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INFORMATION TECHNOLOGIES AS A MEANS OF TEENAGERS' CREATIVITY DEVELOPMENT

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Under the conditions of the modern society development information technologies play a very important part in the person's life. Within these frames the upgrade and modernization of the education system is taking place, informatization and computerization in particular, thus requiring the creation of the psychological conditions for the development of a creative personality in a pupil. Nowadays the special actuality has been acquired by the problem of the creativity development in schoolchildren in the sphere of information technologies, as the development of a personality is determined by the environment where the person is developing. The problem of studying psychological aspects of implementing contemporary information technologies has been researched by the following scholars: O. V. Arestova, Y. B. Maksymenko, V. V. Plokhikh and so on. Information technologies are regarded by scientists as the collection of forms, methods and means of automatization of the information activity in different spheres of the human life and directed on the productivity and efficacy. In the educational process a number of technologies are used: technologies for information processing; database technology for the collection, storage, systematization and processing of information; multimedia technologies; network technologies; geoinformation technologies; computer simulation technologies; computer experiment technologies; computer control technologies [2; 3]. In Psychology when working with schoolchildren out of all the information technologies most often are used the following: developing computer games; developmental psychological simulators; special computer software for personal development; animation studios; psychological computer programs. The indicated technologies indeed contribute to the development of cognitive and intellectual abilities of pupils and also can be used as a means of help to solve personal and behavioral problems. Although there exists a negative influence of computer technologies on the health of schoolchildren [1], which is conditioned by the information overloading and can lead to the deformation of the personality structure and development of the destructive forms of behavior.

Therefore training programs for the development of creativity in young schoolchildren and teenagers using information technologies within the educational environment are being developed. However, insufficient attention is paid to the

development of creativity in teenagers making use of the information technologies within the environment of recreational facilities. After all in these particular environment teenagers can fill the freedom from studying, they get into the socio-psychological situation which contributes to their creative self-realization. The elaborated psychological training for the development of creativity in teenagers using information technologies is directed on the development of their creative abilities, creative thinking, self-development and determination, the ability to defend their own creative ideas, needs to be acknowledged by the others; increase of the level of self-appraisal; relief of the psychic tension; development of activity and initiative. Among the modern technologies used in the training there were multimedia, animation, computer technologies (teenagers worked in the following computer environments – Adobe Photoshop and Autodesk 3Ds Max), design technologies, the project method, “brain storm”, art therapy, communication exercises, psycho-gymnastics. The use of the multimedia technologies is determined by the possibility to influence not only the verbal but the visual thinking too, also to develop the creative abilities of the teenager. Animation technologies in the training work with teenagers allow the formation of the ability to thoroughly consider and evaluate the problematic situations, they stimulate their active creativity. The techniques of the art therapy give the teenagers the opportunity to reveal their own feelings and emotions.

The approbation of the developed psychological training aimed on the development of the creativity in teenagers using information technologies in the environment of the recreation has been conducted. One hundred and twenty teenagers, who were having a rest at the State Enterprise Ukrainian Children’s Center “Moloda Gvardia”, participated in the research. The subjects were given a diagnostics of the level of the development of structural components of the visual and verbal creativity using the methods of D. Johnson, J. Gilford, P. Torrance (the modified version of M.O. Kholodna method), RAT of S. Mednik before and after the performance of the training session. It has been established that the indicators of the verbal and visual creativity in teenagers of the experimental group significantly differ from the primal diagnostics. In particular, the increase of the levels of the development of such structural components of the visual and verbal creativity as productivity (from $X_{avg.}=0,57$ till $X_{avg.}=0,68$), visual and verbal originality (from $X_{avg.}=0,59$ till $X_{avg.}=0,96$), constructive activity (from $X_{avg.}=1,15$ till $X_{avg.}=1,32$) occurred after the training. These are also proved by the presence of the statistically significant differences (on the level $p<0,05$).

It has been proved that the developed training for the development of the creativity in teenagers during the time of their recreation is effective, and also that the usage of the information technologies contributes to the development of creativity and cognitive activity of schoolchildren.

References:

- [1] Bogacheva, N. V., Voiskounsky, A. E. (2017). Computer games and creativity: the positive aspects and negative trends [Elektronnyi resurs]. *Sovremennaiia zarubezhnaia psikhologija [Journal of Modern Foreign Psychology]*, (Vol. 6, no. 4), pp. 29–40. doi:10.17759/jmfp.2017060403.
- [2] Muhina, Ju. R. (2009). Ratio of concepts «information technologies» and modern information technologies» in training. *Molodoj uchenyj*, (11), 295-298. Retrieved from <https://moluch.ru/archive/11/769/>