ISSN 2310-4090

International Journal of Scientific Footprints

Open Access

Education of "Net Generation"

Iglika Dimitrova Getova[1]

[1]Assistant Professor, University of Library Studies and Information Technologies – Sofia, Bulgaria

Keywords:
Smart learning; interactive whiteboards; net generation; information communication technology.

Correspondence:
Iglika Dimitrova Getova. University of Library Studies and Information Technologies – Sofia, Bulgaria
E-mail: i.getova@unibit.bg

Funding Information:
No funding information provided.

Manuscript History:
Received: January 2016
Accepted: March 2016

International Journal of Scientific Footprints 2016; 4(1): 10–16

Abstract

As a result of the development of information and communications technologies over the past two decades, it is now emerging the so-called "Net Generation". In this connection, we will examine the need for the new generation of knowledge acquisition causing changes in the educational process, techniques for providing updated information in an interesting and entertaining trick. The aim is to satisfy the demand of the modern generation of innovative ways of learning, and so it can be engaged in the learning process. Today students from birth grow up with digital technology, which is a reason to work in an interactive environment - where learning is an experience and involves high levels of sensory stimulation. There is no worksheets, rote learning and lecture based teaching. The article discussed many interactive methods of training and development of personal desires in the learner.

Introduction

The rapid development of mobile technologies, wireless communication and sophisticated technologies allow for development modern learning environments that require real-world training for students. Smart training represents an association of educational institutions and professor-teaching staff to implement a joint educational practice in the Internet network based on common standards, agreements and technology. Through joint development and use of the content of general training, the Bologna process enables universities to admit students without retrial, thus creating, Smart educational system for Europe. Single European University will carry out a collective learning process through a single repository of training materials. On the other hand Smart education is flexible learning in an interactive learning environment using content from around the world, which is in the public domain: Smart education - wider dissemination of knowledge [6].

The objective of intelligent life is to make learning more effective due to the transfer of the educational process in an electronic environment. This approach will copy the knowledge of teachers to provide access to all comers. Furthermore, it will expand the range

of the training not only in terms of the number of students, but also in terms of time and space. Training will be available anywhere, anytime. One of the conditions for the transition to smart e-learning is the transition from book to active content. Only knowledge in electronic form can be transmitted with the greatest efficiency. This knowledge should be placed in a repository, which implies the existence of an intelligent search engine. And the mere publication of such content repository will not be enough to activate it. All objects of knowledge must be interconnected by a system of metadata.

Smart training can be seen in the context of five characteristics: knowledge, technology, teaching, teachers and businesses. "Before," the only source of knowledge for students was the teacher and students learn new skills in the classroom or from a book he recommended it. The aim of the university is to train specialists for industrial production.

"Currently," knowledge is transmitted not only from the teacher to the student, but also between students, which allows creating new knowledge. In turn, actively begin to apply educational technology and teachers can carry knowledge not only in the classroom. Business needs specialists trained in the knowledge society.

The "future" is the main source of knowledge for students will be Internet technology. The process of training will include knowledge of the movement of objects in all directions from student to teacher and vice versa, from student to student, etc. The graduate will not only be an expert in his field, but he will be able to join in the business environment as a partner or developer.

Over the last decade actively shape digital society with attributes such as knowledge economy, e-army, e-culture, e-health, e-government, e-science. E-learning is implanted in the structure of the digital society and is a leading element. However, when we talk about e-learning, the focus is primarily on technology. Today, the technological development of the leading universities in the world has reached a point where further development of the information base will bring new quality changes. Educational content is freely available to students, providing feedback to teachers - students, exchange of knowledge between them, automation of administrative tasks.

Develops the need for a higher level of education (Smart education), corresponding to the challenges and opportunities of today's world, allowing young people to adapt to rapidly changing environmental conditions by providing the transition from book to active content.

Using interactive methods alter the essential functions of the teacher in the educational system, which in turn leads to overcoming the stereotypes in training: development of new approaches to professional situations and develop creative abilities. Through interactive methods the trainer abandons its traditional role and makes the students involved in the process.

Learners in this educational process are full participants in it, and their experience is a major source of educational knowledge. The teacher plays the role of host, i.e. he/she gives ready knowledge and incites participants to independently search for a solution. Thus interactive learning changes the interaction

between teacher and student. Educator activity gives way to the activity of the students; his task is to create conditions for development of their initiatives. Educator gave up his role as a kind of filter, transmitting specific school information, and serves as an assistant at work and one of the sources of information.

The use of interactive training models require modeling life situations, using RPGs and joint problem solving and excludes dominance of any participant in the learning process or idea. [2] Thus laying the foundation for the integration of students in the educational process.

All this provides high efficiency in the training of so-called. "Net generation". It is unique in nature as it has grown up with digital technology and this gives grounds to assert that not only is technologically literate, and technologically dependent. Daily use of digital technology leads to development in "net-generation 'skills, understandings and ways of thinking very different than previous generations. [5]

The interactive teaching methods represent such organization of the process in which it the non-participation of the learner in the collective, harmonious, interaction-based technique is not possible. The so-called interactive learning environment is differentiated through the introduction of interactive models. It defines giving knowledge in finished form to its individual learning through new knowledge.

The interactive learning environment is a prerequisite for removing mental blockades and encouraging creativity. Globally are also known the so-called association techniques. In the middle of the last century, in the German marketing magazine Absatzwirtschaft the researcher Bernd Rorhbah published an article concerning an innovation process for stimulation of creativity, offering the 6-3-5 method structured as Brain writing technique [3].

At the beginning of the last century, Alex Osborne found a method for making decisions in a creative way (brainstorming). The method is guided by two principles of conceptual efficiency, namely: postponement of decision and reaching of amount. The general rules of brainstorming are determined on this basis – reduction of social reticence among members of a specific group; stimulation of ideological production and increase of the group's creativity

Methodology

Introduction of modern interactive teaching methods increases the interest of students to classes and their active participation in the learning process itself. The advantages of online resources in comparison with the traditional ways of presenting educational content:

- Interest of students to classes;
- Active participation in the learning process;
- Better assimilation of the teaching material;
- Integration with information systems;
- Electronic transmission of teaching materials.

In the 90s of last century, SMART boards were introduced. This innovation is

developing rapidly by creating technologies to make learning a different and entertaining. So assist teachers and students to work together more effectively by providing them with tools to create powerful educational experience.

SMART boards are interactive flat panels that function as part of the system; including the interactive whiteboard, computer, software, projector and whiteboard other known devices are jointly Smart Notebook software for education and Smart table. The components are connected wirelessly through a USB or serial cables. The projector is connected to the computer and displays the image on the desktop of the interactive whiteboard. The board is controlled by the touch of a finger, pen or other hard object. Interactive whiteboards are available as flat panel display - interactive surfaces that fit over plasma or LCD displays. SMART boards use technology Digital Vision Touch (DViT).

DViT technology is the only one that offers the following features:

- Crystal clear images;
- No requirement for own tools;
- Applicability of a wide range of sizes and types of surface;
- Speed and accuracy [7].

Figure 1. Various Tools for Smart Learning

Due to the increase in computerization nowadays have to provide a better learning environment than with previously known methods. Such is precisely the replacement of blackboards in classrooms (audiences) with so-called. Interactive boards, requiring only white touch screen integrated into computer that is connected to a multimedia projector

This modern alternative to traditional teaching provides an opportunity for students and teachers to write and draw in real time, save the changes and send them to all participants in the teaching process. Notes in real time on materials from the educational content can be entered on easily accessible computer format [2, 3].

Figure 2. Interactive Learning

Advantages of interactive boards

- Help to expand the use of electronic learning devices.
- Allow the teacher to increase the qualitative and quantitative results in the learning process by:
- Rich illustrative material to the lesson;
- Table, text file, map;
- Audio and video applications to the lesson.
- Allow students to absorb information faster.
- Allow students to participate in group discussions.
- Allow students to perform work together to solve a common problem posed by the teacher.
- Provides opportunities to test the knowledge of the students.

Disadvantages of interactive boards

- The image or the material represented on the board can be closed by a person located close to it.
- The interactive board must be protected against damage and others.
- It must be calibrated after each transfer to a new location.
- If the interactive board allows remote access, some users may send unacceptable message or picture on the screen.

The main advantages of interactive board according to experts is that this kind of innovative teaching increases the attendance in classes and engages learners themselves in the more active learning of the teaching material. Moreover, interactive boards are quite universal in the sense that their application is not limited only to work in schools – they can be used everywhere - on meetings, presentations and training events. Their prices are comparable to those of projection equipment, but the investment is long-term and the necessary maintenance is minimum [2].

The interactive boards' surface is a touch-sensitive screen, on which objects can be manipulated by touch the same way it is carried out using a computer mouse on the computer display. On the board, for example, one can open folders, move objects from one location to another, draw lines, symbols, ovals, highlights and others.

The use of interactive boards is widespread in

many European countries and an integral part of modern methods of business presentations and teaching in schools in the western part of the continent. For our country, however, this type of technique is a relatively new phenomenon, whose virtues have only recently begun to gain popularity [1].

Stages in lesson preparation with interactive board:

1. Determination of topic, purpose and type of the lesson;

2. Formulation of temporary structure of the lesson in accordance with the primary purpose; determination of the tasks and the steps necessary to achieve them;

3. Clarification of the stages for which the interactive board's tools are necessary;

4. Selection of the most effective means (consideration of the appropriateness of their use in comparison with traditional means);

5. Assessment of the duration of the selected materials, taking into consideration their interactive nature;

6. Formulation of a time breakdown of the lesson;

7. Arrangement of the collected materials in presentation (on the corresponding software), on a given lesson scenario;

8. Preliminary preparation of students for the interactive board lesson;

9. Testing of the lesson.

The board is actually only one part of the so-called interactive presentation system, which also includes a computer (it may be mobile) and multimedia projector. Broadly speaking, the interactive board acts as a computer screen, while keeping its main role – to be written on it. With the help of the multimedia projector can be made presentations of the lessons and the teacher can make notes or mark individual topics and passages on the screen. The changes and lessons made on the board can be distributed over the network at the school or university through the connected Teacher PC. It also gives the students the opportunity to participate actively in their classes and present their presentations and materials.

The learning process based on the use of interactive teaching methods organizes the inclusion in the technology of knowledge of each student group, without exception. The joint activity means that each student brings their individual contribution in the course of work with the purpose to exchange knowledge and ideas. [4].

Results and Recommendations

Trending innovations in ICT give more and more impact on the educational process. High technological advances provide innovative ways, such as interactive training methods by introducing a new technique for demonstration of educational content.

Each learner prefers to attend lectures (lessons) in which there is attached a novelty, i.e. training material to be taught in an interesting and engaging way. Using interactive methods reduces psychological barrier, i.e. it allows learners to overcome their concerns about the technique and begin to better use modern technology. The trainees quickly learn the methods of work, watching the teacher and their classmates. It should be

noted that after numerous tests and observations during these lessons even lagging students change their behavior, follow with interest the progress of the lesson and fulfill the task set by the teacher. Here burnished factors associated with increasing student motivation and visibility in the presentation of the material.

For participants with high cognitive motivation may provide additional individual tasks to be performed on the computer. Especially helpful is to attract such students in the preparation and conduct of the individual fragments of the lesson using the interactive whiteboard. The individual approach can be applied not only because of the different level of tasks, but also for self-education and self-activity of the students

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