ESTONIAN EXAMPLE OF USING ICT IN EDUCATION (BASED ON TALLINN UNIVERSITY EXPERIENCE) AND ITS DO'S AND DONT'S FOR MOLDOVAN EDUCATION

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Rezumat

Articolul este o sinteză a bunilor practici de utilizare a învățământului electronic (e-learning) în cadrul Universității din Tallinn (Estonia). Autorul pune accent pe utilizarea modelului flipped classroom (clasa inversată) şi a tehnicii BYOD (Bring Your Own Device), precum şi a utilizării codurilor QR la lecțiile de limbă engleză, specificându-se avantajele şi dezavantajele în cadrul sistemului educațional din RM (luându-se în considerare posibilitățile tehnice ale universității de origine (UPSC).

Estonian education is an integral part of the social and cultural life of the people of this European country. Education in Estonia was an important facet, on which great importance was laid from the old times. Estonian education does not only deal with theoretical education. It also lays equal stress on vocational and adult education. Higher education in Estonia is both academically and practically oriented. Teaching is carried out in various forms such as lectures, seminars, group work, laboratory work and independent studies. In the process of learning, the students' responsibility and individual performance are considered important and the grades obtained reflect not only the results of the final examination but also the participation in the course. Science degrees may also include laboratory and practical work requirements. A significant feature in all teaching and studying at the Tallinn University is the use of modern technology that is conveniently accessible to all staff and students [5].

We should first mention that everything started in Estonia in 1986 with the digitalization of schools using Juku computers produced in Estonia and went on until now with several projects designed by Estonian specialists such as Tiger Leap, Learning Tiger, and Nat-I Strategy for Lifelong Learning 2020 (2013). Though the Professional Qualification standard for Estonian Teachers still has the status of a draft, there are several digital competence frameworks used, such as International/European Computer Driving License (ICDL/ECDL), UNESCO ICT Competency Framework for Teachers, European Pedagogical ICT Driving License (EPICT), ISTE National Educational Technology Standards for Teachers (NETS-T), that help teachers identify the level of their digital literacy, in order to perform further training and get the necessary qualifications for the sake of productive use of ICT in the classroom[2]. And it is not only about using Power Point Presentations (as far as a PPP is a supportive material for the teacher, not for the student) or MOODLE (which is productively used in Estonian HEIs, but rarely used in Moldovan ones, including Chisinau "Ion Creanga" State Pedagogical University, where a few professors are striving to excel in using it), but also about using efficient techniques and strategies for different subjects and different types of learners such as flipped classroom, E-Didaktikum, QR-Codes, RÕÕM (meaning joy), BYOD (Bring Your Own Device) etc.

It should be stated that out of 1000 people employed at Tallinn University, 500 are actively using ICT in their classes. Of great help for those who are not very proficient in the use of ICT are the educational technologists and multimedia specialists who are working at the E-Learning Center which provides a number of technical solutions for E-learning and provides advice to the academic staff on e-learning environments [4]. The Centre also provides consultancy services for building e-courses and creating e-learning materials. The existence of various e-courses at Tallinn University makes it easier for the students (especially working master's students) to perform their academic duties, as the problem of attendance is solved automatically (the students meet with the teachers directly 3-4 times per semester usually during week-ends, the rest of the process being internet-based).

Another motivating factor for designing a good e-course is the e-course quality label awarded by Estonian e-Learning Development Center. This is part of the e-learning quality system with a main objective of harmonizing activities related to e-learning and the level of e-courses within the member institutions of the Estonian e-University and e-Vet consortia. The quality label confirms the excellent level of the e-course and is an acknowledgement to the designer and/or teacher. It must be noted that the

process evaluates only criteria related to e-learning design and elements and not to the content of learning materials. The evaluation of the e-courses within the process is structured at three levels:

- self-evaluation level (done independently by the applicant based on the available form);
- institutional level (completed by the institution (e.g. programme leader, head of the department, etc.) and signed by the direct superior of the applicant);
- expert level (a panel of experts will evaluate the e-course based on strict guidelines) [2].

E-courses meeting the quality criteria will be awarded quality labels. This will allow the author to apply the visual image of the quality label in the course learning environment and also with promotion of the course. Candidates for "the best e-course of the year" get two grants (each 30000 EEK). Estonian e-Learning Development Center reserves the right to abstain from awarding the grants due to the lack of suitable candidates.

The concept/model that had the deepest impact while analyzing best practices at Tallinn University was that of the flipped classroom, the one that has been intuitively used during the master course at home university (though not in its extended version). The flipped classroom inverts traditional teaching methods delivering instruction online outside the class and moving „homework" into the classroom [3], i.e. the teacher/the instructor is recording/video-recording his lecture and sending it to students (or is uploading it on a common educational platform, on-line); students watch the lecture at home at their own pace, discuss it with peers or/and the teacher on-line. Concept engagement takes part in the classroom with the help of the instructor/teacher. Educational technology and activity learning are two key components of the flipped classroom model that influence students' learning environments in fundamental ways, as they can watch the short videos of the lectures (5 to 7 minutes) as often as they need, in order to understand and assimilate the information taught. Some learners (in my case, those studying a foreign language) are frustrated by the fact that there are stronger students in the class who manage learning things (in many cases grammar and pronounciation) quicker, so, in many cases they are tempted to give up interfering with the group, and learning the language efficiently. Using flipped classroom as a model for teaching theoretical aspects might help in these situations. This does not mean we need to skip teaching grammar in class, this means, giving students the opportunity to additionally revise the information as many times they need and to ask you the very questions that bother them. This will give the opportunity to escape extra explanation during several classes on controversial topics such as Reported Speech or Passive Voice, or Perfect Tenses etc. and will save room for practicing drills or communication. Flipped classroom might become a good opportunity for students missing classes for certain reasons, for instance, for master's students who are employed or live far away. This does not mean, they are allowed to miss all the course (periodic meetings with the teacher, at week-ends, for example, are necessary for getting answers to questions that appear during the course, which on-line communication will not always solve). This might also solve the problem of individual study somehow, as the students will have the opportunity to study extra information in order to find responses to appeared questions individually. The problems that may appear in our system can refer to the difficulty of teachers to structure and to record materials in short videos and share them on-line (fortunately, our teachers are willing to learn, so, employing IT specialists willing to share their experience and assist would be a solution to this problem). On the other hand, students might complain about lack of possibilities to access the videos, i.e. no necessary devices (computers, i-pads, telephones), no Internet connection, etc. this is not grounded, in fact, as there are computer rooms in all Moldovan universities and in many residence halls. It is necessary, perhaps, to design an introductory course on how to use electronic devices, social networking, blogs, Internet for an efficient learning activity, not just for fun.

In this respect, BYOD (Bring Your Own Device) would be a solution for lack of technologies in many institutions, as many youth own nowadays performant smartphones, i-pads, and lap-tops. A great asset in this case would be using QR-codes (QR=quick response). In order to use these, the learner will need a modern cellphone, smartphone or tablet and an application for scanning the QR-codes that is free. You can hide everything under QR-codes: video files, quizzes, audio files, short information on discussion topics. All the teacher needs is some time and experience in order to generate QR-codes with

interesting activities for their students. The problem for Moldovan institutions for both BYOD and QR-codes use is the lack of wireless networks and the fear that our students will not take the activities seriously and will use their devices just for accessing their social networks profiles and chat with friends.

We would like to believe that Moldovan teachers and students will acquire the culture of using technologies for their benefits: intellectual and cultural development, sharing knowledge and experience, searching for new opportunities, enhancing their skills, because we usually associate technologies to some monsters whose purpose is to waste our time and resources.

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