# Self-Reflection as a Tool for the Formation of Information Culture Foundations of Preschool Children

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**Abstract:** *Objective*: The study aims to clarify the essential and urgent socio-pedagogical problem of preparing the young generation for life in the actively developing information society.

Background: At preschool age, the elements of information reflection are expressed in the ability to flexibly respond to information changes and the ability to reason and comprehend the conditions and results of cognitive activity. The most important requirement in the formation of self-reflection of a preschooler is a critical attitude to information which begins with obtaining the information and ends with the adoption of a conscious decision, the formation of one's own attitude.

*Method*: The primary method of research in the article is the study of literature on the research problem, and a method of analysis, which allowed to assert that self-reflection is an important element of information culture of a preschooler.

Results: The authors singled out and described,

• pedagogical conditions of formation of foundations of information culture of children of senior preschool age directed at the creation of the developing information and cultural environment as communicative and creative space in preschool educational establishment;

• substantiation of cognitive interest as a fundamental component of stimulating creative and search initiatives of a child;

• orientation to the personally significant attitude of a preschooler to the process of formation of the information culture foundations.

*Conclusion*: The research conducted by the authors allowed to assert that self-reflection is an essential element of the information culture of a preschooler.

**Keywords:** Cultural environment, reflexivity, preschoolers, socio-psychological climate, communication activity, self-image.

### INTRODUCTION

Modern society is impossible to imagine without information technology and information in general, so over time, the definition of "information culture" has become part of human culture. The concept, as mentioned above, is rather multifaceted. We take as a basis one of the definitions of E.L. Semeniuk that, in our opinion, reflects the most characteristic activities when working with information:

> "Information culture is the degree of perfection of a person, society or a certain part of it in all possible types of work with information: its obtaining, accumulation, coding and processing of any kind, in the creation on this basis of qualitatively new information, its transfer and practical use".

\*Address correspondence to this author at the Almaty Branch of St. Petersburg Humanitarian University of Trade Unions, Almaty, Republic of Kazakhstan; Tel: +77272331852, +77284354895; E-mail: t.volynets07@gmail.com In the era of the modern information society, the formation of the information culture of the individual acquires a special theoretical and practical importance. In this regard, the existing education system requires certain changes related to the awareness of the need to move on to continuous information education, from preschool age, the first school years and to completion of education, which leads to the emergence of new conceptual approaches to the development and use of technology of the development and education of children of senior preschool age [1-3].

An essential element in the construct of "information culture" of the preschooler is self-reflection, i.e. selfobservation, analysis of one's own thoughts and apprehensions. According to E.V. Ilienkov, The inclination to self-reflection means "ability to become outside oneself", i.e. to go beyond oneself [4]. Through self-reflection, a person discovers his spiritual essence. However, not in vain E. Fromm, when investigating human nature, pays attention to the person's ability to be aware of himself: in fact, this ability is a distinctive feature of the subject [5]. When losing the inclination to self-reflection, the person loses the space of free communication with the world. According to M.K. Mamardashvili, self-reflection is not only a way of introspection, but it is also a means of self-liberation: the subject, consciously performing "acts of selfcognition, moral action and "evaluation", gets satisfaction from the search for the spiritual effort to his liberation. At the same time, self-reflection is in-depth self-knowledge, identification of the mental abilities is "thinking in thinking" [6]. According to S.L. Frank, the deeper a person goes inside, the more he expands and acquires a natural and necessary connection with all other people, with the whole world life at large. In the future, this ability should follow the path of a deep and comprehensive understanding of itself and the other important person [7]. Ye.A. Aleksandrova calls selfreflection the focus of the person's thinking on himself, his own processes and products, the analysis of his own mental state [8]. Thus, self-reflection implies the introspection of:

- One's own acts,
- Results of life activity,
- Self-observation,
- Thinking about what needs to be changed in one's own behaviour,
- And what should be paid attention to,
- And what has great importance in personality development,
- Social and personal development.

In conditions of new information reality, the key pedagogical task is to prepare the child's personality for the independent cognition of the information space, his orientation in information flows and the ability to work with various information sources [9-11]. However, precisely during cognitive, informational, it is educational, artistic, and creative activity that the process of forming the foundations of the information culture of older preschool children is performed. The obtained knowledge and skills contribute to the formation of the following structural elements of the information culture: motivational and personal component; system of knowledge and skills; creativity; communicative activity: self-reflection; activity component. The study aims to clarify the essential and urgent socio-pedagogical problem of preparing the young generation for life in the actively developing

information society, that is, the formation of the foundations of information culture of children of senior preschool age.

# CONDITIONS FOR SUCCESSFUL FORMATION OF THE FOUNDATIONS OF INFORMATION CULTURE

The formation of the structural elements of information culture foundations of children of senior preschool age implies the creation of preschool educational establishment of certain psychological and pedagogical conditions. The first condition is related to the teacher's attitude focused on the individual and personal features of the development of seniorpreschool-age-children, which contributes to the disclosure of:

- Creative abilities of a preschooler,
- The formation of self-consciousness,
- The formation of personally significant and socially acceptable qualities of his personality.

With such an orientation, for the teacher become important such principles as self-actualisation; the principle of individuality; the principle of creativity and success; the principle of trust and support, etc. The implementation of these principles implies a change of the teacher's position:

- the attitude to the child should be as to a subject of his own cognitive activity, a person capable of learning not under compulsion, but voluntarily, at his own will and choice;
- encourage children to be active as partners;
- the teacher should see the prospects of the child's personal growth and be able to stimulate his development as much as possible;
- in practical activity, personal meaning and interests should be support (cognitive and social) of every child [12].

The second condition is related to the need to form a personally significant attitude of a preschool child to information and ways to obtain it. This condition contributes to the emergence of sustainable motivation in the cognition of elements of information culture and stimulates the creative and search initiative of the child in cognitive, informational, educational and artistic and creative activities [13]. It is that the preschooler's need for information emerges in the case when the chosen goal can not be achieved without additional information. So, the teacher's task is to create situations in which preschoolers need to find information to solve vital problems. The effectiveness of the development of his activity should be expressed in the assimilation by the preschooler the position of "subject one's own life in the world of information". This aims the teacher to find and use in practice such methods of information assimilation that meet the interests and needs of preschool children themselves. The third condition for the successful formation of information culture foundations of the preschooler is the development of cognitive interest as a fundamental component of cognitive activity which has an incentive impact on the whole process of cognition and is characterised by the aspiration to penetrate in the essence of phenomena. The pedagogical approach to solving issues related to the components of cognitive interest is to encourage and constantly maintain the preschooler's active interest in sources of information as well as form cognitive interest as a holistic property of the individual.

Another condition is related to the creation of a favourable socio-cultural environment based on the interaction of parents and teachers. It is proved that the formation of the child's inner world occurs only in his joint life activity with an adult: all his interests, apprehensions, ideas and images are formed and initially exist within not the child himself, but in communication with the adults who are the main subjects of the process of formation of information culture foundations of preschool children. From this arises the need for an indissoluble connection of the teacher, parents and child which requires appropriate work based on a pedagogical partnership which includes three-way interaction and mutual impact aimed at the effectiveness of the joint union [14].

Another equally important psychological and pedagogical condition for the formation of information culture foundations of preschool children is the presence of an appropriate socio-cultural environment and developing information environment. The period of preschool childhood is sensitive to the development of social roles and cultural values, norms of children's lives and their transformation into one's own needs through individual self-expression. It also has an impact on the content of his activity in the process of which individual preferences are formed. The development of this process is based on the creation of an informative and entertaining subject-developing environment that gives space for self-expression and self-realisation of the child. One of the significant conditions for the formation of information culture foundations of children of preschool age is the implementation of a subjectiveoriented approach by the teacher's creating a problem situation which stimulates the active independent activity of children to solve tasks and significant personal problems. The main task of the teacher's creating a problem situation is setting cognitive tasks to the child that encourage the preschooler to look for new means of solving it, using previously obtained knowledge and skills [15].

Problematic situations arise where there are contradictions between the existina personal experience of the preschooler and newly obtained knowledge that stimulates the child to search for knowledge and ways to obtain new information on his own, as well as understand the importance of his personality. The basis for the problem situation is the questions and tasks compiled by the teacher which encourage children to compare, finding similarities and differences of the information obtained, identifying cause-and-effect relationships with known facts, justifying the choice of their preferences and confirming regularities by examples from their own experience [16]. Thus, the integration of psychological and pedagogical conditions becomes an important resource to stimulate the process of formation of the information culture of preschool children. Information culture of preschool children should be considered as a purposeful process of interaction between the adults and children, which has personality-oriented character aimed at achieving personally significant results of information activity.

### WAYS OF SELF-REFLECTION FORMATION IN THE UPBRINGING OF CRITICAL ATTITUDE TO INFORMATION OF PRESCHOOLERS

Preschool childhood is a favourable period for the formation of prerequisites for the development of the self-reflexive activity of children which will allow the child to realise his individuality, some uniqueness and his purpose in life as well as teaches him life reasoning. Self-reflection helps think about future activity, compare one's work with the experience of peers that is very important for a child of preschool age since his "self-image" begins to be formed. Using selfreflection elements as mechanisms of cognitive and communicative activity at the stage of preschool age means the revision of priority educational tasks. One of such elements, in our opinion, is the ability to extract information and reflect on it, effectively.

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At senior preschool age not only obtained knowledge but also ways of assimilating and processing of information become necessary. That is why the processes that form the development of cognitive abilities of preschool children include two interrelated components. The first component comprises information consisting of individual data, facts, events of everyday life and thinking processes (analysis, synthesis, comparison, generalisation, etc.) which are necessary for perception, comprehension and processing of obtained information. Not in vain the information is considered as one of the important means of development of cognitive needs and interests of preschool children; it is information that contributes to activation of such mental processes of the preschool child's personality as perception, thinking, memory, attention and speech [17].

Another component of the cognitive process is the attitude to information. preschooler's Obtained information leaves a certain emotional mark in his soul which we call "attitude", that is, in the process of perception of information the child develops a certain attitude to the information, facts and events that he assimilated. Due to the age and psychological characteristics of children of senior preschool age and their attitude to information differ in perception. If for an adult, the information is primary, and the attitude to it is secondary since the adults express their attitude to something only when they have knowledge about it, but children have the opposite picture. As a rule, for them, the attitude is primary, and the information is secondary, that is, they seek to know what is of interest to them. So, in the process of cognitive activity, for the effective assimilation of certain information by children, the teacher should first of all form a positive attitude in children to the information that he wants to convey to them, and after that present, the information itself, creating in this way a strong foundation on which knowledge is easily superimposed in the future [18].

As experience shows, the need for information arises when the child's chosen goal can not be achieved without additional sources. So, one should create situations in which preschoolers need to search for information to perform the task set. One should note that the main prerequisites for the development of selfreflexivity are internal consciousness, internal activeness. It is an internal activeness that provides social and cognitive independence and initiative. Selfreflection helps preschool children formulate their knowledge, determine the purpose of further work and adjust their educational path. If the child gets external experience through sense organs, the source of his rich inner experience is self-reflection through which he is able to develop, transform himself and the world. At preschool age, the elements of information selfreflection are expressed in the ability to flexibly respond to information changes and the ability to reason and comprehend the conditions and results of cognitive activity. Besides, self-reflection is understood as a kind of speed of adaptability to changes in the assimilation of various sources of information (screen, interactive, paper and oral); the degree of manifestation of cognitive interest in various sources of information; self-determination in the choice of objects to obtain information, methods of describing the obtained information; ability to formulate and conduct selfassessment of one's own speech actions.

The critical attitude can be defined as the ability to form questions and build arguments to protect one's own opinions and sum up. It is the ability not only to interpret and analyse the information, but also the ability to reasonably prove one's own position, objectively evaluate the facts, draw conclusions based on the obtained information and only then form one's own attitude to it. Further development of critical attitude to information is implemented in the process of game activity. When mastering the social role, children get life experience full of new emotions and informative content, consolidate knowledge of new forms of communication and interaction, expand their vocabulary, acquire social skills and achieve a positive emotional state [19].

# DEVELOPMENT OF REFLECTION IN THE GAME ACTIVITY

In the course of game activity, for informative enrichment of his own worldview, the child needs information that contributes to the formation of ideas about the essence of the object or phenomenon; the cognitive motive which determines the emergence of the attitude to the object of interest; the need for practical realisation which manifests itself in specific actions or deeds. Gradually, at senior preschool age, the role-playing game becomes an integrative activity which is closely related to different types of activity art, speech, cognitive, communicative, art-productive and constructive. For children, not only the process of the game becomes important, but also the result, invented game plot, created game environment and ability to present the products of their activities, obtained knowledge and skills on their own.

The advantage of role-playing games at this age stage is not only the ability to use the child's knowledge in the game but also interaction of children during which they exchange certain information, knowledge as well as their game ideas [20]. When playing together, children start taking into account the desires and actions of the others, defend their points of view, make and implement joint plans. Therefore, a role-playing game has a huge impact on the process of development of communication of children in this period. In such a game, activity originates new motives and needs of the child, develop such qualities as initiative, sociability, ability to coordinate with the actions of a group of peers to establish and maintain communication.

One of the varieties of such games is directing games. The source of the directing game is children's impressions, knowledge and fabulous images. The child does not take upon himself any permanent role but gives the role-playing value to dolls, figurines of animals and objects-substitutes; inventing the plot with their participation and adjusts the relations of acting characters as a film director. At the heart of all the plots of individual directing games, there are factors which constitute the direct experience of the child, what he sees around himself: everyday life and human relationships. Along with that, emotions allow the child to foresee and feel the consequences of his activity. When acting in an imaginary situation for another person, the child assigns the features of this person and experiences in his feelings. His own emotions which disturb him in life moved into the background. Double self-sensation in the game enriches the emotional sphere, contributes to the understanding the hidden meaning of the situation and leads to the disclosure of new positive gualities, new motives and needs. So, in the directing game, the child freely fantasises, imagines, invent plots, connects the content of cartoons, tales and stories, and in one game, different sources can be united. The events taking place in tales and cartoons have a special emotional significance for children. The child, mentally immerses himself in the events of cartoons and tales, empathises the characters, acts with them in the internal plan - the plan of imagination - and thus realises himself as an active participant of the plot. All this contributes to the development of creative thinking and imagination of the preschooler, the formation of a holistic vision of the world.

Experience shows that the directing game is such a child's play activity, which is richer and more diverse,

the more interesting the real life of the child, the greater his awareness of the world. A wide range of roles contained in different types and forms of socio-cultural activities contributes to the development of critical thinking skills, problem-solving, development of different models of the child's behaviour in problem situations as well as the formation of understanding the adults and peers. The role-playing game gives preschoolers the opportunity to evaluate their own actions in real life, allows them to find their "role" and take a leading position which is a way of selfexpression and self-affirmation. At senior preschool age, at the time of evaluation of game activity, not only the result but also recognition of this activity from its other participants is important. Recognition of others strengthens the values of the group and improves the attitude towards the child from the side of the same people like him. At the same time, the child becomes much more active, and his self-esteem and claims increase [21].

The game activity of the preschool child is more or less effective. It gives qualitative results if at the same time the individual has strong, bright and deep motives that cause the desire to act actively, with full dedication, to overcome the inevitable difficulties, unfavourable conditions and other circumstances, persistently moving towards the goal. At preschool age motivation of activity is closely connected with rivalry, aspiration to a priority, superiority and self-assertion. Involvement of preschool children in the struggle for achieving better results in cognitive activity stimulates the development of cognitive interest, creative activity, initiative and responsibility. Effective applying this method by the teacher in the formation of the information culture foundations of preschool children allows adding an emotional mood to the active work of students, captivate by the idea of competition and show their hidden abilities and opportunities. Competitions help the teacher see and evaluate the capabilities of every child as well as bring up the will and character, in addition to that, they provide interest and creativeness. It is proved that asserting oneself among the others is an innate human need, and he implements this need by competing with other people [22]. That is why, already being at preschool age, the tendency to compare his achievements with the results of peers to assert himself is typical of the child. It is on competitiveness that competition is based on and has educational resources:

they create strong emotional and value stimuli that strengthen the basic motives of preschool children in the formation of information culture foundations;

• they can reveal quite unexpected individual abilities of the child which were unrevealed in the habitual environment.

When children compete with one other, realistically evaluating their capabilities, they compare themselves with peers, try to achieve personal success and recognition of their own achievements in the environment which matters for them. This increases the power of their expression to a high level [23]. One of the effective methods of formation of knowledge and ideas of children about properties of information and development of self-reflection is the joint creation of flashcard or animated album by preschoolers together with teachers and parents. When creating a flashcard, children, the presentation participants, discussed various ideas and selected material about the types of information (text, sound, graphic and video); about methods of information perception and information properties (useful and useless. clear and incomprehensible, etc.); made an alphabetical dictionary - a list of favourite books, cartoons and websites. First of all, preschoolers selected text material (tales, poems and riddles), then visualillustrative (photos, video fragments, reproductions and book illustrations), and with the help of adult partners, they transformed it into digital format. Then with the help of Microsoft PowerPoint Program, they created slides and added animation. The work showed that such kind of created flashcards was emotionally filled, helped to assimilate difficult material, contributed to the development of logical thinking and taught preschoolers to make an algorithm of actions.

### CONCLUSIONS

Playing in conditions of a preschool educational establishment, with the active participation of the adult, the preschooler satisfies his needs for art, activeness, cognition and communication. In various combinations, he rechecks his valeological, competitive, individual and personal and other possibilities. Understanding and transforming the incoming information, he learns to adequately and creatively respond to the process of initiating and maintaining interpersonal contacts with various subjects of information and communication activity.

Thus, cultural values are the means of development of the value-semantic sphere of the child as the basic framework of his personality. It is culture values that perform the functions of orienting point for selfdetermination in the socio-cultural environment, and cultural identity is considered as a mechanism for opening the primary personal meanings of life activity. It is common knowledge that the information environment has a significant impact on the development of a preschool child. It is subjectdeveloping, and the educational environment becomes the basis for organising exciting and meaningful life and versatile development of every child.

The most important condition in the formation of self-reflection of a preschooler is a critical attitude to information which begins with obtaining the information and ends with the adoption of a conscious decision, the formation of one's own attitude. In the course of the role-playing game manifest themself such leadership qualities of a preschooler as self-confidence, independence, responsibility for their actions which help build relations between children and distribute the roles in the group that effectively affects the result of joint activity. Thus, the role-playing game is the way children enter the world of the adults, a kind of rehearsal of adult life for the child which lays a solid foundation for his further success.

Summing up the above said, one should note that at the stage of preschool childhood occurs the development of the prerequisites of reflexive activity, which is the realisation and analysis by the child of his activity for further improving its results, providing the opportunity to plan and understand his place in the world. It is preschool age that is considered to be the most favourable period for self-development, selfdetermination and self-realisation. In this aspect, selfreflection gives support to the child as a person as well as helps identify his strong points and individual gualities. These gualities become the core of personal growth and provide completely new opportunities for obtaining knowledge, cognition of the world, children's art and creation of universal values which are the basis of information culture of preschool children.

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