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E-CONTENT – LEARNING BY DOING

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Abstract: *In our era when almost everything is personalized only the learning and the e-learning too seem to be one step behind. Why is personalization so important in learning?*

Although we all know that one of the purposes of education is that each student should achieve his/her potential and is strongly connected to the student's unique needs, the educational systems from all countries are standardized and ignore individual needs to a great extent. There is a gap between what the students need and what the educational systems offer. This gap is quite hard to bridge in the traditional classrooms, but today teachers can use a wide range of strategies and resources in order to make this possible.

If we take into account the resources, in e-learning one of them is the e-content, which is strongly connected to technology, but also with methodology. It is obvious that today's teacher must master not only the design and teaching methodology, but also technology.

This paper aims, as a starting point for future research on a group of students from different specializations attending the Computer Assisted Instruction course at "Lucian Blaga" University in Sibiu, Romania, to connect personalization in e-learning with the design and implementation of the e-content, using free and open source software, in order to improve the quality of learning. This research is all the more important as the students who attend this course are training to become teachers, so they must be aware of the importance of personalizing the learning process.

Keywords: *e-content, e-learning, personalization of learning*

I. INTRODUCTION

A Report Prepared for the UNESCO 2009 World Conference on Higher Education shows that "In recent years, there has been renewed conversation about the purpose of education, particularly in the light of the recognized role higher education plays in developing human resources for a growing global economy." [1] In this light we can talk, in higher education, about some key stakeholders like parents, communities, and employers but, definitely one of the most important is the students. Even so, we must also take into account entities like public and private bodies, which will be employing the graduating students. Apart from stakeholders, another important aspect in higher education is that educators would also consider the ultimate consumer of the employer's products, for example a school of education would consider the ultimate consumer the student, in fact the future students of our students when they become teachers.

II. LEARNING BY DOING

An important issue for the teachers is that they "need professional development, not only in technology skills and applications, but also in new pedagogical methods of incorporating technology

into the classroom.”[2] For those who already teach, this can be done by participating to specialized trainings. But for today students, the future teachers, it is better to be done during their academic instruction.

The focus of this paper will be on a group of students from different specializations, attending the Computer Assisted Instruction course at “Lucian Blaga” University in Sibiu, Romania, in order to become teachers.

The subject will be approached through three aspects which I consider to be important for preparing the students for their future job:

- a) Skills/professional values in need for future teachers
- b) Students’ educational experience in order to become a teacher
- c) Personalization of learning experiences

- a) Skills/professional values in need for future teachers

As Doug Lemov said in his book *Teach Like a Champion*, “Great teaching can be learned”. [3] So when we start to teach students for becoming future teachers we must answer to two important questions: Which are the skills/professional values in need for the future teachers? and “How should we teach our students /future teachers in order to achieve these skills/professional values?”

As an answer to the first question we can find over 50 skills/professional values that a good teacher must have, but for this research we will stop only at two: plan their teaching and apply a variety of technological resources to maximize learning. Planning is very important because it leads in great percent to the success of teaching and teaching tasks become much easier.

This phase of planning is connected with resources to be used, because when a teacher plans the teaching he/she must take into account the resources, too, such as: human, material, technological, time resources. Such a resource is e-content, and when the teacher uses it at lessons he/she must choose between an existing one or design and create his/her own e-content.

We will consider a strategy, by which the students can achieve these two skills/professional values, and this is the answer to the second question which will be given in the next paragraph and it is in a strong connection with the student’s educational experiences.

- b) Students’ educational experience in order to become a teacher

Roger C. Schank, well known as a leading pioneer of artificial intelligence and cognitive psychology, underlined in one of his articles that “Education is dominated by the idea that learning means acquiring knowledge that will be “needed later.”” [4], but in most real situations this “later” never comes. Carl R. Rogers, in the book “Freedom to Learn” stated that, “Much significant learning is acquired through doing.”[5], and the same assertion was made by the ancient Chinese philosopher, Confucius, “.... involve me and I will understand.”

It is obvious that students need educational experiences focused on functional knowledge and pedagogical approaches connected with real world applications. The type of learning must be an experiential one, learning by doing, in which the student is personally involved, has self-initiative and participates completely in the learning process. Experiential learning addresses the needs of the learner, being in connection with professional interests and developing employability skills. This is the reason why the student must design and implement the e-content, in this way he/she will achieve the two skills/professional values mentioned above.

- c) Personalization of learning experiences

The practical part of the Computer Assisted Instruction course lasts 20 hours. In the first 4 hours each student is required to prepare a lesson plan, in which to include a teaching stage or an assessment stage using e-content. The next 12 hours are dedicated to the design and implementation of the e-content, the last 4 hours being used for reviewing.

The learning experience of the student is personalized due to the fact that he/she can choose:

- to work individually, in pairs or in groups;

- the topic for e-content, in connection with their professional and personal interests;
- to obtain feedback during the design of e-content stage from the colleagues and from the teacher – all the products are posted on an Internet group so everybody can see it;
- the software to be used in order to implement the e-content.

The personalization of learning is also important because due to different specializations the students will teach in the future different subjects, so the strategies for teaching are different.

In figure 1 is an example of an assessment e-content elaborated by a law student, for a History lesson, for the 8th grade.

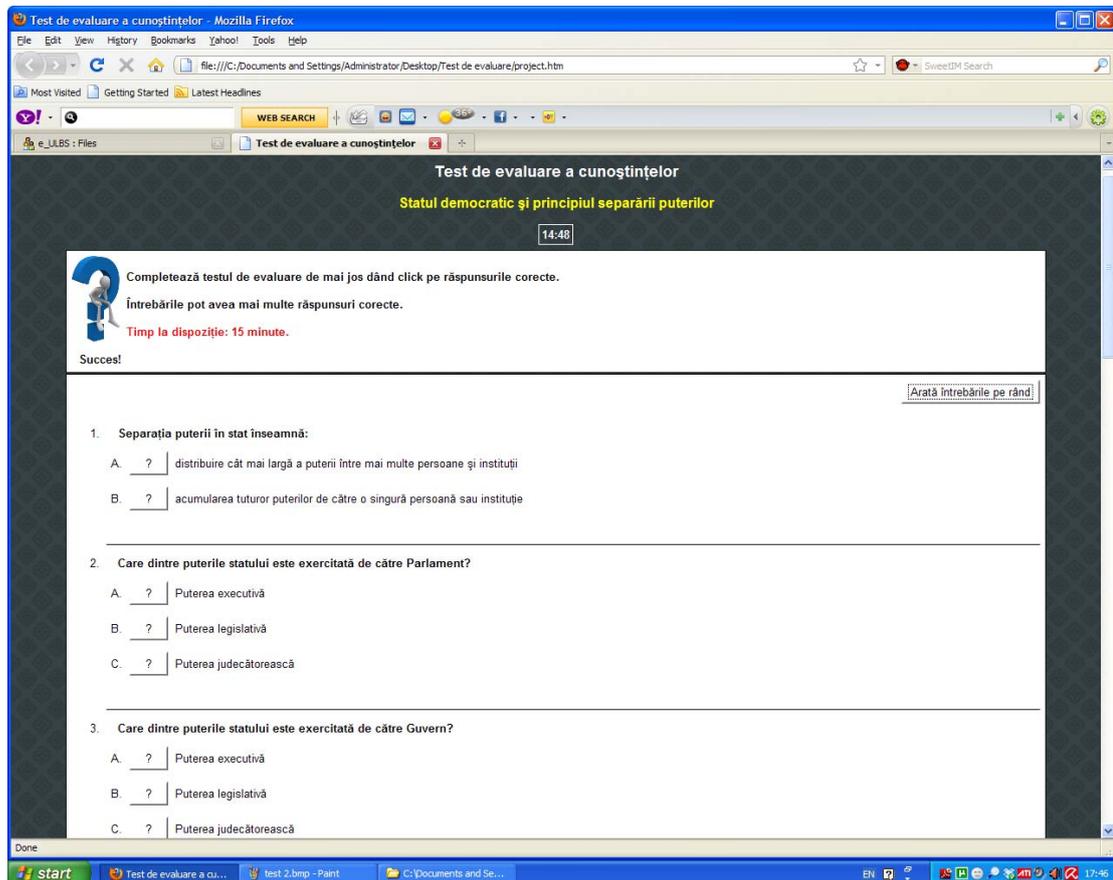


Figure 1. Example of a multiple choice test

At the end of the course, each student/pair/group presents their e-content in front of all students, using supporting technology. This is a good experience, because all students can see and then discuss about different e-contents, obtain feedback regarding their work, and share the experience gained, following the design and implementation of e-content. It is a good opportunity for the teacher to underline again the importance of the link between planning and resources.

III. CONCLUSIONS

The success in education will come if we identify, learn from, and involve the main stakeholders, in our case the students. Each student should achieve his/her potential and must be prepared for the labour market, where he/she needs some skills which might be gained into the classroom. It is important to integrate technology in academic programs, encourage students to take responsibility for their own learning and offering guidance in terms of implementing technology in their future teaching activities.

If students have ICT knowledge, this is the first step to become a permanent self learner, which is another professional value in need for a good future teacher.

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