

MANAS Journal of Engineering

Volume 5 (Issue 2) (2017) Pages 72-76

Case Study of using the ICT in Life Security Education

Nurbubu Asipova

Kyrgyz-Turkish "Manas" University, Chyngyz Aytmatov Avenue, 56, Bishkek, Kyrgyz Republic

n-asipova@mail.ru

Zamirgul Kazakbaeva

Kyrgyz-Turkish "Manas" University, Chyngyz Aytmatov Avenue, 56, Bishkek, Kyrgyz Republic zamira.kazakbaeva@manas.edu.kg

Received:06.03.2017; Accepted: 06.07.2017

Abstract:

Security of a society and individuals is of major concerns of the modern world. The lack of knowledge about life safety rules among youth leads to tragic outcomes. This requires targeted training children and young people the basics of life safety using the ICT. Our objective is to show how to use ICT in raising awareness of students about kinds of threats, including domestic, technological and social ones, to demonstrate the ways of using ICT as an essential tool and how to use it in emergencies. It is the main reason of our activity in this field, such as production of our own video lessons, social network and other Internet applications as the main teaching tools. However, one of the main problems at secondary schools and higher educational institutions is the lack of video lessons in Kyrgyz language. Therefore, we use our original video tutorials and other Internet applications in class.

Keywords:

Life safety, threats, video lessons, multimedia, human security education, Net Support School

information technologies.

Опыт использования ИКТ на занятиях по основам безопасности жизни

Аннотация:

Безопасность общества и личностей находится в центре внимания современного общества. Это требует целенаправленного обучения детей и молодежи основам ОБЖ с использованием ИКТ. Наша задача показать, как использовать ИКТ для формирования представлений учащихся о видах угроз для жизни в разных возрастных группах молодежи, включая бытовые, техногенные и социальные предпосылки угроз. Продемонстрировать, как можно использовать ИКТ как средство обучения безопасности жизни, как делать поиск информации с помощью Интернет, как использовать ИКТ как средство своевременной связи в чрезвычайных ситуациях, и т.д. Для этого мы используем на занятиях по ОБЖ, авторские видео уроки, социальные сети и другие приложения Интернета как средство обучения. В связи с тем, что в школах и Вузах существует большой недостаток в видео-уроков и других интернет источников на кыргызском языке, мы предлагаем свои разработки уроков с использованием ИКТ по ОБЖ.

Ключевые слова:

Безопасность жизни, ИКТ в образовательном процессе, видео уроки, новые

образовательные технологии.

1. INTRODUCTION

Main task of this work is teaching schoolchildren the Basics of Life Security using the computer technologies, usage of which will be especially helpful during the process of teaching the Basics of Life Security. Computer technologies provide following advantages:

- quick acquiring the knowledge and necessary information;
- quick spreading of necessary information among close relatives, friends and others, i.e. informing the environment;
- visual education, which means easy perception of basic information on the Basics of Life Security;
- effective processing the data about extreme situations, condition of population being prepared to extreme situations and getting an exact solution at the exact moment;

Video lessons help to increase the interest of students in the subject and their activity throughout the lesson. Today, video lessons are the quickest and most effective method of teaching, which leaves all other methods far behind by the price/quality criteria.

It was pointed out that text information is perceived much worse than visual. Students usually remember only 10% of what they read, 20% of what they hear and 70% of what they participate in.

When teaching is held in a video format, student is involved and participates in it, because he/she can repeat all actions directly after the instructor. Students can rewind the videoteacher and listen to him as many times as necessary. They are involved in the process. All the information they see and hear can be immediately applied in practice.

2. THE STUDY

In the solution of the above mentioned problems the special role is given to the modern computer technologies, which are actively used in education. The usage of information computer technologies (ICT) in the studying process will increase the effectiveness of education. Taking all this into consideration, there were developed effective and colored slide show, video lessons and the ABC of Life Security education.

Pedagogical advantages of video lessons:

- You can start watching video anytime when it is comfortable for you;
- You don't need to spend money on tutors;
- You can watch video lesson by yourself or with your classmates under teacher's control:
- In video format student can repeat all actions of teacher, who has designed the course;
- You can play forward the "Video teacher" and watch so many times as it is needed;
- You are in the process and you are watching each action (movement) and word of "video teacher";
- You can practically use all material you have learned;
- Result is well-learned knowledge, fixed skills and work experience with video

In order to prepare for video lessons, we can use modern computer graphics and audio editing applications, such as Adobe, Corel and Sony. They are used for processing raster graphics, vector graphics, video, animation and multimedia (see Figure 1).

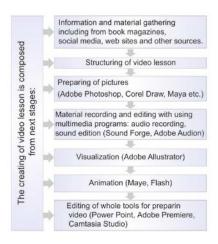


Figure 1. The creating of video lesson is composed from next stages.

Here you see an information portal about Life Security education. This website is regularly updated. Our portal is created in such a way, that children can get not only theory, which would be useful in dangerous situations, but also they get skills to keep their lives secure.

Materials are given in the form of games, and they have interesting and attractive context, bright and smartly illustrated examples. Using this program, children can find a lot of useful advices on Life Security, special multimedia and video materials and safe and secure work tests.



Figure 2. Information portal about life security education.





Figure 3. Security classes using Video lessons

During the lesson, we use Net Support School Professional, which helps to design effective lessons and promote active learning.

- Demo Screen to Student's PCs everyone has a Front Seat
- Highlight Areas of Interest-Pass Demo Control to Any Students
- Monitor Student's screens to keep them on task
- Hand out and collect coursework, files and tests
- Lock-up student's PCs to get and hold their attention
- Chat using text or Audio even hold group discussions
- Control, Log off or Shut Down student's PCs





Figure 4. Netop School Software For Networked Classrooms

3. CONCLUSION

This paper is a result of theoretical and practical work of group of scientific specialists from computer and pedagogy departments of the Kyrgyz-Turkish "Manas" University [1]. Teachers are working on creation of Life Security e-course for schoolchildren in Kyrgyzstan. The objects, the subjects and the tasks are combined in the interdisciplinary approach, which helps children to themselves in various situations including even cases of terrorism.

We have experience of using an ICT in teaching Life Safety Education [2]. We have designed seven video lessons for life security teachers, which makes the work of teachers easier, interesting and more effective. This article considers the role and place of information technologies in the modern education system.

We would like to share our experience on how to make interesting lessons using the Microsoft Office and graphic software, and to demonstrate our own video courses and other Internet applications. During the lectures, we actively use NetOP School - an interactive computerbased classroom management tool, which is also used for monitoring and presentations.

REFERENCES

[1] Kazakbaeva, Z., Asipova, N. & Moldalieva, A. (2005). Creation of e-courses on life security education as a part of e-Social Science. In G. Richards (Ed.), Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2005 (pp. 2133-2137). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

[2] Kazakbaeva, Z., & Kazakbaev, M. (2002). Vital activity safety. Training manual for higher educational institutions. (Bishkek, Kyrgyzstan) (Kyrgyz language)