

Chapter 64

The Play Theory and Computer Games Using in Early Childhood Education

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ABSTRACT

The article describes the role of play in child's development and identifies the characteristics of mature play in preschool age. The paper gives an overview of the computer games for preschool children used in Russian kindergartens. The research conducted with 50 Russian kindergarten teachers provides the analysis of the most important factors of computer programs selection made by teachers for their classroom activities. It is analyzed whether the factors concern the theory of children's play and whether the kindergarten teachers need the scaffolding program for choosing computer games appropriate for children's development. It is described the essence of the scaffolding program. They are formulated the criteria for evaluating computer games to make classroom activities developmentally appropriate.

INTRODUCTION

The main problem facing today's kindergarten teachers all over the world is the constant pressure to teach more academic skills at a progressively younger age cutting down the time for traditional Early Childhood activities. In contrast with this fact psychologists and education researchers stress play as preschool children leading type of activity, providing necessary skills and effective socializa-

tion (Vigotsky, 1977, Elkonin, 1978, Zaporozhets, 1978). Intellectual and social benefits of play in early years have been documented by many researchers (Lester & Russell, 2008, Vigotsky, 1977). Children engaged in play experiences are more likely to have well-developed memory skills, language development, and are able to regulate their behavior, leading to enhanced school adjustment and academic learning (Bodrova & Leong, 2005).

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Following Bodrova and Leong (2003) nowadays young children spend less time at home playing with their peers and more time playing alone, in the classroom they tend to rely on realistic toys and props, and have a hard time using their imaginations to invent a substitute for a prop they do not have. During the long time of play observation in kindergarten classrooms in Russia, China and France the authors of this article marked that very often children had frequent problems to try a new topic or plot, they mainly chose the familiar scenarios of family, school, or hospital. According to that observation results and based on other researching (Kravtsova, 1996) we can conclude that play which take place in many of today's kindergarten classrooms does not fit the definition of mature or well-developed play. Even 5- and 6-year-old children who according to famous Russian psychologists Vygotsky and Elkonin should be at the top of their play performance often show immature play signs more typical for toddlers. Bodrova and Leong (2008) underline that important factors influencing such a serious situation with children's development are following: increasing adult-directed forms of children's learning and recreation; proliferation of toys and games that limit children's imagination, substitution of real play by "play impostors".

Analysis of the software for children shows the huge opportunities that computer games have for intellectual, emotional and social development, as well as for children's learning (Verenikina, 2003). As we suppose, the main goal for contemporary early childhood education practice is finding a balance between uncontrolled children's playing computer games and adult-directed activities for using computer programs to train or even drill children's academic skills. According to the theory of play and children's development phenomena computer games and gaming platforms first of all should make an emphasis on make-believe play and take into account the stages of play. Moreover,

Susan Haugland (1992) underlines that adults play an essential role when computers are used successfully with young children. Meanwhile the survey showed the problem of negative attitude of significant amount of the Russian kindergartens teachers to computer games and their using in the classroom (Sokolova&Gerkushenko, 2002). The present paper is based on the idea of scaffolding children's play by means of planed including of computer games into kindergarten classroom activities. Such scaffolding can be possible if kindergarten teachers are ready to guide children in the world of computer games: the have positive motivation and necessary competency for choosing and using computer games in the classroom.

1. MOTIVATION

In 2011 International Center for the Childhood and education of Volgograd State Socio-Pedagogical University started the project "Childhood without borders". One of the objectives of the project was to support innovative practices in preschool education. The project had a number of subprojects which were oriented to different areas of children's development. One of subproject realized cooperatively with Volgograd State Technical University was dedicated to using Information and Communication technologies in kindergarten. Main participants were teachers from municipal kindergartens. Totally 10 kindergartens were involved in the project. The essence of this subproject was in complex analysis of using computer games in kindergarten for improvement of children's development. The area of problems we investigated was the competent scaffolding of children's play activity as the necessary tool for their learning and development.

The necessity of the research can be explained with the results achieved in 2002 when we define the kindergarten teachers' attitude to computer

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