KAKO KORISTITI AKTIVNU TABLU U UČIONICI

Snezana Stavreva Veselinovska[1]

Rezime: *U toku je realizacija projekta vlade Republike Makedonije "Kompjuter za svako dete". Septembra 2009 godine je završen projekat "TEMPUS" čiji nosilac je bio Pedagoški fakultet - Univerzitet "Goce Delčev" Štip, a u koji je bilo uključeno nekoliko osnovnih i srednjih škola sa teritorije istočne Makedonije. Jedna od prednosti ovog projekta je uvođenje aktivne table (Active board) u nastavni proces. Uz pomoć aktivne table mogu da se predstave različite nastavne sadržine i to tako da učenje predstavlja izazov, da bude zabavno i aktivno. Aktivna tabla je prozor u svet, svet u koji pristiže nova tehnologija! Cilj ovog rada je da razmotri prednosti i nedostatke korišćenja aktivne table u tradicionalnoj i modernoj nastavi pri izučavanju nastavnih sadržina predmeta "Uvod u životnu sredinu" za III razred devetogodišnjeg osnovnog obrazovanju.*

Ključne reči: *aktivna table, informatičko društvo, IKT, nastava*

HOW TO USE AN ACTIVE BOARD IN THE CLASSROOM

Summary: *The project of the Government of the Republic of Macedonia "A computer for each child "is in a process of realization. Meanwhile, TEMPUS, the project whose beholder is The Faculty of Pedagogy of The University of "Goce Delcev" in Stip, in which a few elementary and high schools from Eastern Macedonia are also included , is in a process of realization as well. One of the achievements of the project itself is introducing the active board in the educational process. Various educational contents can be displayed and be presented in a way that makes learning challenging, fun and active. The active board is a window towards the world, a world in which the new technology is about to arrive! The goal of this project is to realize the advantages and disadvantages of using the active board in the traditional and contemporary education, for learning the contents of the subject "Introducing the environment" for third grade in the nine-grade primary education.*

Key words: *active board, society of informatics, ICT, educational process.*

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1. INTRODUCTION

 In a country that is strategically devoting itself to create a qualitative movement towards the European system of values, young population's education is of essential importance and with the highest potential.

 If we take into consideration the fact that teachers are in the foundation of the educational system and that they directly influence the attitudes and perceptions of young generations, the possibility of introducing e-learning into teachers' education does not have only educational but also a much wider significance for the society. It will be a channel for injecting changes ina a way that is simple but appealing to young people. Through this channel they will approach European standards and quality, they will share a common educational and cultural area, and they will improve their professional performance and competitiveness.

Furthermore, as e-learning is a universally accepted "language", it will also be an opportunity to strengthen multiethnic communication and cooperation.

In order to make this significant step it is necessary our European partners to transfer their knowledge and to share their experiences with us.

Although during the last decade some changes are obvious, still the sector of teacher education has been traditionally neglected compared to other areas of higher education. This has direct influence on the quality of elementary and secondary education where we still have a low level of services on the part of teachers, consevrative teaching practices, complete non-connectedness or a low level of cooperation with other educational institutions, relatively poor resources, high unemployment rate. There are many socio-econimic reasons for this, but in the frames of the educational system the problem is located in poor education offered by teacher training faculties.

Information society takes the educators to the future where they will depend on modern ICT. Technological expansion, although modest compared to the region, is especially noticeable in schools. Teachers have access to some resources that allow them, at least in theory, to introduce innovative methods. Some believe that expert staff will readily embrace the technological revolution if schools/faculties have several computers in each classroom and a computer laboratory in each school or faculty. And, as a result of this, children/students will become good computer users; teachers will become computer literate, which in turn will lead to curriculum improvement. However, this is not the case.

In 2003, as part of a qualitative research project, a thorough interview was realized with a considerable number of teachers from elementary and secondary schools in the country. The goal was to investigate the attitudes and perception of modern technology. The findings were frustrating. They found that teachers do not recognize the need for incorporating technologies into the teaching process, or do not understand the connection between computer skills and learning in the classroom (80%). Not only do many teachers lack confidence in using the available technology, but they are also incapable of seeing its potential, which, in a way, is contrary to their traditional methodology. Very few teachers understood the essential difference in incorporating technologies as an integral part of the teaching process. In addition, they are not ready to share the generation right of the children to use new technologies.

The quality of teacher education should be improved to a new paradigm. Technologically supported learning should be incorporated into the teachers' curriculum. There is a simple

lack of understanding that the integration of technology really means developing the curriculum; technology development should not focus on technology itself but on the curriculum. Some bad usages of technology were noticed, not because technology itself was bad, but because the users did not understand the need to reform the curriculum and did not put technology into that context. Through a sound theoretical and practical work, the curriculum should provide unity of cooperation among all the participants in the process: university teachers, students and teachers from this area. This is not a trivial issue aas the integration of e-learning into the teachers' curriculum changes the whole paradigm of the teaching and learning process. This brings about a considerable change of direction towards learning focused on students and a higher level of students' expertise concerning individual interests and abilities, and because uncritical acceptance of technology in various educational surroundings in the country has proven counter-productive.

In august 2002, under direct guidance of the President of the Republic a strategic document "E-declaration 2002" was prepared by the Committee "E-Macedonia for all" and it was accepted by the National parliament. A considerable part of this is the component E-learning containing a strategic devotion to support efforts and projects that treat the implementation of modern technologies at all levels and forms of education.

In its strategic plan University "Goce Delcev" in Stip points out the incorporation of ICT in the institutions of higher education, primarily in the teaching process, as high priprity.

2. NEW TOOLS, NEW SCHOOLS

The world is changing, our students have changed, and traditional schools are no longer able to educate young people for the future.

Have schools changed? Some have and more are adopting new practices. These are the new schools we mean in the title. What we suggest is that to be a truly new school, it has to model new ways of teaching and learning, and of using new tools. It has to have at its core an interest in helping its students to be successful in the 21st century in work and play, and in all other aspects of living in a world that promises only change as the norm.

Luckily, students are off to a good start, technologically at least. Today's young people have grown up with technology, use it as a matter of course, and never knew a world without it. We already know that certain types of pedagogy lend themselves to helping students develop 21st century skills. Now it is time to put these methods together with new tools.

There is no shortage of tools. Постојат голем број на applications that are enticing people to create, communicate, and share online. These tools are growing increasingly robust, supported by a community of creators. For the most part, our students know how to use these tools for their own purposes. Schools must help them to use the tools to learn as well as to satisfy intellectual curiosity. In addition, we are beginning to see the development and collection of another category of tools free Web-based educational applications.

Technology alone will not solve every educational problem. Some issues are intractable, but adding technology into the mix just help, and in unexpected ways.

It is possible to educate or form only by means of upbringing (character forming). The only method of educating is upbringing, That is why education does not have its own methods but borrows them from upbringing. Which methods are applied depends on the level of acquired pedagogical knowledge and the level of society's development. In the first case the choice of methods is the content of a separate pedagogical science – teaching methods.

If we are speaking about the influence of the society's development on the choice of upbringing methods, we are entering the sphere of sociology and other social sciences. Then, upbringing is a social process or a process of making the following social: knowledge and skills, will and habits, and moral and beauty.

Upbringing and education are realized with the help of educational means. Educational means are institutions, formal and informal groups of influence. In this way, educational institutions and educational associations are at the same time a means in a wider sense of the word, and forms of young people's organizing and work. (Milenko S. Stojnic, 2009).

As we are directly involved in education, we already know that nothing is simple. One of the questions being asked is "What is the aim of using ICT tools?"

All we know is that there is no simple answer to this. At least we are still talking – and discussing. Perhaps we will not agree about the goals of education or not know what functions in all cases, but at least we can hear the promising note about the use of technology in schools. A number of proofs show the significant role of technology in young people's education today.

What is their potential? What will the future be? While there crystal ball, look at promising ideas a few tutorials to help you get started using some of the tools. Of course, underlying all the positive implications for new tools new tools in new schools, there is a dark side too. According to Miguel Guhlin (2006) "Social networking tools like MySpace (or Fecebook and Bebo) and YouTube grant freedom of speech and assembly to the masses in a way the American Revolution never could. For this reason, disruptive technologies are the greatest threat to the powerful who have traditionally controlled the means of publication…and that includes our schools".

As teachers at pedagogical faculties and educators of future educators of children of pre-school and school age, and as someone who cares about the future of teaching, we must use the innovations of information technology offering wide range of computer tools. We hope that elementary school teachers will also discover new possibilities and change the manner of teaching new teaching contents that would be more inspirational to pupils. We hope that professors will change their ideas about preparing their students. We believe that new solutions offered by new technologies can improve education and prepare students for future. Nowadays, technology is promoting its ability to make many things different.

3. 21ST-CENTURY SKILLS

As society and the world of work change, the skills that students need to live and thrive in it also change. The competition will be fierce and can come from anywhere in this flat word. In some ways, students today are ahead of their elders. Technology is second nature to them and they accept and use it without question. Schools lag behind.

The shift to new tools can have a profound effect on schools and learning, causing a transformation in thinking. This will happen because the tools promote creativity, collaboration, and communication, and they dovetail with learning methods in which these skills play a part. New tools enable that possibility.

The old way of doing things is presentation driven information is delivered and tested. This approach prepares students for jobs that require simply following directions and rote skills. The new way is collaborative, with information shared, discussed, refined with others, and understood deeply. It prepares students to become part of a nimble workforce that makes decisions and keeps learning as the workplace changes. What makes the difference is

preparing students with 21st –century skills using a flexible approach rather than teaching just what will be tested.

4. STUDENTS AND LEARNING

While using the Web has changed the world and the workplace of the 21st century nowhere has it had a greater effect than on the lives of young people. They play video games, communicate using text messaging and instant messaging, conduct Internet searches, download music and share files, and use the Web for homework. These technologies have always been available to them. Their parents and teacher and the rest of use who weren't born into a technologically interactive world have to struggle to keep up.

Marc Prensky is a speaker, writer, and educational software game designer whose theory about the differences between today's teens and the adults in their lives defines the generation gap. He calls students digital natives, people who live in a world technology is omnipresent. He calls their parents and teachers digital immigrants, well-meaning adults who have to work at being comfortable with technology.

According to Prensky (2001), today's students:

- ❑ Are no longer the people our educational system was designed to teach
- ❑ Have not just changed incrementally from those of the past our students have changed radically
- ❑ Represent the first generations to grow up with this new technology
- ❑ Thing and process information fundamentally differently from their predecessors
- ❑ Are all "native speakers" of the digital language of computers, video games, and the internet.

Of course, many adults are just as comfortable with technology as the most advanced teen. And, unfortunately, many students cannot 24/7 access to technology and thus cannot be facile. However, the definitions are useful for understanding that today's student's are likely to be a wired generation and that today's teacher and parents are likely to need a little help from their young friends.

5. ACTIVE BOARD

The Promethean Active Board is in the heart of revolutionary learning which focuses on accepting and celebrating individual unique needs and abilities and obligates all pupils, one by one, to connect with it. Active board is a real interactive solution for learning. It is mounted on the wall, with adaptable height and is easily raised and lowered. The projector is near and it minimizes the shadow and projects pictures with very clearly thus attracting the attention of pupils, and the sound system enables everyone in the room to hear what is being taught. Using the Promethean active board we can easily create lessons with an innovative approach to learning that include: touching, listening, watching and understanding.

Characteristics and benefits:

- ❑ Saves money and time
- ❑ Adaptable
- ❑ Minimizes lighting and shadowing
- ❑ Does not require any special maintenance

6. DO YOU SPEND TOO MUCH TIME IN THE CLASSROOM?

Do you spend too much time in the classroom preparing materials for lectures? An on-line research carried out by Promethean with about 10 000 teachers resulted in amazing findings about their balance life-work, and it was found that work increasingly occupies a greater part of their lives. The questions asked in this research were from various areas such as using technology in teaching, from practicing to marking, discovering the precise life-work balance of teachers from primary and secondary schools. 38% of teachers wanted to reduce the time spent for preparing lessons, school work and research for lessons.
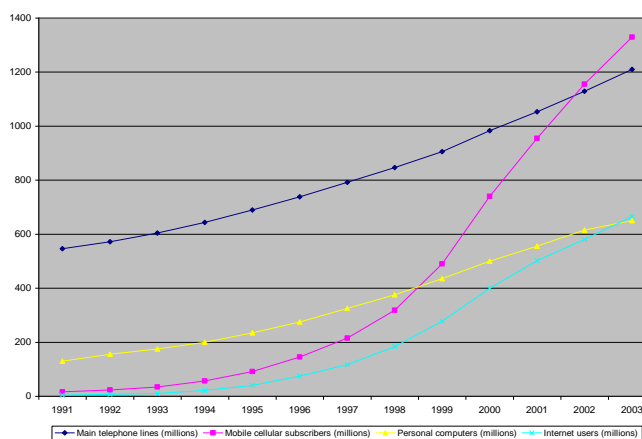
 Increase in ICT tools access

Active board is designed to enable interaction between teachers and pupils and interaction with the teaching material. Active board is the key for the creation of really dynamic lectures. These software packages have built-in educational resources for enriching pupils' experiences. Pupils and teachers are able to cooperate by using the active pen.
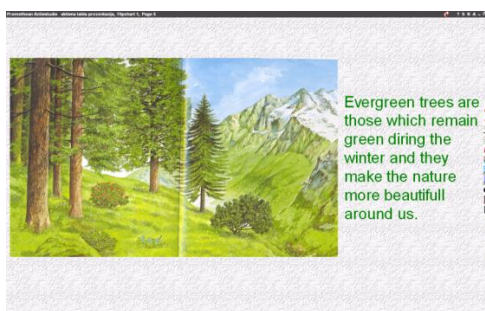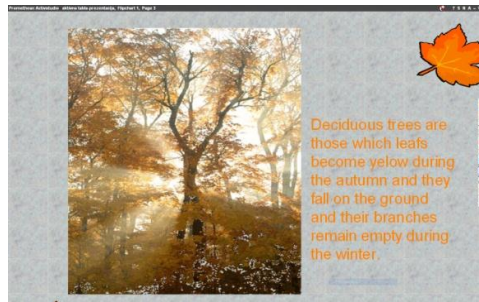
Both teachers using active board and pupils travel together into a new stage of education. Interactive boards all over the world transform the classroom into an alive and enjoyable environment where pupils are guaranteed to have the freedom to learn what they like, and this is great. Interactive boards make it possible to project everything from the computer screen onto the active board. Even simple sounds and pictures can seem magical when they are presented on this type of board. Pupils can be encouraged to use measuring tools such as interactive rulers, callipers and protractors. Engage pupils; senses by using various colours and pictures that will make the lecture successful. You can then notice they smile and look forward to the next school day.

7. DAILY LESSON PLAN, GETTING FAMILIAR WITH THE ENVIRONMENT

Realizer:	Boskova Katerina
Mentor:	Vaska Zajkova
Date of realization:	23.10.2010
School:	"Vanco Prke"- Stip
Class:	Grade III-2
Teaching topic:	Characteristics of my environment
Teaching unit:	Forest trees
Educational aims:	Pupils acquiring knowledge about deciduous and coniferous trees
Educational цели:	Developing pupils' interest in forest environment and the flora that can be found there.
Functional aims:	Gaining abilities for distinguishing deciduous from coniferous trees in the forest
Teaching aids:	- Textbook; - Active board and its equipment;
Teaching methods:	- Conversation method; - Illustrative –demonstrative method; - Independent pupils' work; - Dialogue method.
Teaching forms:	- Frontal form; - Individual form; - Group form.
Lesson articulation 1 Introductory part:	I begin the lesson with introducing the teaching unit to the pupils by showing a variety of pictures of forest trees on the active board. I start conversation with the pupils: Q: What kind of trees do you see in these pictures? PA: (I see coniferous and deciduous trees).

	Q: What colour are they? PA: (They are green, yellow and yellow-green). Q: Which leaves are yellow? PA: (Leaves on deciduous trees are yellow). Q: Which leaves are green? PA: (Leaves on coniferous trees are green, but deciduous trees also have green leaves in spring and summer). Q: Which coniferous and deciduous trees do you know? PA: (Deciduous trees are: linden-tree, poplar, oak, beech etc., and coniferous are: pine, fir tree and juniper tree).
2. Main part :	In this part I present the teaching content. I write the title of the lesson on the active board. I point out that there are 2 types of trees in forests, and they are coniferous and deciduous trees. Then I show them pictures of forest trees (pointing to the two mentioned types of trees), I tell them that deciduous trees lose their leaves in autumn and that is why they are called deciduous. I ask the pupils: Q: Do you know which products are made from forest trees? PA: (Furniture, paper, firewood, etc.). Q: What grows underneath forest trees? (I show them a picture) PA: (There grow blackberries, raspberries, wild strawberries, and mushrooms)
3. Final part:	At the end of the lesson I give pupils a task on the active board and they should pick from the given trees those that belong to forest environment. I ask several pupils to do this task but for different forest environments. Then the pupils do a quiz using the joysticks of the active board.
Activity in pupils:	• Listens; • Answers questions; • Actively participates in teaching; • I write;
Activity in teacher:	• I explain; • I show; • I answer; • I describe; • I write.

8. PROMETHAN ACTIVE STUDIO QUIZ
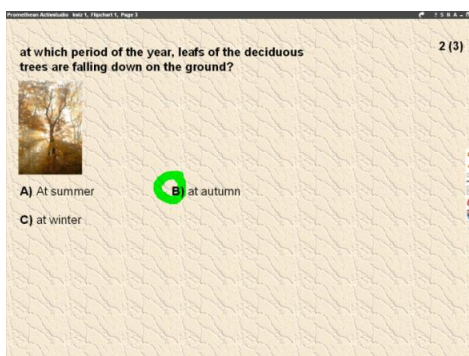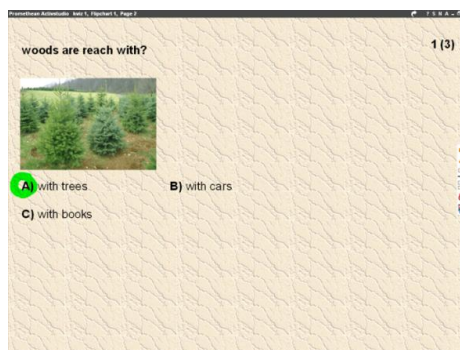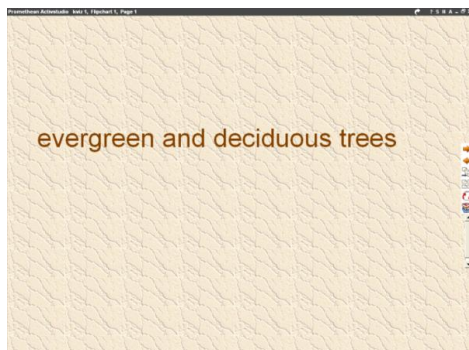
9. CONCLUSION

The present changes in learning practices can be seen through the following trends in the educational process:

- ❑ From linear to hypermedia;
- ❑ From instruction to construction and discovery;
- ❑ From education focused on teachers towards education focused on pupils;
- ❑ From learning to absorbing materials to learning how to cope and learn;
- ❑ From school to lifelong learning;
- ❑ From a single manner of learning the same for everyone to an adaptable learning style;
- ❑ From learning as torture to learning as fun, and
- ❑ From teacher as a transmitter of knowledge to teacher as a man who helps and facilitates the learning process.

The goal which is to enable children to become motivated pupils, critical thinkers and problem solvers can be achieved only with such a form of learning that provides the pupil with the necessary tools for participating and join the learning process.

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