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Communication Culture Development in Children Aged 5-6 Years Using Educational Gaming Technologies

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Abstract

This article deals with communication culture development in the children aged 5-6 years and the role of the educational gaming technologies facilitating this process.
Presented is a gaming technologies model whose structure encompasses two main types of gaming technologies: 1) gaming technologies for social skills development; 2) gaming technologies for developing personal communication skills.
These two groups of skills are developed with the help of the gaming technologies by changing the different structural components of communication.
An important task implemented through the two main types of gaming technologies is development of the child's communicative actions – initiative actions and response actions as well as practicing them for achieving a positive communication outcome, positive interaction, liking and cooperation and hence, improving communication culture.
On the basis of a psycho-pedagogical experiment presented and analyzed are the results from applying the model in the kindergarten teaching practice related to facilitating the process of communication culture development. Formulated are recommendations with regard to the teachers' targeted pedagogical activity focused on developing the children's communication culture by introducing educational gaming technologies within the scope of their interaction through its main form of implementing it in kindergarten, i.e. the pedagogical situation.

Keywords: *communication culture, educational gaming technologies, development, pedagogical activity.*

1. Introduction

Early development of the speaking skills in children is a mandatory pre-condition for a successful integration in their peer group and facilitates the overall development of the child's personality.
According to G. Narkabilova one of the signs of increased attention to the formation of a culture of communication is that cultural communication skills are an essential component of the general culture of a person, is a condition for self-realization, establishing contacts with people around them, and determining life goals.[1]
Pre-school age is a sensitive period in terms of communication culture development since, according to N. Lyapina, in the children aged 5-7 years communication adopts new, non-situational forms of verbal interaction with the adults which radically changes the child's speech behavior – in the process of interaction children start to show themselves as tactful and polite. [2]
According to E. Plaskina, the formation of a communicative culture of a child of preschool age is a process of interaction between a child and adults and other children, aimed at adopting customs, traditions of different cultures and value attitude to them, mastering the norms and rules of interaction in a multicultural environment. [3]
The challenges accompanying communication culture development in the children aged 5-6 years requires more time for developing their interpersonal communication and its encouragement. Due to this reason, of priority is the issue related to the organization of the child's communication process with the child's peers and adults. In this connection the necessity of finding unexplored possibilities for its development arises. Considering the development specifics of the children aged 5-7 years, the gaming environment and in particular the educational gaming technologies appear to be the most suitable for this purpose.
In the last decade, a shift to greater societal reliance on technology has mandated that young children's educators emphasize the use of technology as a play-based tool to tune into children's learning and cognitive engagement [4]
In connection with the issue studied, of interest is the opinion of V. Gorshkova on educational technologies and their interactive nature. According to the author, the interaction becomes possible by intentionally establishing the subject–object relations determining the role of the teacher and the

children. The result of this interaction are the states of the participants in the educational process in which they are able to understand the other person and to achieve an accessible language of communication. [5]

D. Dimitrov defines the game technology as "systematically elaborated procedural and structural integrity of interconnected procedures for targeted design of the activities and the educational varieties of the game". [6, page 23].

S. Ivanov underlines that educational gaming technologies and techniques play a decisive role for implementing the objectives and the tasks of the educational interaction at all levels. They provide for the adequate satisfaction of the child's leading needs and interests and ensure the child's activeness and its targeted educational orientation. [55]

G. Ivanova presents her own opinion for the nature of the educational gaming technologies as being "scientifically justified and practically significant set of interrelated, consistent and joint actions and operations of the teacher and the children, which find expression in specific procedures, and are intended for the formation and development of the children's independent game activity and development of their gaming culture". [7, page 69]

According to B. Adulbaeva et al. the purpose of gaming technology is to create a full-fledged motivational framework for the formation of skills and activity, depending on the functioning conditions of the preschool institution and the level of development of children. The main thing is not to change the child and not to remake him, not to teach him some special behavioral skills, but to give him the opportunity to "live" in the game the situations that excite him with full attention and empathy for the adult. [8, page 2242]

M. Korotkova summarizing the opinions of different authors points out the following principles which should be observed in the design and introducing of the gaming technologies into the teaching practice: the principle of development; the principle of modelling; the principle of combining the gaming and didactic goals; activity principle and communication principle. [9]

The effect of the educational gaming technologies on the communication culture development in children aged 5-6 years can be found in several aspects: pre-school age is a sensitive period for the development of communication; communication among children in pre-school age unfolds in the context of their practical and theoretical knowledge about the world surrounding them; gaming technologies being innovative educational technologies create conditions for a better development of the child's cognitive, emotional and personal potential; gaming technologies create conditions for spontaneous and targeted contacts, and for promoting cooperation and encouraging communication.

2. Materials and Methods

Based on this theoretical analysis of the nature of gaming technologies, their types and design methods, developed is a model for communication development by gaming technologies focused also on development of speech culture. With the help of the gaming technologies model created are conditions for improvement of the social contacts and conversational skills among children with regard to the following parameters: /acc. N. Vitanova [10, page 103]/: quantity, content, structure and functions.

To ensure the smooth running of the gaming technologies realization process, pedagogical interaction is used which places the child's personality in the center. Such interaction is focused on the personality. It is characterized by "anthropocentric, humanistic and psychotherapeutic orientation and aims at the the multi-faceted, free and creative development of the child, according to G. Selevko. [11, page 28].

As a result of this, the efforts are focused on creating and researching the effectiveness of using a gaming technologies model with a focus on communication in the organization of the teaching process in kindergartens targeted at developing the child's skills for effective communication, including also a good communication culture.

In connection with this, an experimental research study has been conducted encompassing the following stages - ascertaining, forming and control stages.

The research study involved 162 children at the age of 5-7 years, of whom 95 girls and 67 boys, divided in two groups – a control group and an experimental group. The number of children in the experimental group was 84 and in the control group 78. All of them were at the age of 5-7 years and attending kindergarten.

During the forming stage of the experiment, the experimental gaming technologies model was approbated. In the structure of the model included were two main types of gaming technologies: 1) gaming technologies for social skills development; 2) gaming technologies for developing personal communication skills.

The first type comprises of the following sub-types of gaming technologies: 1) gaming technologies for development of interaction skills and skills for achieving coherence of opinions, concepts and actions; 2) gaming technologies for development of skills for evaluation of the ideas, opinion, actions and behavior of the others; 3) gaming technologies for development of skills for cooperation /practical, cognitive and personal/; 4) gaming technologies for development of skills for establishing an empathic connection.

The second type comprises of the following sub-types of gaming technologies: 1) gaming technologies for developing skills for expressing evaluation; 2) gaming technologies for developing skills for standing up for one's principles in the group; 3) gaming technologies for developing skills for a more objective self-assessment and self-control for expressing one's own opinion and for self-affirmation; 4) gaming technologies for developing skills for considering the requirements of the group members, their understanding, observance and creation; 5) gaming technologies for developing skills for reading and interpretation of social signs; 6) gaming technologies for developing skills for identification, naming and expression of feelings; 7) gaming technologies for developing reflexive skills; 8) gaming technologies for developing skills for maintaining a positive self-image.

The gaming technologies model includes three types of strategies: strategy for stimulation of the interaction and coherence of actions among children; of the activity in the interaction; strategy for developing an evaluative attitude towards others and towards oneself; strategy for stimulating the evaluative attitude towards others and towards oneself, one's own opinion and the opinion of others, which results is a meaningful relationship, cooperation among children, it suggests adequate organization, encouragement and a communication model and mutual assistance in the game situation.

These three strategies are realized through gaming technologies working at four levels: gaming technologies facilitating perception; gaming technologies facilitating understanding; gaming technologies facilitating expression and gaming technologies facilitating the reflexive interaction.

Each game technology is associated with various types of games related to the developmental stages of communication among children in the game situation.

The particular game unfolds over three successive stages: explanatory-motivational, creative and reproductional and reflexive

In connection with the scientific literature review on the topic, based on the experience of other authors, the following indicators have been developed for assessing the culture of communication among children:

Zero level /the child does not use the generally accepted polite greetings, forms of address, apology expressions and language etiquette; does not show himself/herself as tactful, helpful and friendly in the process of communication.

Low level /the child uses the generally accepted polite greetings, forms of address, apology expressions and language etiquette in isolated number of cases requiring this and rarely shows himself/herself as tactful, helpful and friendly in the process of communication.

Middle level /the child uses the generally accepted polite greetings, forms of address, apology expressions and language etiquette in most of the cases requiring this and rarely shows himself/herself as untactful, unhelpful and unfriendly in the process of communication.

High level /the child uses the generally accepted polite greetings, forms of address, apology expressions and language etiquette in all the cases requiring this and is doing his/her best to show himself/herself as tactful, helpful and friendly in the process of communication.

Through the experimental situation "Paying a Visit" conditions are created for obtaining information related to the culture of communication among children. The aim of the game is to encourage children to practice the use of generally accepted polite words and language etiquette, according to the requirements of the situation they find themselves in. The needed tools include a white drawing sheet and a coloured pencil set for each child. This experimental situation takes place during the ascertaining and control stages of the experiment.

Guidelines: The teacher informs the children that on this particular day they are paying a visit to the younger children from a group in the same kindergarten (or another kindergarten). For this purpose each child is asked to draw a picture as a present to a child in the host group. Each child is then evaluated according to the criteria above at the time of giving the present.

3. Results

In order to verify the statistical significance of the results obtained from the control and experimental groups, the Student's' T - Test (Paired Samples T-Test) was carried out.

Table 1
Test Results - Control Group

		Mean	Std. Deviation	Std. Error Mean	t	Df	Sig.2-talled
Control Group	Ascertaining Control	,17949	1,07804	,12206	1,470	77	,146

Table 2
Test Results - Experimental Group

		Mean	Std. Deviation	Std. Error Mean	t	Df	Sig.2-talled
Experimental Group	Ascertaining Control	-, 36905	1,10617	,12069	-3,058	83	,003

Referring the control group, there is no statistically significant difference between the results obtained during the ascertaining stage and the control stage of the experiment. Since p (column Sig. (2-tailed) (Significance, 2-tailed)) is bigger than 0,05 (p = 0,146), we cannot conclude that there is a difference between the two arithmetic means.

Referring the experimental group, we can conclude that there is a difference between the two arithmetic means since p (column Sig. (2-tailed) (Significance, 2-tailed)) is smaller than 0,05 (p = ,003). This proves the effectiveness of using the gaming technologies model applied in connection with improving the communication culture of children aged 5-6 years.

We assume that this is due to the direct influence of testing the proposed model of game technologies during the formative stage of the experiment, which includes information about social standards in communication and offers the opportunity to learn them in game situations.

It is characteristic of children who have reached a high level that they clearly express their intentions to help others, take into account the wishes of their partners in the game, use positive forms of addressing them. In a small part of these children the ability to use these forms is combined with selfish motives - to receive a desired toy or object, to be done a certain service.

Children who have reached intermediate level use etiquette and polite expressions in most situations that require it, but sometimes miss them in the process of communication due to strong emotional tension or ignorance of the appropriate ones.

Children, who demonstrate a low level do not use benevolent forms of addressing their peers in the game, usually show disregard for the interests of their partners, their treatment of them is rude and commanding. It is assumed that the behavior of certain adults serves as a model in this regard. In these children, the work of educating the culture of speech in the forms regulated for this purpose needs a serious reassessment.

The children who demonstrated zero level are mostly of non-Bulgarian ethnicity, which raises the question of their appropriate language integration within the kindergarten.

4. Conclusion

The results from the conducted experimental research study prove that the gaming technologies create favorable conditions for the development the culture of communication among children. Improving communication among them under the conditions of purposefully designed gaming technologies, stands out with its specifics.

This communication specifics results from the particular position which children occupy in the course of the game. It is expressed among all by the variety of situational communication and experiences of the child in the gaming situation. The active practical and verbal recreation of one's own social experience in the game in various situations results in improvement of the culture of communication among children as a whole but also of each child individually. in the game interaction to some extent

the discrepancy between the current needs for interaction and play with other children and the subjective social experience of the child is overcome. In the conditions of game activity the experience gained outside of it is supplemented and enriched with experience, assimilated by different subject position / as a real participant in different game situations and role positions.This complementarity facilitates the establishment of social and personal contacts in the process of communication between children and supports the development of their culture of communication.

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