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## CHALLENGES OF BLENDED-LEARNING

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***Annotation.** Creation of the virtual environment as an educational resource to increase motivation and inquisition of the students is a great challenge for Russian educational system. The paper considers some issues of blended-learning. Some elements of blended-learning are analyzed through the ways they are implemented in Tomsk Polytechnic University.*

On the Internet you can find a huge variety of the content about blended-learning, but if you start to analyze it you will realize that you cannot immediately take and use it. Why? Because most of this content has been created by people who live in Europe and the USA, and here in Russia, we have our own educational system, mentality and technical capabilities. Thus, to take something from abroad we have to adapt it to our educational environment, to avoid rejection of new technologies. Let's sort out what blended-learning is and how teachers and students get adapted to a new learning environment.

**Blended learning** is a formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path and/or pace and at least in part at a supervised brick-and-mortar location away from home [1].

The first part is online delivery of the content and instructions: the facilities of Tomsk Polytechnic University are increasing day by day, teachers have their personal sites, where students can find content related to the subject and write a message to ask for help and instructions; the scientific-and-technical library is an available online source and some of the teachers are considering the creation of high quality audio/video lectures. This may be regarded as one of the steps to a massive open online course (MOOC) like OpenCourseWare (OCW) of Massachusetts Institute of Technology [2]. OCW provides more than 2200 courses, which are available 24/7 for anyone. Everybody can enrich and share their knowledge; teachers can take a closer look at how other professors are organizing and teaching their classes.

The second part of the definition is the possibilities that enable students with an element of control over time, place, path and/or pace to make their study more efficient. **Time:** Learning is no longer restricted to the school day or the school year. The Internet and a proliferation of Internet access devices have given students the ability to learn anytime. **Place:** Learning is no longer restricted within the walls of a classroom. The Internet and a proliferation of Internet access devices have given students the ability to learn anywhere and everywhere. **Path:** Learning is no longer restricted to the pedagogy used by the teacher. Interactive and adaptive software allows students to learn in their own style, making learning personal and engaging. New learning technologies provide real-time data that gives teachers the information they need to adjust instruction to meet the unique

needs of each student. **Pace:** Learning is no longer restricted to the pace of an entire classroom of students. Interactive and adaptive software allows students to learn at their own pace, spending more or less time on lessons or subjects to achieve the same level of learning [3]. The plenty of these varieties provide a wide discretion for both a teacher and a student. Their roles have changed. A teacher is not a severe master anymore; he/she is more like a guru. A student gets more freedom and a huge responsibility. Is our educational community ready for this? Not really, and not all of us. Freedom of choice can ruin everything in a moment, a teacher cannot be sure that a student will find time, place, path and pace for studying. Nowadays motivation is a commonly used word. A guru, who is able to motivate students and who has such a tool as blended-learning, can provide the society with high-qualified specialists.

The majority of blended-learning programs resemble one of the four models: Rotation, Flex, A La Carte, and Enriched Virtual. The Rotation model includes four sub-models: Station Rotation, Lab Rotation, Flipped Classroom, and Individual Rotation [1].

The most outstanding is a rotation model — a program in which students rotate between learning modalities within a given course or subject, at least one of which is to be online learning. As a TPU student I can say that some teachers implement elements of blended-learning. They successfully use rotation model activities. For example, the teacher gives us a practice task. To find the solution we can ask a lot of questions, but we never get a straight answers. The teacher guides us to the answer, teaches how to work with the content and find useful information. During lab sessions we work on the computers with no strict instructions how to tackle the task. We have to find our own way and in the end, everybody comes to one result implementing different techniques. Thus, the technology of blended-learning develops the abilities to enhance independent learning, critical and creative thinking, to devise a construction, idea or concept of our own.

Primarily, blended-learning may be applied to language classes where it is considered to be efficient. The class is divided into small groups working for a group project, getting information from virtual resources, then sharing knowledge and experience in the fast-changing and expanding language. We, as students, do not have rigid rules, however, we have traditions. For example, we start every lesson with news or any interesting content, which we share in the target language.

In conclusion, blended-learning provides students with experience of online learning, helps to acquire skills in micromanagement (any time, any place) and motivates for independent learning. The impact of blended learning and the challenges encountered are still to be measured and evaluated, and to be continued.

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