course study. They would like to have course related online personal learning environment (PLE) in the social media where they can manage and maintain the existing learning content, organize, share and create new learning resources. PLE is a term, which can be explained as an online learning space for formal and informal learning activities [3]. The formal learning is offered by learning institutions such as universities, colleges, learning centres and the learners receive diploma, certificate, and etc. The informal learning is a life-long learning happens through forums, conversations, social groups of interest, asking questions, reading forums and sharing posts [3]. PLE cross traditional boundaries and help students to connect a range of learning resources within a self-managed online space – to adapt formal learning content, comment it and explained to peers or to produce new learning content.

### **NATIONAL QUALIFICATIONS FRAMEWORK FOR LIFELONG LEARNING**

In 2012, the National Qualifications Framework for Lifelong Learning (NQF) was approved. It has been developed following the European Qualifications Framework for Lifelong Learning (EQF). The NQF of Bulgaria contents of nine levels for the whole education system and all its qualifications. Levels 6 to 8 relate to qualifications acquired in the higher education system. The separate levels are defined on the basis of a learning outcomes-oriented approach. They are described in terms of knowledge (theoretical, practical) and competences (personal, professional) [7].

In summary for bachelor and master levels, graduates will have not only theoretical and practical knowledge, but also some skills and competences: to analyse and evaluate information; demonstrating mastery and innovation; to analyse complex problems and generate solutions; to share knowledge and ideas with others; ability to generate new knowledge; ability to establish administrative structures and to manage teams; to demonstrate autonomy and team responsibility; ability to present ideas and solutions to specialized and non-specialized audiences and etc. [7].

Some departments in the University of Ruse updated their bachelor's course syllabus according to the NQF. The idea is not only to add needed skills and competences on a paper, but also to change the teaching methods according to the NQF. At the same time

the regular academic classes have limited time which has been reduced in the past years. The overall course time is not enough to achieve all NQF learning outcomes.

The role of the social media to increase some learner's skills and competences will become important in the future. A research in the University of Ruse was conducted that supports this claim.

### SOCIAL MEDIA FOR EDUCATIONAL PURPOSES IN THE UNIVERSITY OF RUSE

A research in University of Ruse with 270 students separated in ten social media groups is conducted across four semesters – two academic years 2014/2015 and 2015/2016. Ten facebook groups are included in the research and the similarities between these groups are as interesting as the differences. The research analyse how regular and part-time students in University of Ruse in first, second and third year of their study use social media for learning activities.

The research started with 116 students in the first semester in 2014/2015. The learners were regular students in first, second and third year of their study. They were separated in different closed facebook groups.

Two of the groups were created about two learning courses conducted in the current semester. The group with the students in the first year of their study was created for academic consultation purposes. Academic consultant mission is to help first year students succeed academically during their first semesters of study. In University of Ruse academic consultation meetings are only for the first year of study. The academic consultant has two hours each two weeks for consultations. Usually these hours and the time in two weeks are not enough for active consultations. Students need to ask questions and receive some answers more often. Some university events are important for the students and they have to be announced quickly to attend them. After the first year of their study students also need help and advices and this can be done online using the same social media group. The activity and the usage of that group are presented on Fig. 1.

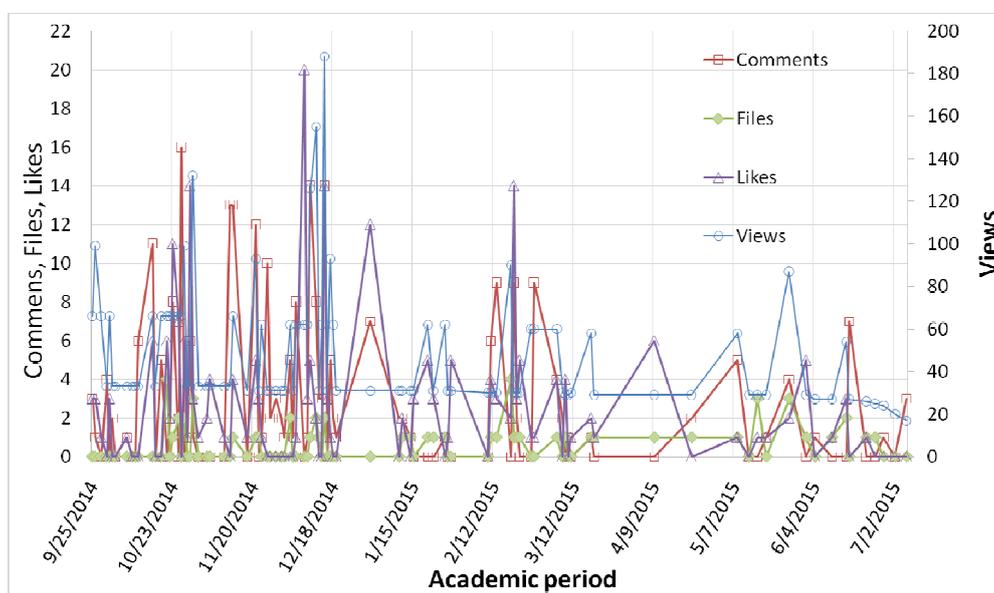


Fig. 1. Social media group activity for first year students consultation in 2014/2015

Within the overall group picture, a wide range of posts, files, views and comments exists, and has been explored through analysis. The data shows that more than 90% of the students perform different activities and have some engagement with posts, likes or comments. Different student's profiles can be summarized, ranging from those who are highly motivated and very active in the group with posts to those with little interest, who are only engaged as viewers. The results show that the students were more active with questions and posts during first semester, in afternoon hours and in the end of the

semesters. The group became more organized and informed. The common atmosphere in the group can be defined as friendly, supportive and helpful for different learning activities.

Two of the social group were created to support the learning and teaching activities with students in second year of their study for the course “Modern Computer Technologies”. They participated in the research only in one semester. Students had to use the social group not only to collaborate and communicate within, but also for publishing their weekly tasks. The idea was to share the tasks with their classmates and teachers. The learners used also other kind of social media - web-based cloud-computing office tools that enable group document editing. Students were engaged in collaborative projects that support the creation, editing, and management of different weekly tasks. The tasks are published in the group and allowed students to demonstrate personal and team skills. The tasks were evaluated in the group by the teacher and also by the peers with likes and comments. Some kind of ranking – “Top 10 tasks for the week” was organized. The evaluations were fun and at the same time useful for the learning outcomes, because the students became more enthusiastic. They had chance to see and compare their own tasks with the best tasks of their classmates and this led to better results. Sharing the results of students learning achievements each week had a positive effect on student self-motivation.

Two groups were created for students, who are in the third year of their study. They participated in the research for the whole academic year. The groups were created to support the learning and teaching activities for the courses: “Software Engineering” in the first semester and “Reliability and Diagnostics of Computer Systems” in the second semester. Lecture notes, links with video and other illustrative learning materials have been posted each week in the groups. The teacher could notice how many students have seen the materials. Students had also possibility to become co-teachers – to find, analyze and publish additional learning materials and resources for the current learning topic. The results of this learning strategy showed that the learning community was forced to be more engaged in course activities. Even after the lecture hours for the week, the students thought about the lecture notes and shared additional learning resources.

For Software Engineering course the group was used also for coursework related collaborations. Students were divided in teams. Each team consisted of five or six students, who had to create common coursework software project during the whole semester. The results of each team were published in the group. The idea was to share their experience with the other teams. Each team had to create a software company and to design a software project. The students had to select their positions in the company: a manager, a business analyst, a designer, a developer, QA, tester and etc. Students could communicate online and work together in the group and in different kinds of online team collaboration tools. Managing the successful completion of software company project was fun as an idea at the beginning but it was a complex task. Each team had limited unreal budget and limited time for the project (till the end of the semester). They had to use some agile practices [2] such as: weekly or daily online or live meetings; planning and tracking their progress using online tools; analyzing and predicting some problems to finish the projects on time. Every student for example wanted to be a manager, but the results showed that it is not an easy task. For example, two teams have changed their leaders in the middle of the semester because of some managing problems. Students had an interesting experience and learned some new skills: to work together in a team; leadership's skills - to demonstrate leadership and in the same time to find way to motivate the others to work for the team; conflict managements skills; communication skills and etc. Some fun in the group with online voting competitions was also organized: “The most smiling team photo”, “Best company presentation” and etc.

For coursework live presentations, there were created facebook events and the students had to choose appropriate daily hours for the whole team. For better organization, sometimes more events are created for different daily hours. Some students

could not attend for example the event in the morning, so there is another chance for them to attend the event in the afternoon. Students can tag and approve the attendance of morning or afternoon events using social media event tool. The team leaders had to publish the time for the oral team presentation and they could also tag the team members using the tagging tool. All team members and also the whole group were announced for their presentation time

The Software Engineering course was studied three times in academic year: in autumn with regular students in third year, winter with part-time students, spring with regular student in second year of their study.

Two groups were created for part-time students, who had live classes in Software Engineering course for two weeks in January 2015 and in January 2016. Part-time students have only two weeks to attend five or six courses for more than 10 hours a day and continue their study at home during the rest of the semester. In class hours they do not have enough time to stop and analyze in details the learning content and ask questions if something is not clear. Often they have more questions when they study for the exam at home and need help for their course works. The social group was helpful for the learning at home with teacher and peer supports on time. Following the activity in the group, part-time students could feel they are a part of an online learning community. Their needs and questions find quick responses and advices. They had chance to publish online their course projects materials and receive peers and teachers comments and support. Consultations were not only in the group, but also as private messages with the teacher at any time. Usually for part time students in University of Ruse there are two exam dates and they have to choose one of them. The students have also one extra date. The exam dates were announced as events in the group with information about the time, the room and also some exam instructions. For each event (exam) every student received an invitation. Each student can answer if he or she will attend the event (the exam) on this date and the teacher is announced also for students' attendance. Analysis of the student progress showed that the students were well organized and finished their course works on time and most of the students attend the first exam date. The results and the students' activity in the group even after the exam reveal that the social media group enhance their engagement and interest.

For the course "Reliability and Diagnostics of Computer Systems" some learning and teaching practices for the activity in the groups can be also summarized. In the beginning of the semester, the students were announced that there will be some kind of competition. The competition consists of several tests during the semester with practical tasks of different learning topics. For each test the students will receive points and they will be published in the group. Students gain also some points for their activity in lectures and practical workshops. The total formula is calculated in the end of the semester and the best students receive excellent marks also announced in the group. This strategy forced the students to become more active in lectures, practical workshops and tests. The tests dates and hours were announced in the group as events and the students were invited.

### **SURVEY RESULTS ON THE USAGE OF SOCIAL MEDIA FOR EDUCATIONAL PURPOSES IN UNIVERSITY OF RUSE**

In this part are presented and discussed the results gained from a survey on student's use of social media for educational purposes. These results include data from the survey carried out with students in ten Facebook groups for two academic years 2014/2015 and 2015/2016. The survey includes 9 questions. Some of the results are presented in diagrams. 192 students responded to the questions: 21 first year students, 75 second year students and 96 third year students; 167 full-time students and 25 part-time students.

On Fig. 2 are given results of question how students evaluate the use of social media groups for teaching purposes. The majority of students 82,7 % evaluate the teaching with

the maximal grade 5.

One of the keys to successful training is to assess whether the educational challenges in social groups are designed to assist student achievement of their best expected results. On Fig. 3 are presented students answers about their satisfaction and expectations for their achievements. 91 students are satisfied of their results and 95 pointed that their achievements are more than expected.

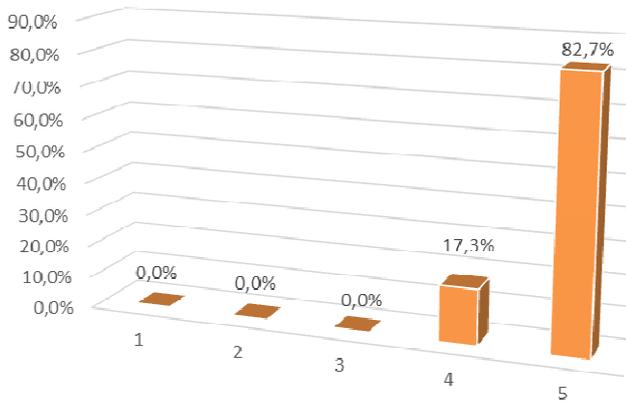


Fig. 2. Results of Survey question: "How do you evaluate the use of social media groups for teaching purposes?"

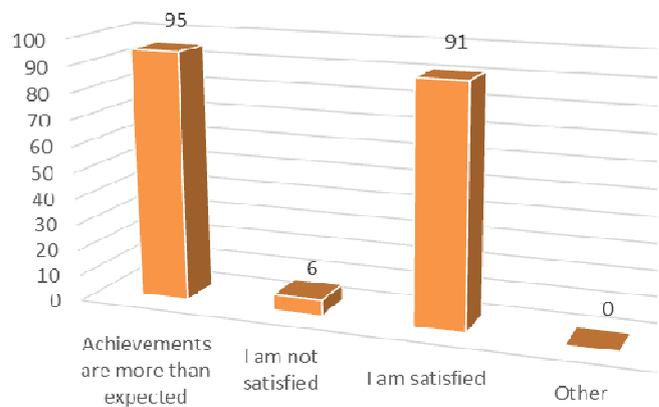


Fig. 3. Results of Survey question: "Are you satisfy of your expected achievements (knowledge, experience, mark)?"

The question about students' motivation and their interest is also important. On Fig. 5 and Fig. 4 are presented students answers about their motivation and how often they use the created social media groups. 67 percent of students were actively engaged with the group every week and 27 % every day. 94,3 % answered that their interest and motivation were increased. Some students wrote in other comments that the teacher motivated them to do their best.

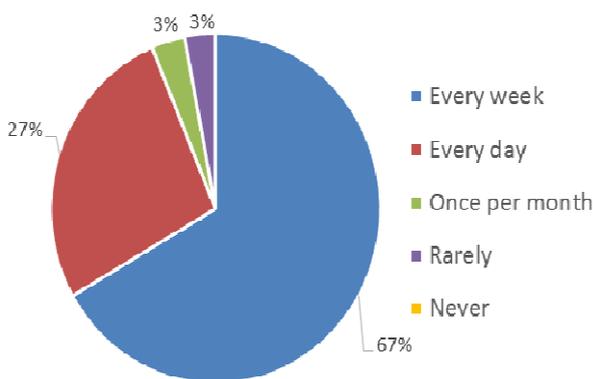


Fig. 4. Results of Survey question: "How often do you use the social media group for the discipline?"

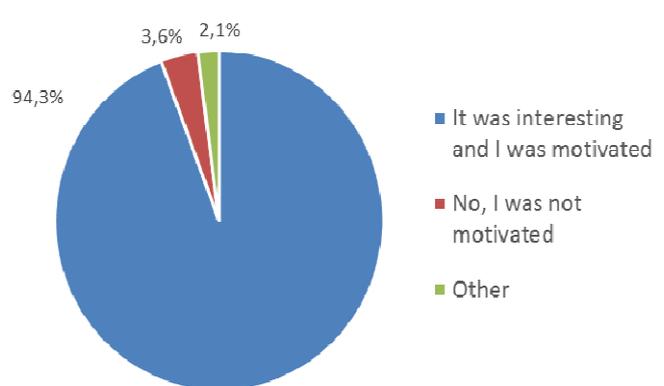


Fig.5. Results of Survey question: "Have you been interested and motivated to study the disciplines using new social media practices?"

On Fig.6 are presented answers of multiple-choice question about the most interesting learning practices in the created social media groups.

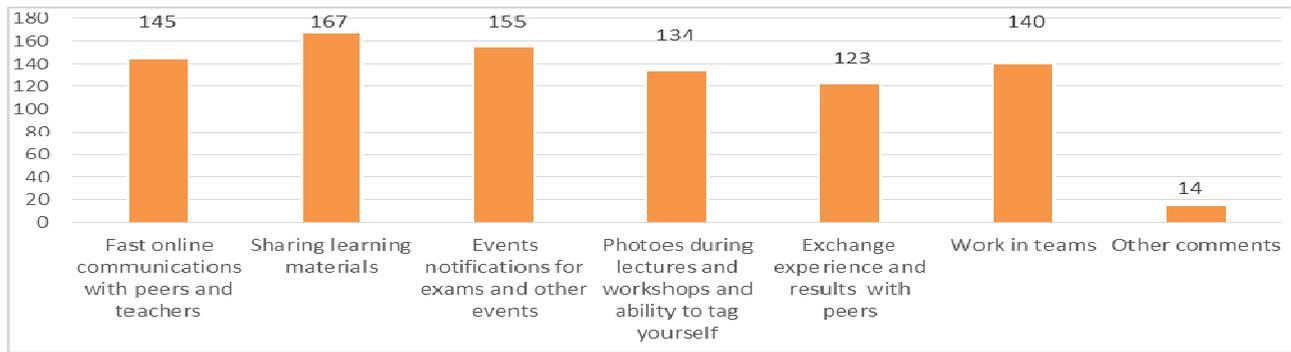


Fig. 6. Survey question about the most interesting learning practice in the created social media groups

## CONCLUSIONS

For better or worse using social media is a lifestyle of the young people. Using the right training strategies and practices, social media can be used as a powerful tool for engaging the attention of learners. The survey results in University of Ruse reveal that social media reinforce the learning by extending the communication outside lecture and workshops hours and help students to increase their interest and motivation in course topics. Most of students are satisfied and their achievements are more than expected.

The social media educational potential can be summarized in terms of: providing distance collaborative learning interactions among classmates; enhance engagement of students with the possibility to comment and share their opinions of learning topics; enhance understanding of learning content with more illustrative online examples even after the semester; expand discussions beyond classmates; possibility to share results of learning achievements; online participation in collective knowledge generation; give learners power to direct their self-regulated learning space; spread events announcements; possibility for students to find, share and create learning resources.

Social media users share information at rapid speeds. They often do not even realize they are developing also some skills. The research results reveal that using social media for educational purposes learners can acquire and apply a set of skills needed for lifelong learning: abilities to find, organize, create or customize learning content; leadership skills – to motivate the others to work in a team; presentation and communication skills through writing new posts, commenting posts and etc; self-direction, autonomous and self-motivation skills; critical ability to analyze and comment peers tasks; ability to balance formal and informal learning content; creativity to produce new learning content; social competence to communicate and work with others to co-construct learning content; ability to present ideas and solutions to specialized and non-specialized audiences and etc.

Using social media event tool, students became more organized for different events: tests, lectures, exams, faculty celebrations, seminars, student competitions and etc.

Social media exists and became a powerful tool in the society. 98 % of the survey respondents think that social groups for learning purposes definitely have to be used also in other disciplines. It's only a matter of time before most teachers find that the social media could be very useful for educational activities.

## REFERENCES

- [1] Chu, S.K.W. Examining university students' use of social media for education, The 2014 International Conference on Teaching and Learning in Higher Education: The New Generation Learners, National Taiwan Normal University, Taiwan, 2014.
- [2] Dingsøyr, T., et al. A decade of agile methodologies: Towards explaining agile software development. *Journal of Systems and Software* 85.6 : 1213-1221, 2012.

[3] Dabbagh, N., A. Kitsantas. Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and higher education* 15.1: 3-8, 2012.

[4] Moran, M., J. Seaman, H. Tinti-Kane. *Teaching, Learning, and Sharing: How Today's Higher Education Faculty Use Social Media*. Babson Survey Group, 2011.

[5] Tess, P. A. The role of social media in higher education classes (real and virtual)– A literature review. *Computers in Human Behavior* 29.5 : A60-A68, 2013.

[6] E-learning Shell 02 - <http://e-learning.uni-ruse.bg>

[7] [http://www.swfm-qf.eu/main/wp-content/uploads/BUL-2\\_national-report-VET-system-and-training-program.pdf](http://www.swfm-qf.eu/main/wp-content/uploads/BUL-2_national-report-VET-system-and-training-program.pdf)

### **ABOUT THE AUTHOR**

Assoc. Prof. Galina Ivanova, PhD, Department of Computing, University of Ruse, Phone: +359 82 888 855, E-mail: [givanova@ecs.uni-ruse.bg](mailto:givanova@ecs.uni-ruse.bg).

**The paper has been reviewed.**