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E.Gau<sup>1</sup>, Zh.A.Karmanova<sup>2</sup>, V.S.Prokudina<sup>2</sup>

<sup>1</sup>Organization «Wendepunkt», social and educational support to families, children and adolescents, Bremen,  
Lower Saxony, Germany;

<sup>2</sup>Y.A.Buketov Karaganda State university (E-mail: karmanovazh@mail.ru)

### **Analysis of the possibilities of gaming activities in the development of logical thinking of primary school children**

In the article, there are some questions to help teachers in primary school on effective use of didactic games in their activity. The importance of article is in wide use of the developed system of games, occupations and actions in pedagogical activity of teachers in primary school. This article can be interesting for teachers who are looking for the ways to improve quality of their work, determine the most appropriate working methods to increase the efficiency of educational process. Undoubtedly, for these teachers experience represent a certain interest.

*Key words:* didactic game, primary school age, cognitive processes of younger school students, training process, teacher, game activity, game task, didactic task, game actions.

Educational and training impact of game activity on child development is generally recognized and teachers-practitioners seek to use an arsenal of children's games, which educates effectiveness, activity of personal qualities of school students, their independence and initiative. But the analysis shows that generalizing researches on development of logical thinking of younger school students on the basis of use of game activity is performed slightly.

The system of didactic games in pedagogy was created in 60th in connection with development of the theory of sensory education. Her authors are known teachers and psychologists: L.A.Wenger [1], S.I.Ageeva [1], S.V.Gerasimov [2] etc.

Recently, E.V.Karpov [3], O.M.Dyachenko [1], N.E.Veraksa's [4, 5] scientists search go in the direction of creation of a series of games for full development of children's intelligence which are characterized by flexibility, initiative of thought processes, transfer of the created intellectual actions on the new contents. Often, there are no fixed rules in such games; opposite, children are placed in front of the need to choose ways of solving problems. Authors more often call offered games developing, instead of traditional — didactic.

Scientists indicate the need of use of didactic game in the course of training of younger school students. According to a number of researchers, children deprived of joint game activity with contemporaries, grow with low level of a self-assessment, claim and self-esteem. Therefore the teacher is faced by a task to organize work with children so that children's relationship in the course of carrying out didactic games developed positively.

In works of the last years with regret noted that at many schools work on training of younger school students through didactic games is carried out occasionally, game isn't considered as an educational tool and unity of children. Thus, revealed the problem of search of optimum conditions for successful training and education of younger school students through didactic games.

Considering relevance of a problem and its importance for mental development of children, we are set a goal: to promote development of thinking of younger school students by means of didactic games.

There are following methods of research are used in work: analysis of psychologo-pedagogical and methodical literature.

It is accepted to distinguish two main types of didactic games: games with the fixed, open rules and games with the hidden rules. Example of games of the first type is the majority of didactic, informative and outdoor games here carry also developing intellectual, musical, games entertainments, attractions. To the second type refer plot-role games. Rules in them exist implicitly.

Didactic games differ according to training contents, cognitive activity of children, game actions and rules, the organization and relationships of children, by role of teacher.

Types of didactic games. Didactic games differ according to training contents, cognitive activity of children, game actions and rules, the organization and relationships of children, by role of teacher. The listed signs are inherent in all games; however, in one game distinctly act one signs, in others — others more. There is not accurate classification in group of games by types. Often games correlate to the content of training: games on sensory perception, verbal games, games on acquaintance with the nature and others [6].

Games with subjects (toys, natural materials, etc.) are most available to children as they are based on direct perception, correspond to aspiration of the child to work with things and thus to get acquainted with them.

Desktop printed games, also as well as games with subjects are based on the principle of presentation, but in these games children are given not a subject, and its image. As well as the didactic toy, desktop printed game is good only in case when she demands independent mental work.

Verbal games are most difficult; they aren't connected with direct perception of a subject. Children have to operate with representations in such games. These games have a great importance for development of thinking of the child as children learn to state independent judgments, to draw conclusions and conclusions, without relying on judgments of others, to notice logical mistakes [6]. Allocate also following types of didactic games: games travel; games instructions; games assumptions; games riddles; games conversations [6].

Of course, all range of possible game techniques don't settle with the listed types of games. However in practice are most often used the specified games, or in a «pure» look, or in combination with other types of games: mobile, subject and role, etc.

By the nature of cognitive activity didactic games can be referred to the following groups:

- the games demanding from children of executive activity. Using these games children carry out actions on a sample;
- the games demanding reproduction of action. They are directed on formation of computing skills and skills of spelling;
- the games by dint of which children change examples and tasks in others, logically related with them;
- the games including elements of search and creativity.

This classification of didactic games doesn't reflect all their variety; nevertheless, it allows the teacher to be guided in abundance of games. And also it is important to distinguish actually didactic games and the game receptions which are using at training of children. In process of «entry» of children into activity new to them — educational — value of didactic games as way of training decreases while game receptions are still used by the teacher. They are necessary for drawing attention of children, tension removal at them. The most important consists in that game was integrally combined with serious, intense work that game didn't distract from the doctrine, and, on the contrary, would promote an intensification of mental work.

Structure of didactic game. Didactic game has a certain structure. The structure — is the basic elements characterizing game as form of education and game activity at the same time. The following structural components of didactic game are allocated: didactic task; game task; game actions; rules of the game; result (summing up) [6].

The didactic task is defined by the purpose of training and educational influence. It is formed by the teacher and reflects his training activity.

The game task is carried out by children. The didactic task in didactic game is realized through a game task. It defines game actions, becomes a task of the child.

Game actions — is a game basis. As the game actions more various, as more interesting to children the game and more successfully solved the cognitive and game problems.

Rules of the game. Their contents and orientation are caused by general problems of formation of child's identity, cognitive contents, game tasks and game actions. Rules contain moral requirements to children relationships, to performance of standards of behavior by them. The rule in didactic game is set. Using rules teacher manages the game, processes of cognitive activity, behavior of children. Rules influence on the solution of a didactic task — imperceptibly limit actions of children, direct their attention to performance of a specific objective of a subject.

Summing up (result) — held immediately after the game. It can be counting of points; identification of children who completed a game task better than others; determination of winner team etc. It's necessary noted achievements of each child, to emphasize successes of the lagging behind.

It is necessary at carrying out games to keep all structural elements as didactic problems are solved with their help.

In a situation of didactic game, knowledge is acquired better. Didactic game and lesson can't be opposed. The most important — didactic task in didactic game is carried out through a game task. The didactic task is hidden from children. The attention of the child is paid to performance of game actions, and the problem of training isn't realized by it. It also does game by a special form of game training when children most often inadvertently acquire knowledge, abilities, skills. Relationship between children and the teacher is defined not by an educational situation, and game. Children and teacher — are participants of one game. This condition is violated — and the teacher follows the road direct training.

Functions of didactic games. Proceeding from the aforesaid, didactic game — is game only for the child. For the adult — it is a way of training. The purpose of didactic games and game receptions of training — is to facilitate transition to educational tasks, to make it gradual. Told allows to formulate the main functions of didactic games: function of formation of steady interest to the doctrine and tension removals; function of formation of mental new growths; function of formation of actually educational activity; functions of formation of all-educational abilities, skills of educational and independent work; function of formation of skills of self-checking and self-assessment; function of formation of adequate relationship and development of social roles [6].

So, didactic game — this is difficult, many-sided phenomenon. In didactic games occurs not only assimilation of educational knowledge, skills, but also all mental processes of children, their emotional and strong-willed sphere, abilities and abilities develop.

In expanded form pedagogical conditions of development of informative processes of the younger school student can be presented like this: the certain content of knowledge which is giving in to ways of judgment; finding of such receptions and means, such bright comparisons, figurative descriptions which help to fix in consciousness and feelings of pupils the facts, definitions, concepts, conclusions; definitely organized cognitive activity, being characterized system of intellectual actions; such form of the organization of training at which the being trained is put in a position of the researcher, the subject of the activity demanding manifestation of the maximum intellectual activity; use of means of independent work; ability development actively to operate with knowledge; at the solution of any informative task use of means of collective work at a lesson, leaning on activity of the majority, translating pupils from imitation to creativity; to induce to creative works that each work, on the one hand, would stimulate pupils to the solution of collective informative tasks, with another, would develop specific abilities of the pupil [7].

Game is the good means stimulating development of cognitive processes of pupils. She not only stirs up mental activity of children, increases their working capacity, but also cultivates at them the best human qualities: feeling of a collectivism and mutual assistance.

At the heart of any game technique carried out on occupations the following principles have to lie:

- relevance of a didactic material;
- collectivity;
- competitive spirit.

On the basis of the specified principles it is possible to formulate requirements to didactic games held on occupations:

- didactic games have to be based on games familiar to children;
- it is impossible to impose to children game which seems useful, game — business voluntary;
- game — not a lesson;
- the emotional condition of the teacher has to correspond to that activity in which he participates.

Game can be considered carrying out the functions in case it provides [7]:

- not only assimilation by the child of concrete educational abilities, but also education at the school student of desire to study;
- understanding by the school student of the occupations not as simple game in school, and as doctrines.

Competent carrying out didactic game is provided with the accurate organization of didactic games.

First of all, the teacher has to realize and formulate the game purpose, answer questions: what skills children will master in the course of the game, what moment of game should pay the special attention, what educational purposes are pursued when carrying out game. Further, it is necessary to decide on quantity of the playing.

The following important stage at the organization of didactic game is selection of didactic materials and grants for game. In addition, it is required to plan the time parameter of game accurately.

And, at last, it is important to think over the conclusion, summing up after carrying out didactic game.

Nature of activity of pupils in game depends on its place in system of educational activity. If game is used for an explanation of a new material, it has to be programmed practical actions of children with groups of subjects and drawings in it.

Another condition needed in order that application of game at elementary school was effective is a deep penetration of the teacher into game mechanisms. The teacher has to be the independent creator who isn't afraid to take responsibility for distant results of the activity.

The teacher, who has mastered the principles of application of game receptions, has to show an initiative. By results of psychological researches it is possible to mark out the following professionally important qualities of the teacher concerning game activity of children: ability to observe game, to analyze it, to estimate a level of development of game activity; to plan the receptions aimed at its development; to enrich impressions of children for the purpose of development of their games; to pay attention of children to such impressions of their life which can serve as a plot of good game; to be able to organize the game beginning; widely to use indirect methods of the management of the game, making active mental processes of the child, his experience, problem game situations; to create favorable conditions for transition of game on higher level; to be able most to join in game on the leading or supporting roles, to establish the game relations with children; to be able to train in game by direct ways (display, explanations); to offer new roles, game situations, game actions for the purpose of game development; to teach children to discuss game and to estimate it.

Thus, the carried-out theoretical analysis showed:

1. Development of informative processes of the younger school student will be formed more effectively under purposeful influence from the outside. The instrument of such influence is the special receptions one of which is didactic games.

2. All of the above convinces of necessity and opportunity of formation and development of cognitive processes at younger school students with using didactic games.

Being excellent, the younger school age possesses deep potential opportunities of physical and spiritual development of the child. Under the influence of education children form two main psychological new growths — randomness of mental processes and the internal plan of action (their performance in mind). In the course of the doctrine children seize also receptions of any storing and reproduction thanks to which they can state a material selectively, establish semantic connection.

Randomness of mental functions and the internal plan of action, manifestation of ability of the child to self-organization of the activity result from difficult process of an interiorization of external organization of behavior of the child, created originally adults, and especially teachers, during study.

As a result of the purposeful training, the thought-over system of work it is possible to achieve in initial classes of such intellectual development of children which does the child capable to mastering by receptions of logical thinking by the general for different types of works and assimilation of different subjects, for use of the acquired receptions at the solution of new tasks, for anticipation of certain natural events or the phenomena.

Development of informative processes of the younger school student will be formed more effectively under purposeful influence from the outside. The instrument of such influence is the special receptions one of which is didactic games.

Everything higher the told convinces of need and opportunity formation and developments in younger school students of informative processes by means of use of didactic games.

## References

- 1 Ageeva S.I. Training excitedly. P. 1. — Moscow: IN «Soveksportkniga», IG «Sources», 1991. — 64 p.
- 2 Gerasimov S.V. When the doctrine becomes attractive // *Pedagogika*. — 1993. — № 2. — P. 51–54.
- 3 Karpovs E.V. Didactic games at elementary school: Popular grant for parents and teachers. — Yaroslavl: Development academy, 1997. — 283 p.

- 4 Veraksa N.E. Development of preconditions of dialectic thinking at preschool age // Psychology questions. — 1997. — № 4. — P. 135–139.
- 5 Veraksa N.E. Dialectic thinking and creativity // Psychology questions. — 1999. — № 4. — P. 5–14.
- 6 Technology of game in training and development: studies. grant / Ed. I.Pidkasisty, Z.S.Haydarov. — Moscow: Moscow pedagogical institute publ., 2006. — 268 p.
- 7 Schukins G.I. Pedagogical problems of formation of informative interests of pupils. — Moscow: Pedagogy, 1988. — 203 p.

Е.Гау, Ж.А.Карманова, В.С.Прокудина

### **Бастауыш мектеп оқушыларының логикалық ойлауын дамытуда ойын іс-әрекетін қолдану мүмкіндіктерін талдау**

Мақалада бастауыш мектеп педагогтарының өзіндік іс-әрекеттерінде дидактикалық ойындарды қолдану тиімділігі бойынша көмек көрсету мәселелері қарастырылды. Жұмыстың мәнділігі бастауыш мектеп педагогтарының педагогикалық қызметінде өңделген ойындар жүйесін, сабақтарды және шараларды кеңінен қолданумен түйінделді. Авторлар білім беру процесінің тиімділігін арттыру жұмыстарында мейлінше тиімді әдістерді саралай отырып, өзіндік жұмыс сапасын жоғарлату жолдарында ізденісте жүрген педагогтар үшін қызықтыларды анықтап берді.

Е.Гау, Ж.А.Карманова, В.С.Прокудина

### **Анализ возможностей использования игровой деятельности в развитии логического мышления младших школьников**

В статье рассмотрены вопросы оказания помощи педагогам начальной школы по эффективному применению дидактических игр в их деятельности. Значимость статьи заключена в показе широкого использования разработанной системы игр, занятий и мероприятий в работе педагогов начальной школы. Авторами предложены пути улучшения качества работы, определены наиболее оптимальные методы повышения эффективности образовательного процесса.