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## AN IMAGE OF A 21<sup>st</sup> CENTURY TEACHER

*K.N. Volchenkova, Ya.V. Semenova*

The paper describes the qualities of a 21<sup>st</sup> century teacher that any educator has to develop to equip students with the competences needed to be successful in a rapidly changing world. The authors singled out the 21<sup>st</sup> century teachers' characteristics and disclosed their content. The results can be used as a framework signposting the routes for continuing professional development for both preservice teachers and professional educators as well as for the development of professional teacher training programmes.

Keywords: 21<sup>st</sup> century skills, continuing professional development, teacher training.

It has turned into an axiom to declare that we live during a time of fast change, in which technological and social interruptions make remarkable unpredictability in all the spheres of human activities. A general public's ability to learn is key to its prosperity, however economic, social, and technological uncertainty put much pressure on human being's ability to adjust to change. Citizens of all ages need to make sense of ambiguity with the loss of authority that used to surround educational, political, scientific, moral, religious, and other cultural institutions [1].

Most educators nowadays realize that while in the industrial society the main focus of education was to contribute to the development of factual and procedural knowledge, in the information society of the 21<sup>st</sup> century the development of conceptual and metacognitive knowledge is considered increasingly important. A key instructive reaction to constant change is to center the education process on building up the skills and attitudes that give students the necessary tools to adapt to novel, complex conditions. Many education institutions are moving their educating and learning towards furnishing students with knowledge, skills and attitudes that set them up for long life learning, in an rapidly changing world.

Consequently, regardless of whether we do not realize what the future will be like, we can be better prepared for the main thing we are sure of – change. Therefore, the characteristics that students require have been named «21<sup>st</sup> century skills» because of their central importance in times of uncertainty, in a jobs marketplace where routine cognitive work will be increasingly automated.

What are these new qualities and competencies? Researchers offer different sets of 21<sup>st</sup> century skills though the key ones were presented in a 2012 review by Pearson and the Canadian National Council on Measurement in Education

where the educators identified the following essential 21<sup>st</sup> century skills: critical thinking, creativity, collaboration, metacognition, and motivation [2].

A US National Research Council committee suggested the skills being divided into three main groups. They identified *cognitive skills* (Non-Routine Problem Solving, Systems Thinking and Critical Thinking), *interpersonal skills* (ranging from Active Listening, to Presentation Skills, to Conflict Resolution), and *intrapersonal skills*, which are personal qualities that equip a learner (broadly clustered under Adaptability and Self-Development) [3, 7].

Russian Federal Educational Standards 3++ have the analogy for the world 21<sup>st</sup> century skills and describe them in terms of universal competences. Though the universal competences differ from specialism to specialism, the key categories are the same and we can admit that Russian system of tertiary education goes hand in hand with the world trends. Thus, the key categories of universal competences are critical thinking skills, project work skills, teamwork skills, communication skills, intercultural communication skills, lifelong learning skills.

Many researchers agree that traditional teaching is no longer sufficient to educate students for the 21<sup>st</sup> century. Teachers need to think about knowledge and education in new ways. To make the shift into the future possible an educator must be equipped with the tools to develop the key skills in his/her students with the focus on helping students create knowledge, not just accumulate knowledge. It is no longer enough to «fill up» learners with the knowledge they will need for life: rather, learners need to learn how to learn. Acknowledging and dealing with complexity, uncertainty and diversity is also central to 21<sup>st</sup> century education, as is the ability to think at a «system's level». Students across the achievement and socioeconomic spectrum need and deserve motivating, supportive instructional environments, engaging content, and the opportunity to learn in settings that support collaboration with peers, teachers, and the larger world community.

If we commit to a vision of 21<sup>st</sup> century knowledge and skills for all students, it is critical that we support educators in mastering the competencies that ensure positive learning outcomes for students. According to the American Association of Colleges for Teacher Education (AACTE) and the Partnership for 21<sup>st</sup> Century Skills these include:

- ✓ successfully aligning technologies with content and pedagogy and developing the ability to creatively use technologies to meet specific learning needs;
- ✓ aligning instruction with standards, particularly those standards that embody 21st century knowledge and skills;
- ✓ balancing direct instruction strategically with project-oriented teaching methods;
- ✓ applying child and adolescent development knowledge to educator preparation and education policy;

- ✓ using a range of assessment strategies to evaluate student performance and differentiate instruction (including but not limited to formative, portfolio-based, curriculum-embedded and summative);

- ✓ participating actively in learning communities; tapping the expertise within a school or school district through coaching, mentoring, knowledge-sharing, and team teaching;

- ✓ acting as mentors and peer coaches with fellow educators;

- ✓ using a range of strategies (such as formative assessments) to reach diverse students and to create environments that support differentiated teaching and learning, Technological Pedagogical Content Knowledge is a framework to understand and describe the kinds of knowledge needed by a teacher for effective integration of technology in all content areas [4].

Thus, what are the qualities of a 21<sup>st</sup> century teacher that he/she needs to develop? What is an image of a 21<sup>st</sup> century educator? Based on the literature analyzed and the teaching experience in higher education the authors offer a list of characteristics for a 21<sup>st</sup> century teacher presented below.

A 21<sup>st</sup> century teacher *exercises mindfulness*. Mindfulness means maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment. In terms of our professional activity, the surrounding environment plays the key role. To teach well in the 21<sup>st</sup> century we should be aware of the context: global and local. What are the learners' needs? What are the employers' requirements? What is the strategy of the university we are working at? How can we change the learning content to satisfy the requirements of both education standards and the society we live in? To answer these questions we should develop our research and analytical skills and, as a result, to make the right decisions in the classroom.

A 21<sup>st</sup> century teacher *engages*, does not entertain. One of the main misconceptions widely speculated among the teachers is that they are not in the classroom to entertain. This opinion is quite sensible as they are in the classroom to engage, not entertain. The concepts of «entertaining» and «to engaging» in education have quite different meanings. One of the greatest distinctions is that entertainment is often passive, whereas engagement is active or interactive.

In learning environments, entertainment and engagement look quite different:

- ✓ entertainment's primary purpose is to create an enjoyable experience while engagement's primary purpose is to focus attention so learning occurs;

- ✓ entertainment is ephemeral, often frivolous while engagement creates long-lasting results and deals with important issues;

- ✓ entertainment needs have little relevance to the reader/watcher/listener while engaging experiences most often relate directly to the learner;

- ✓ entertainment is an escape from problems while engagement involves solving problems;

✓ when problems are a part of entertainment, the solution is given while when problems are a part of an engaging experience, the learner supplies the solution;

✓ entertainment results through the creativity of others while engagement asks for creativity on the part of the learner.

Thus, entertainment is not the same as engagement while entertainment should be fun and exciting, engagement should be meaningful and developmental. Our charge is to provide meaningful engagement.

A 21<sup>st</sup> century teacher *researches new concepts and ideas*, and adjusts them to the education practice. Much research has been done in the field of education for the last decades and the science is constantly being developed. To be aware of the latest findings in the field a 21<sup>st</sup> century teacher should read and digest a lot of information.

Rethinking pedagogy for the twenty-first century is as crucial as identifying the new competencies that today's learners need to develop. One of the concepts widely studied today is how to better develop high order thinking skills. The findings described in the literature can give us the ideas how to do this.

Lai E. states [5] that to develop the higher-order skills the students now need, individuals must engage in meaningful enquiry-based learning that has genuine value and relevance for them personally and their communities. Recent studies have found that learners are more successful at acquiring new competencies when they build strong metacognitive abilities, reflect objectively on new concepts learned, and integrate that information with their existing knowledge and skills. The process of adapting new knowledge for their own use and incorporating it into their existing conceptual frameworks will support further learning. Once new learning is integrated into existing 'ways of knowing', this in turn nurtures creativity and originality and establishes new cognitive habits. Critical thinking skills are also enhanced. Deeper learning results when individuals bypass expectations to memorize and repeat disconnected facts and knowledge (with limited application), and instead seize opportunities to grasp difficult concepts and complex ideas, evaluate newly presented ideas, and summarize their own reactions and insights [6].

So, for an education practitioner nowadays to use the knowledge he got at the university is not enough, he/she has to review the literature on the subject and employ the best ideas into his/her educational practice.

A 21<sup>st</sup> century teacher *takes risks*. Students today live digitally every day. They use the Internet, text messaging, social networking, and multimedia fluidly in their lives outside of school and they expect a parallel level of technology opportunity in their academic lives. There is a disconnect between the way students live and the way they learn, and student engagement ultimately suffers. Closing this gap is a challenge for our current higher education. Thus, there should be a proper guidance for the students to make the use of these devices

positively. Teachers should find the ways to integrate the digital tools wisely into the education process for the students to develop their research skills. Taking advantage of student engagement in social networks and cultural trends can be a risk for teachers who are not as familiar with what is «current», but 21<sup>st</sup> century teachers do not mind. They know that this will increase the students' motivation to learn and be more likely to have experiences that they will not forget.

A 21<sup>st</sup> century teacher *advances adaptability*. Flexibility is essential. 21<sup>st</sup> century teachers know that the technology they use will be obsolete in 5 years. With more and more digital resources being offered every day, 21<sup>st</sup> century teachers know it is less important to teach how to use specific software than it is to teach their students how to find quality information, to think critically, and to problem solve.

A 21<sup>st</sup> century teacher *champions collaboration*. Teachers are getting professional development from each other by: using [professional](#) social networks like ResearchGate, Academia, Google Scholar, where they can share their wisdom and advice; participating in international conferences; becoming members of the communities of practice; networking and collaborating to realize research and professional projects; teleconferencing with [Google Hangouts](#), [Skype](#), or [Zoom](#). They work with students through learning management systems like [Edmodo](#), Moodle, Blackbird. All these activities allow them for global networking and getting support from peers as well as adapting to the current needs of the learners and administration. Teachers may build better links with colleagues, build stronger links to people and organizations within their communities, emphasize learners' growth through real-world research projects, perfect their skills in teaching learners to work together in small groups.

A 21<sup>st</sup> century teacher *reinforces reflection*. A 21<sup>st</sup> century teacher believes in reflection, not just as a way to improve his or her own performance but as a tool for students to do the same. Like promoting practice, teachers need to devote time after every learning experience for students to reflect and to decide what changes should be made. Giving this kind of attention to our own work allows us to improve it and to remember it better. Moreover, reflection activity is the way to improve and enhance our teaching and to plan the continuing professional development on the analysis made.

### **Conclusion**

Since the emergence of a global movement that requires a new model of learning for the 21<sup>st</sup> century, it has been stated that formal education must be transformed to enable new forms of learning that tackle complex global challenges. Literature on this topic offers arguments for transforming pedagogy to better support acquisition of the 21<sup>st</sup> century skills. However, the question of what qualities should the teachers have to equip their learners with 21<sup>st</sup> century skills is largely overlooked. In spite of worldwide agreement that learners need skills such as critical thinking and the ability to communicate effectively, inno-

vate, and solve problems through negotiation and collaboration, pedagogy has seldom adapted to address these challenges. Rethinking pedagogy for the twenty-first century is as crucial as identifying the new competencies that today's learners need to develop. One of the points to start with is defining the skills that 21<sup>st</sup> century teachers should have. We provided the list that is not exhaustive. The list that is the result of our reflection on the topic and that can be enriched in the future after a comprehensive research of the competences that are claimed to be essential for a 21st century educator to possess and constantly develop.

Equipped with the appropriate skills and tools multiplied by our mindfulness and innovative outlook we will be able to find our new Euclids and Einsteins. The truth is that they are out there just waiting for the 21<sup>st</sup> century teachers to engage them, to inspire them, to support them and to discover them.

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