BYOD AND TURN TO YOUR NEIGHBOURS

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Do we have any tool in our hand to motivate our students better? Do we know enough? We are confident that students' attitude to learning and doing in the last few years has been changed a lot. Students attend the lectures, seminars, workshops, if they are motivated, if they are attracted or if they see differences compared to a book, or a paper.

In the last years, the use of own mobile devices (BYOD) has increased considerably in education. We can follow the changes only, if we apply the new techniques and methods during our courses.

The majority of the students have at least one of the devices, which can be transported and used during the lectures or workshops in higher education. Many of the students bring their own devices (BYOD) and they can work in pair or groups, by turning to their neighbour when the lectures present opportunities for that.

M-learning devices are very useful for learning, for reading and finding relevant content on the Internet, for assessing acquired knowledge and for performing real measurements. Their use in experiments is based on the rich set of built-in sensors in the smart phones (Kuhn, J., & Vogt, P., 2013). If we want to let our students leave universities, colleges with an adequate knowledge and with applicable skills we should take the advantage of the ICT, multimedia and m-learning devices (laptops, smart phones, tablets) and their applications (Jarosievitz, 2015, 2011, 2009).

This research work has been done with first-year students in Physics at the Dennis Gabor College from Budapest, in the school year 2015-2016.

My objectives were to learn about the impact of the use of own devices of the students and to answer the following questions:

- Do the students understand better the phenomena in physics?
- Are they performing better in problem solving?

I have developed and tested the following student activities, questions. Students used their own devices and turned to their neighbours:

- Responding the quiz questions, during the physics lectures (30-hour course)

This experimental teaching with mobile learning devices involved 188 students who were enrolled in the course. In the beginning of the course 43 % of students filled in the general questionnaires sent to them via internal communication system. During the lectures 5 different surveys have been filled out, each of them was related to the physics chapter taught previously. The 6^{th} survey included mixed questions which were already asked during the previous surveys. Students used their mobile devices to fill in the online survey, turning to their neighbours, discussing the results and using the program Socrative real-time questioning tool.

In the end of the course some students gave personal interview, and reflected to the method used. All the reflections were very positive, and promising.

I think that quiz questions can be developed and the method can be implemented also in other courses. The results, questions and answers will be presented during the conference.

Keywords

BYOD, m-learning, interactive experiments, ICT, multimedia.

References

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