At the beginning of XXI century a new age of evolution began for the human civilization – the age of information society. Global information networks are the organizational and technical foundation of the information society, where the Internet is the key. And as a result there appear new opportunities for formation and development of network structure in different fields of social life, including science and education. These new conditions of social development require training of new the experts, use of new modern teaching methods suitable for the information society demands. That is why training of highly qualified academic and teaching staff is one of the main problems of education system of Ukraine. Under the following conditions, universities from all over the world drew their attention that it is possible to use information technologies.

The problems of implementation of information technologies and their use of in the process of education are explored in publications of the following scientists: J. Cecil [1], J. Kettunen [2], Polat E. S., Petrov A. E. [3]. It is noted there that development of effective educational systems creates conditions for social accessibility of quality education for the majority of people.

In his report to discover the experience of using ICT in the e-Learning courses.

Educating technologies, that give the opportunity to enable the activity, were aimed to form the competencies in participants. The main curriculum content was to review the modern technologies as well as to study some approaches, demonstration of the opportunities to use the interactive technology in education with the help of teaching trainings by the teachers of CSTU.
PhD. in telecommunication engineering Jose-Luis Poza-Lujan and PhD. in telecommunication engineering Miguel Ferrando Bataller’s lectures in telecommunication engineering were of great interest during studying.

The review of the ability to record and montage video lectures with the help of Campatlasia Studio [4] became the know-how of our courses. The virtual studio of CSTU (fig. 1) helped embody this project practically, so everyone could record all necessary information.

![Fig. 1. Partial segment of virtual studio of CSTU](image)

The following free application Handouts On Air by Google Aps was used to provide on-line consulting, webinars and giving on-line lectures [5]. The application was adjust to e-Learning system CSTU (Moodle and Hangouts adjustment is described on the official Moodle website https://moodle.org).

Hangouts On Air gives the teachers the opportunity to air their videos live, for example, a created channel can be aired to unlimited number of students, although while streaming there can be only 10 active users. It was necessary to create Google+ account and YouTube Channel to work with Hangouts On Air (fig. 2) (https://www.youtube.com/channel/ UCIFtfzTQ4SIYk6tS1cr5_6A), and the accounts of these two networks should be connected. The video is recorded while streaming and after it was live, it is saved on YouTube and Google+.
We paid great attention to off-line learning. The offline learning is a kind of self-tuition but under teacher’s supervision. The participants are free of psychological stress, caused by the necessity to meet some requirements and stereotypes. So, the participants have different attitude to the process of studying: their motivation level and self-esteem increase, and lowers the fear to make a mistake.

References


