AET 2020

Proceedings of the 1st Symposium on Advances in Educational Technology

Volume 2

Kyiv - Ukraine

November 12 - 13, 2020

Supported by
ACNS - Academy of Cognitive and Natural Sciences

Co-organized by
MDPU - Bogdan Khmelnitsky Melitopol State Pedagogical University
NULES - National University of Life and Environmental Sciences of Ukraine
UEM - University of Educational Management

Sponsored by
KSPU - Kryvyi Rih State Pedagogical University
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IITLT - Institute of Information Technologies and Learning Tools of the NAES of Ukraine

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Edited by Serhiy Semerikov, Viacheslav Osadchyi and Olena Kuzminska

Printed in Portugal
ISBN: 978-989-758-558-6
DOI: 10.5220/0000155000003364
Depósito Legal: 494058/22

https://aet.easyscience.education/2020/
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Media Education Technology at Preschool Educational Institutions

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Keywords: Media Education, Media Educational Technology, Forming Media Literacy of Children of the Senior Preschool Age, Media Educational Tale.

Abstract: The article substantiates the media educational technology at preschool educational institutions, in which diagnostic-target, integration and analytical stages are distinguished. The problems in media education implementation at preschool establishments have been identified and the prospects for their solving have been determined. The psychological factors of forming media literacy of children of the senior preschool age have been highlighted. Diagnostic toolkit has been developed and indicators of high, sufficient and low levels of media literacy of preschoolers have been determined. The experience of conducting media educational classes "Grains of media education", the use of media educational tales in working with children have been highlighted. The expediency of media education for kindergarten teachers of preschool educational institutions of Ukraine, formation their motivation for media educational activities with children has been proved. The effectiveness of implementing the media education technology at preschool educational institutions has been confirmed on the basis of positive dynamics of levels of preschoolers' media literacy formation.

1 INTRODUCTION

1.1 Problem Statement

Media threats as manipulations of consciousness, fake messages, dangerous acquaintances, the emergence of dependence on new media, provoking aggression through the media, cruelty, violence, etc. are increasing in the modern Ukrainian society. In such conditions, media education is becoming increasingly relevant, primarily for children, since the age of a child is constantly decreasing when child first contacts the mass media. It is necessary to begin to form media literacy as early as preschool age. There are several reasons for this.

Back in 2016, Ukraine adopted the Concept for the Introduction of Media Education in Ukraine (new edition) (ms.detector.media, 2016), which focuses on preschool media education. In January 2021, a new Basic Component of Preschool Education was adopted, in which critical thinking is defined as a cross-cutting skill of preschoolers (MON, 2021). Critical thinking is often equated with media education (Savchenko et al., 2020). Thus, the need to form media literacy of preschoolers is provided by the new State Standard of Preschool Education. However, media education in preschool education is not limited to

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Chaika, V., Kuzma, I., Yankovych, O., Binytska, K., Pysarchuk, O., Ivanova, T., Falfushynska, H. and Lyakhova, I.
Media Education Technology at Preschool Educational Institutions.
In *Proceedings of the 1st Symposium on Advances in Educational Technology (AET 2020) - Volume 2*, pages 224-235
ISBN: 978-989-758-558-6
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critical thinking. There are more than ten of them in the Catalogs of Media Competences, and they are formed during several types of preschool activities, primarily by educational lines: “Child’s personality”, “Child’s game”, “Child in society”, “Child’s speech”, “Child in the world of Art” (MON, 2021; edukacja-medialna.edu.pl, 2014).

Another reason for early media education is that media literacy in preschool is not perceived as a subject, but as a way of life. Later, teenagers have to be re-educated, changing skills and style of behavior in the media environment. It is much more difficult to do that than to organize properly media education from the very beginning.

Given the relevance of media education in the modern society, the Ministry of Education and Science of Ukraine approved an all-Ukrainian experiment on media education for 2017–2022, which involves 153 educational institutions, not only schools, gymnasiums, lyceums, regional institutes of postgraduate education, but also preschool educational institutions (Dorosh, 2017). However, the question concerning the format of the media education implementation remains controversial, as well as whether preschool age is sensitive to the formation of critical thinking. The creation of teaching and methodological support for media education in preschool is a problem. There are few such publications. Among the first there is primarily “Media literacy and critical thinking in the preschool education” (Volosheniuk et al., 2020).

Despite the fact that preschoolers learn about the world, moral values in play and fairy tales, media educational fairy tale is an innovative media product that is insufficiently known or unknown to preschoolers, kindergarten teachers and parents.

1.2 Literature Review

The influence of the mass media on the development of a child is reflected in (Chorna, 2007; Danyliak, 2017; Tereshchuk et al., 2019; Waters et al., 2016). Scientists focus on the insufficient use of media potential, print media in particular, for the upbringing of children; on the necessity to eliminate the low-end media products.

The issues of the preschoolers’ media education are investigated in (Ashytok, 2017; Brzyszcz, 2018; Drzewiecki, 2013; Kachura, 2017; Kondratenko, 2013; Krutiy, 2013; Oliinyk, 2013; Polievikova, 2013; Semeniako, 2016; Sotska, 2013; Šupšáková, 2016). The scientists pointed to the positive functions of the modern media in preschool education: didactic, educational, diagnostic, entertaining, etc. At the same time, they focus on the threats of the modern media to a child and the relevance of media education precisely in preschool, particularly in this context, Kachura (Kachura, 2017) notes: “The average child is already from two years under the influence of the information flow coming from the TV, at the age of three a child shows fairly stable preferences in the choice of cartoons, and to five years, begins to master computer skills. These resources carry so much information that it is difficult to master even for an adult, what to say then about a child. The key to the formation of a person capable of active and safe functioning in the modern media space is media education” (Kachura, 2017).

However, in the works of these scholars forms, methods of media education are not reflected as components of the system of media education. Media educational activities were researched comprehensively by Yankovych et al. (Yankovych et al., 2019), who substantiated the technology of formation of media literacy of older preschool children. However, not all issues have been resolved. The need for a media that combines traditional and innovative approaches to education remains relevant.

The problem of the low level of parents and kindergarten teachers’ media literacy, who have to help children to become literate, remains in preschool educational institution. It is obvious that it is impossible to form competence in a child, if you do not possess it yourself. Parents often do not know what media, media education, media literacy are and they associate them with the mass media – radio, television, the Internet. Kindergarten teachers also feel the need to improve their own media culture. In Ukraine, methodological materials for the formation of children’s media literacy have only just begun to appear (Volosheniuk et al., 2020). Such developments for a decade are intensively created abroad, in Poland in particular, where the “Media Education” (Edukacja Medialna) web-site operates, with scripts, exercises and additional information for conducting classes in preschools, schools, houses of culture and libraries (edukacjamedialna.edu.pl, 2021).

The materials are elaborated in accordance with the Catalogue of Media and Information Competences defined within the framework of the “Digital Future” project. In addition, other interesting developments for conducting workshops, media education classes for preschoolers and their parents were created (edukacjamedialna.edu.pl, 2014). The systematic work on creating such resources has only begun in Ukraine.

The need for an innovative media product, which would be used with interest by parents with children

and thus increase the level of media literacy, was identified.

The relevance of the problem of implementing media education at preschool institutions, the need to perform tasks aimed at the formation of media literacy of children arising from the Basic component of preschool education (MON, 2021), the need for innovative, interesting to children and adults, media products, the need to resolve these controversies led to the definition of the purpose of the study: to prove and experimentally test the media educational technology at preschool educational institutions of Ukraine.

The *object* of the research is institutions of preschool education of Ukraine; the *subject* is the media education of preschoolers (age 5–6).

1.3 Material and Methods

Theoretical and empirical methods were used to realize the purpose of the study.

Among the theoretical ones, primarily are such as functional and structural, interpretive and analytical, comparative analysis of literary and informational sources, through which the investigated problem was studied, forms, methods, means of realization of media education and formation of children's media literacy in Ukrainian pedagogy were revealed. An interview method was used in order to determine modern problems and ways to solve them in a preschool educational institution in relation to the implementation of media education. During the research, the specialists of the Academy of Ukrainian Press (founded in 2001, one of its tasks is the promotion of media education in Ukraine) were interviewed: Oksana V. Volosheniuk – a manager of media education programs of AUP; Yuliia O. Huza – an editor of the "Media Education and Media Literacy" site.

One of the leading methods of the research is modelling – to develop a model of the media educational technology at preschool educational institutions of Ukraine.

In the process of scientific research, empirical methods were used: testing, observation, interviews, experts' assessments, questionnaires, polls to measure the level of media literacy of the experiment participants, as well as pedagogical experiment to verify the efficiency of the media educational technology at preschool educational institutions of Ukraine.

Scientific research was carried out at preschool educational institutions and educational complexes of Ukraine (Kyiv, Ternopil, Khmelnytskyi city and region, Kherson, Mukachevo).

2 RESULTS

2.1 The Peculiarities of the Implementation of Media Education in the Preschool Educational Institution

A comprehensive study on the formation of media literacy of older preschoolers involves the definition of "preschool media education". Often, the very different interpretation of the concepts leads to differences among kindergarten teachers, teachers regarding the forms and methods of media education.

In our opinion, preschool media education is a part of the educational process characterized by a three-component structure (education about media, education through media and for media) that is implemented through the partnership of kindergarten teachers, parents and children, involves the formation of critical, conscious, responsible perception of information to all members in the partnership (Yankovych et al., 2019).

Surely, preschool media education has its own characteristics and is fundamentally different from media education of a student or an adult. This difference lies in the specificity of mental activity, thinking, insufficiency of life experience in preschooler. It is characteristic for a preschooler to thoughtlessly absorb information, which is transmitted from TV screens, computer monitors, radio receivers. Immersing into the informational and virtual world, a child is often not even thinking about the content of what child sees and hears, if they are not prepared for the critical, conscious, responsible perception of information. However, such abilities are difficult to form. There are factors that become an obstacle, but there are those that are favorable.

Thus, the problems will be highlighted at the beginning.

1. According to the periodization of the intellectual development of children by Piaget (Piaget, 1977), a child aged 5–6 years (2–7 years old period) is at the stage of preoperative representations, during which intuitive, visual-effective and visual-imagery thinking develops. Psychologists say that "thinking specifically, preschoolers tend to literally understand a lot. Therefore, they often misunderstand the words used in abstract and figurative meanings" (Brailko, 2010, p. 15). Since preschoolers are characterized by weak abilities to perform abstract mental operations, their thoughts often turn out to be very naive and unrealistic. Therefore, media literacy formation is problem-

atic.

2. Children have limited life experience, they are easily exposed to, and therefore do not realize when it is worth checking information and whether it is true. The main criterion still remains: "familiar-strange" (one can believe a familiar person); authoritative and non-authoritative (parents and kindergarten teachers are authoritative, peers, and often somewhat younger or elder brothers and sisters are non-authoritative). To find errors in the media is an unreal task for an average child to perform.
3. Media education involves its implementation through the media (including TV and computer). At the same time, a child should spend little time at the TV, especially computer (MON, 2021).

At the same time, the potential of preschool age for the formation of media literacy should not be underestimated. In this context, the work of Brailko (Brailko, 2010) are of great interest, who found out that cognitive activity and constant cognitive interest as the foundation of future educational motivation in preschool age (5–6 years) develop. All mental operations actively develop in children.

Liubchenko (Liubchenko, 2014) shows that when children are taught with a kind of purpose (even for a short period of time), the mental process changes very quickly. If 5–6-year-old preschoolers are taught to observe and draw conclusions (for example, to differentiate which things float and which sink, under which conditions leaves appear earlier on the cut brunches of poplars, to compare the shape of a tool with the conditions of its use), significant changes in their mental development occur.

Children learn to search for and identify the most peculiar features of things and phenomena, to find significant dependencies, relationships between them, and thus logical forms of thinking develop rapidly in children (Liubchenko, 2014, pp. 213–214).

The criticality of mind is characteristic for older preschoolers, that lies in the ability to objectively evaluate their own and others' opinions, to thoroughly prove and comprehensively check all the hypotheses put forward. Children who have developed this feature tend to check everything thoroughly before doing anything, and if one opinion does not pass the test, they reject it without hesitation and look for a new, more correct, one (Brailko, 2010, p. 10).

Studying the work of psychologists on the development of mental activity of preschoolers indicates that the formation of critical thinking can only be started in preschool institution, and it is necessary to continue this work at school age. At the same time, it is necessary to implement the pedagogy of partnership (children will not become media literate without the help of parents and kindergarten teachers).

It is advisable to take into account the role of fairy tales in shaping the personality of the preschooler. But for the formation of children's media literacy it is necessary to use it in the combination with cognitive activities.

2.2 Media Educational Tale as a Means of Forming Media Literacy of Preschool Children

A media educational tale is an effective component of the educational and methodological complex "Seeds of media education". In preschool age, play is a leading type of children's activities, and a fairy tale is one of the most effective means of development. We consider a special kind of a fairy tale – media educational tale, which gradually turns into dramatic games: small dramatic actions, where everyone plays the role of a certain hero, are played out by the plot of the fairy tale. But special feature of the media educational tale is not only in this. We have noticed that children love those fairy tales, in which they act themselves as heroes. And that is why in our fairy tales a kindergarten group acts as the hero of the fairy tale.

We have created media educational tales in the following directions: definition of basic terms (what is media), search for information, differentiation of truth and falsehood, safe use of media, communication in media, moral, economic, legal aspects of media (copyright).

For example, the fairy tale "Wonderful word media" tells about a meeting in the Forest Kingdom, where a group of children from the kindergarten is present.

"On the meeting, the animals said that they would like to know everything about their Kingdom: who lived, who and what ate, how many huts the inhabitants of the Kingdom had, and so on.

Owl, Wolf and Squirrel were involved in collecting such information. Animals and the Owl, a large clever bird, worked for a long time.

And later they wrote about everything they had found out in a book, as well as in a magazine and newspaper of the Forest Kingdom. They also reported on the Forest Radio and Television.

Just from magazines, newspapers, television, and radio the forest dwellers learned about everything that interested them. Not everyone has the opportunity to see Owl, Wolf or Squirrel to ask them questions. However, everyone could use a newspaper, magazine, radio or television program to find out how many huts

is in the Kingdom, who and what dishes cooks and what food likes.

In the Forest Kingdom, newspapers, magazines, radio, and television were called a wonderful word media. The media, having received information about the life of the Forest Kingdom inhabitants from Owl, Wolf and Squirrel, retold the animals about what they heard and saw".

But more in the Forest Kingdom there was the group of children from the kindergarten. And they told the fairy-tale inhabitants that they could also get information... (children supplement: from a computer, tablet, mobile phone).

And then the kindergarten teacher with the children summed up. Newspapers, magazines, radio, television, tablet, Internet are called the word media. Media transmit information from those who have received this information to those who want to use it (Kuzma, 2020, p. 78).

Obviously, the safe use of media is the most painful problem that children face. Nobody really wants to limit himself/herself in time to play with a smartphone, a tablet. The fairy tale "A Hare and a smartphone" is devoted to this topic (Kuzma, 2020, p. 85). It tells the story of a Hare, who found a smartphone and completely devoted himself to the game. In this tale, the moral motives and security of the use of new media are closely intertwined. The Hare did not go to the Bureau of Finds, but played hard. At the same time, he ignored the rules of being in the Forest: he forgot about carefulness, fell into the clutches of the Wolf. The fairy tale also educates the ability to help and support each other (the animals freed the Hare as a group). In connection with the emergence of such a dangerous situation, preschoolers learn not to succumb to temptation (temptation and danger often walk together) (Kuzma, 2020, p. 85).

A fairy tale takes on a completely different meaning if the child is its hero.

In this fairy tale, the kindergarten group created advices for the forest animals, advised not to get carried away with smartphones, but to play on playgrounds, to help parents in the garden or at home.

Exactly media educational tale, in which a group of children and each child are the heroes of the fairy tale, strengthens the motivation for media education, which we used in the experimental model of the technology.

Thus, the enrichment of the educational complex has necessitated the specification of diagnostic tools for the formation of media literacy of older preschoolers. Identical to the term media literacy, we consider media competence.

2.3 Diagnosis of the Formation of Media Literacy of Preschoolers

On the basis of study of the works on the problems of diagnosing the formation of the preschool children personal qualities, the implementation of media education, analysis of media education competencies of preschool children, identified in Poland in the framework of the "Digital Future" project (Cyfrowa przyszłość, 2010), empirical studies, we presented the ideal result ideal result high level of media literacy formation), that we expect to achieve in preschoolers, as a result of media education. A preschooler with the formed media competencies is aware of the importance of learning about media and education through media and for media, analyzes media educational tales with interest, responds positively to the announcements about media education classes, computer as a media means, is aware of the diversity of media, knows how to receive information, how to distinguish truth from untruth in media messages, how to verify information authenticity, existing media threats; knows what property is that responsibility ensues for assigning the work of another author; critically analyses the media products for children is familiar with a computer, acquires basic techniques of working with it; is able to create media means (pictures, photo galleries, comics), showing creativity, analyzing it adheres to the rules of safe media usage.

Children of a sufficient level of media literacy formation, although not aware of the diversity of media, do not know how to receive information, how to distinguish truth from misrepresentation in media reports, how to verify the authenticity of information, that liability is incurred for the appropriation of the work of another author, but they are aware of the importance of learning about the media and education through media and for media. Their only media product, created independently, is a picture. They are experiencing positive emotions when using media products, agree to proposals for reading and discussing media educational tales, critically analyzing with their parents the media, adhere to the rules for the safe use of the media.

Without special educational influence the low level of media literacy prevails in children (misunderstanding of the importance of media education lessons, its benefits to the child, ignorance of the types of media, their functions, the choice of the source of information, ways of verifying the truth of the source, the ways of distinguishing the truth and lies in the media. Such children use mobile phones, tablets, gadgets without permission from parents, experiencing positive emotions when using media products, but do

not want to analyze it, or analyze superficially. They show no interest in media educational tales. They do not show creativity while drawing (pictures are the only media work).

Formation of media literacy of older preschoolers is a complex process that involves a certain algorithm of actions for children, kindergarten teachers, parents, the implementation of special forms, methods, media education activities, diagnostic tools for checking whether the result corresponds to the aim. These actions and components are inherent to educational technologies. Thus, the actual task is to reflect the media educational technology at preschool educational institutions in the model.

2.4 The Model of the Media Educational Technology at Preschool Education Institutions

The research on the development and experimental verification of the media educational at preschool educational institutions was conducted during 2017–2020 (two stages: 2017–2018 – the first stage; 2019–2020 – the second stage) at the preschool education institutions of Ternopil (No 3, 16, 18, 19, Educational complex No 35), Khmelnytskyi (No 28, 29, 46), Kolkivtsi Educational complex (Khmelnytskyi region), Kherson (Educational complex No 7), Mukachevo (Educational complex No 1). Totally 384 respondents were involved in the confirmatory experiment (Yankovych et al., 2019). 225 children were involved in the formation experiment (2019–2020): 5 control and 5 experimental groups.

Some principles of the study of media literacy of preschool children were verified at Ternopil Volodymyr Hnatiuk National Pedagogical University at the Department of Pedagogy and Methods of Primary and Preschool Education and Khmelnytskyi Humanitarian Pedagogical Academy at the Department of Preschool Pedagogy, Psychology and Methods of Professional Disciplines.

A number of questions were asked to the children at the stage of the confirmatory experiment. The list of questions and answers to them is given in table 1.

On the basis of the analysis of answers to the first question “Do you know the word “media”? What do you think it is?” we concluded that the essence of the word is incomprehensible to children. 37 preschoolers out of 384 answered that the media is a TV, other 12 added that this is also a computer (but not a children’s magazine, book or theater).

Older preschoolers were asked: “If you want to learn about something how would you do it?” However, they could not answer this question without help. And only after the prompts “From the TV show ...”, “From the children’s magazine”, the answers were “from the computer”, “from the mobile phone”.

All children are aware that TVs often display distorted information, especially when it comes to advertising. However, they could not answer how to distinguish truth from untruth.

When asked how to check out whether what happens in life is described in fairy tales, children did not immediately answer that you need to ask your dad, mom, teacher. There was also such an answer: “One has to go with a mother or a father to the forest and check there, for example, whether a fox is talking to a hare”. What is said by a child is vivid confirmation of the fact that children have developed visual and effective thinking. Consequently, no child independently gave the correct answer to this question.

During the experiment, kindergarten teachers were asking: “Should children know that unusual events are reflected in fairy tales? Maybe, it is better for them to grow up with faith in the reality of the fair world”. We were answering that stereotypes formed in childhood often accompany people throughout their lives. For example, in adulthood, many adults are convinced that hedgehogs are wearing apples on their thorns. Such pictures were seen in books and magazines in childhood and remained in their memories as such that correspond to reality. Who defined the age when it comes to finding out the truth?”

During the experiment, we found that there is a direction in the field of media education, which kindergarten teachers give a lot of attention to in preschool education: child safety in the media and during contact with the media. Kindergarten teachers in preschool institutions talk about the threats of the modern digital means for the child’s organism. However, preschoolers often do not want to perceive and respond positively to such information, share it with their parents, who also prohibit the use of mobile phones, gadgets, tablets, etc. However, such devices increasingly attract children’s attention.

During the survey, all children answered that they like to read children’s books, magazines, watch TV and could not give preference to any single media product. Similarly, everyone answered that they like to talk about fairy-tale heroes, their acts, what they do well and what is wrong, but we have found in individual conversations that there is a need for a deeper critical analysis of such works, for example, whether the reflected events, in children’s opinion, are reliable.

Unfortunately, the only media product of preschoolers is the drawings, but they did not set the goal of using them to transmit information. In

Table 1: Survey results of preschoolers during the confirmatory experiment.

Content of the question	**Number of positive responses and % of general quantity**	**Number of negative responses and % of general quantity**	**Note**
1. Do you know the word "media"? What do you think it is?	0 0%	384 100%	49 (13%) answered inaccurately, incompletely
2. Do you know what are the ways to learn something, to get information?	0 0%	384 100%	(children with the help of tips partially answered the question)
3. Have you ever heard that what is written in newspapers, magazines, books, or shown on TV screens (for example, advertising) is not always true, and the authors of books, articles can make errors?	322 84%	62 16%	Only from television screens, mostly advertising
4. Do you know how to check the truth of what is written in children's books, magazines, is shown on TV screens?	0 0%	384 100%	
5. How to check if what is described in fairy tales happens in life?	0 0%	384 100%	
6. Do you have a mobile phone? For what purpose do you use a mobile phone?	200 52%	184 48%	Phones are used for communication and entertainment
7. Do you know that you can use a computer, tablet, mobile phone to watch TV following certain safety rules?	384 100%	0 0%	
8. Do you play a mobile phone, do you use a computer, a tablet, watching TV violating security rules?	257 67%	127 33%	
9. Do you read children's books, magazines?	384 100%	0 0%	
10. Do you love talking with your parents about fairy tales, their acts, what they do well, and what is wrong?	384 100%	0 0%	

addition, the children did not create together with their parents or kindergarten teacher's newspapers, comics, as a means of conveying information. The role of a fairy tale is underestimated, in particular one that would acquaint with the media world, how to get the necessary information, distinguish truth from falsehood, and so on.

During the experimental study, a group of experts was created: a methodologist of an educational institution, a teacher and one of the parents who distributed the children by levels.

According to the results of the confirmatory experiment, conducted in 2017–2018, it was found that 246 (64%) children (in control and experimental groups) are at a low level of the media literacy formation; 138 children (36%) – at a sufficient level. Preschoolers of a sufficient level of media literacy had several advantages over low-level children: they followed the rules studied while using the media, showed creativity when creating pictures as a means of transmitting information, and critically analyze the media. However, in order to obtain a high level of media literacy, they lacked knowledge about the variety of media, how to distinguish truth from lie, how to verify the authenticity of information, the inadmissibility of appropriating the work of another author, lacking the ability to create newspapers, comic books and other media products, analyze them, and also realize the necessity of organizing special classes for the formation of such knowledge and skills. The results obtained during the confirmatory experiment determined the relevance of the development and implementation of the media educational technology.

As the technology, first of all, we understand a system, which has a clear algorithm of actions, we have identified the stages of it: diagnostic-target (set-

ting the goals), integrational (work on the implementation of goals), and analytical (analysis of the results of the experiment on the implementation of technology).

The technology model is depicted in figure. It demonstrated the process of implementing media education of preschoolers in partnership with parents and kindergarten teachers from the goals to the result, using forms, methods, and means of media education activities, including the media educational tale as innovative media product (figure 1).

One of the main elements of the substantiated technology is the cycle of classes "Grains of Media Education" (supplemented by media educational tales), which is a part of the procedural component.

The organization of the experiment to test the model of technology provided for the methodical training of kindergarten teachers. For this purpose, special methodological guidelines and recommendations for kindergarten teachers were developed and used, in which both theoretical principles and practical approaches to the organization of the process of media literacy formation of children of the older preschool age in preschool institutions were developed and used. Kindergarten teachers, involved in the experiment, were instructed in detail about the essence of the experimental work in control and experimental groups. Traditional methods and programs were used in control groups; experimental groups implemented the developed technology model (Kuzma, 2020).

At the first stage, the diagnostics of the formation of children's media literacy in the control and experimental groups was carried out. In control groups and in experimental groups, no child was at the high level of media literacy. In control groups, 41 children (37.3%) out of 110 were at a sufficient level, 69 (62.7%) – at a low level of media literacy. In the experimental groups – 44 (40%) out of 115 children were at a sufficient level, 71 (61.7%) – at a low level of media literacy.

At the first stage, according to the diagnostics of the formation of media literacy among older preschoolers, the goals of media education were set.

At the second stage – integrational – the integration of actions of all the subjects of the educational process of preschool educational institution took place, the inseparability of the processes of motivation formation to media education, knowledge about media, their functions, a computer as the latest media tool, danger of the modern technical devices; skills of critical thinking and creation of the simplest media together with parents and kindergarten teachers.

At this stage, children with parents and kindergarten teachers read and analyzed media educational tales, media education classes were conducted for children: "Where do we get information from?", "Truth and untruth: how to distinguish", "Does Little Red Riding Hood really exist?", "What do you know about the copyright of the authors of books?"

During the media education class "Where do we get information from?" preschoolers found out about the essence of media, its types; how beneficial they are to a child, realized that there are many sources of information; learned to choose the source of information according to their needs; tried to find another source of information than from an older person. Since preschoolers are thinking specifically, it is not necessary to demand from them to remember the meaning of the word media.

Therefore, the knowledge of the essence of the concept of media was not tested during the experiment. However, as a result of experimental work, preschoolers have learned that not only TV, but children's magazines, booklets, theater is also media. Every day a preschooler is receiving a variety of new information. The kindergarten teachers told children that they could learn a lot, not only by asking parents or adults, but also flipping children's magazines, watching television programs. The class helped to find out what are the ways to find information.

The media education class "Truth and Untruth: How to Make a Difference?" was difficult for older preschoolers. Its goal was to get the children to know: not all that we learn is true; therefore, one has to learn to check information. After completing the training, preschoolers developed the ability to formulate simple questions to verify the accuracy of information; knew whom to contact to verify truthfulness of information; critically perceived information.

The media education class "Does Little Red Riding Hood really exist?" was an interesting one for the children. The kindergarten teachers told the children that not everything described in the fairy tale is true. After the class, the children knew that the actors from TV screens or magazines and books with whom they got acquainted could be fictional; heroes of fairy tales are also fictionalized.

Children can often distinguish between truth and untruth in fairy tales. But they do not always succeed. During the class, they become convinced that the author of fairy tales is inspired by the real world, for example, the world of animals. Preschoolers can create their own hero through their imagination.

When the experiment began, we thought that the main problem in implementing media education in preschool is the lack of interesting educational and

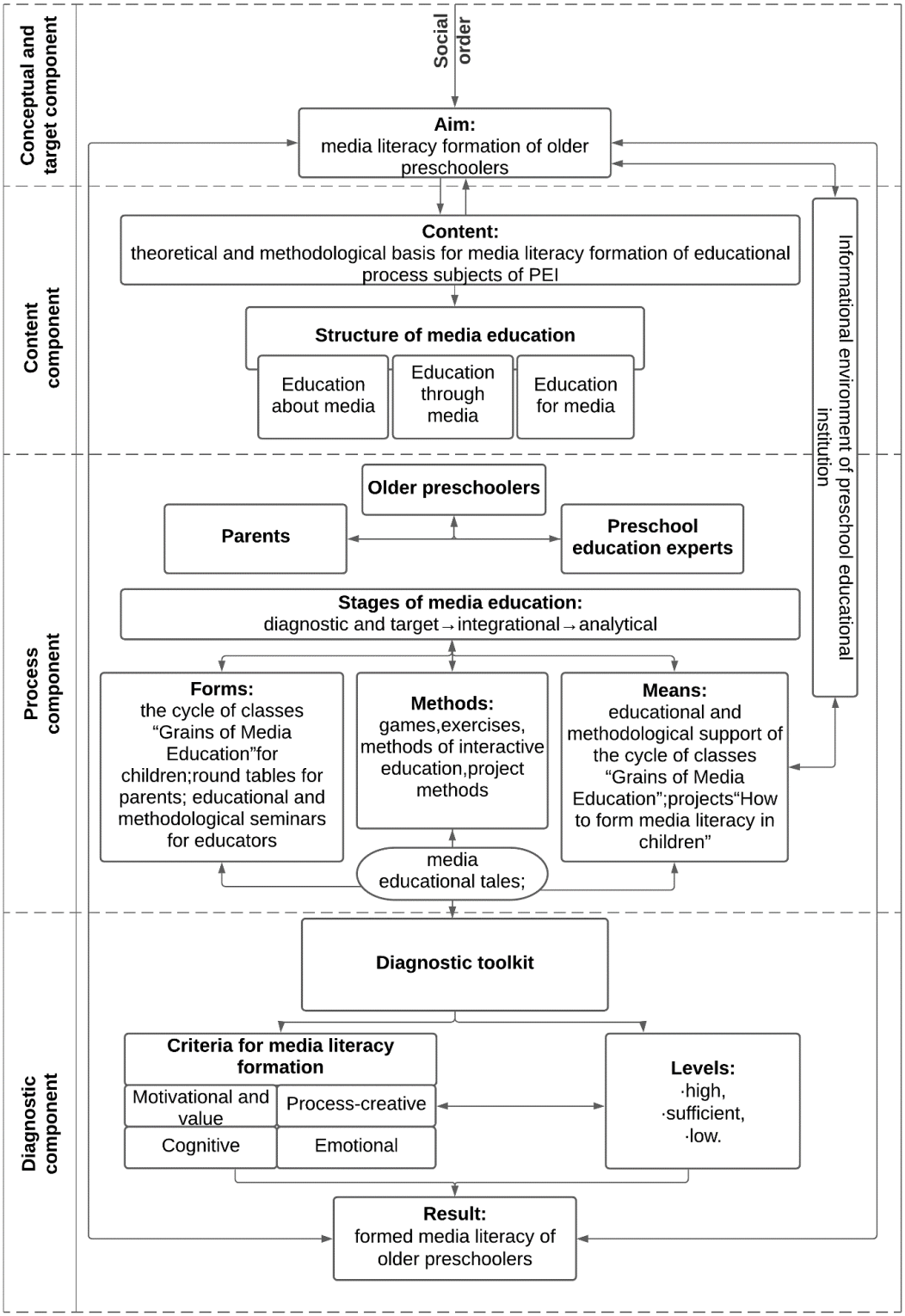

Figure 1: Media educational technology at preschool educational institutions.

methodological support. Therefore, by substantiating the media educational technology, we developed it and named as "Grains of Media Education".

The name of the methodological support "Grains of Media Education" itself testifies that children develop elementary knowledge and skills that will become the basis for media education in elementary school. We implemented various media education trends, borrowing the experience of Polish pedagogy: using information, relations and communication in the media environment, media language, creative use of media, ethics and values, legal and economic aspects of media use (edukacjamedialna.edu.pl, 2021).

It has already been pointed out that the problems of media education are challenging not only for children, but also for parents. When reading the methodological development "Grains of Media Education", parents had possibility to find out what media education is. Parents together with children and kindergarten teachers acted on the principles of pedagogy partnership, using the information environment of a preschool educational institution.

During the experiment, promising ideas of the experience of the children's media literacy formation in preschool institutions of Ukraine were realized, in particular, the creation of a photo-paper "My Family Tree", a comic book "One day from my child's life".

Children not only acted as the authors of comic books, but also as their characters. For example, one of the preschoolers performed as a doctor, and the kindergarten teacher (his father) was taking photos of him during his work. Then a series of comics was created from the photos.

A child, due to the comics, learned to distinguish between two types of text information: language and thought.

One of the comics topics was: "A TV is My Friend". At the same time, children found out that the TV did not only a medium that transmits information and affects children. It was illustrated as the following: a father calls his child to eat, or to read a book, to wash, but the child had the only answer: "No, let's watch the cartoons". In the end, the children saw the result of such behavior: a pale, frustrated face, poor eyesight, headaches, distorted spine. In the picture the child is yelling: "OK, let's turn off the TV and go to the garden".

During the experiment, we trained preschoolers to avoid extremes: not to consider everything seen on the TV as untruth, and not to believe everything entirely what they saw or heard in the media; to choose elder people (parents, kindergarten teachers, etc.) to verify the correctness of the information.

At the analytical stage, the media education activities of the subjects of the educational process of the preschool educational institution were analyzed. After the experiment was carried out, the positive changes in the dynamics of levels of media literacy formation were observed: in experimental groups, 24 children (20.9%) were at a high level of media literacy, 71 children (61.7%) were at a sufficient level; 20 children (17.4%) were at a low level of media literacy. In control groups, 44 children (40%) were at a sufficient level, 66 children (60%) had low levels of media literacy.

In the control groups, the distribution of children in the groups, which was recorded during the confirmatory experiment, has almost not changed.

The dynamics of the formation of media literacy levels is presented in table 2.

Thus, the research has proved the effectiveness of implementing the media educational technology at preschool educational institutions.

After the experiment we came to the conclusion that children are more likely to analyze media production with their parents and kindergarten teachers, they are more interested in magazines.

Significantly (by 44.3%) in the experimental groups decreased the number of low-level media literacy. Instead, one in five children has a high level. Compared to the first stage of the experiment (2017–2018) during the second stage (2019–2020), the number of representatives of the low level of media literacy in the experimental groups decreased by 10.6% (it was 28% during the first stage, it became 17.4% after completion of the second stage) (Yankovych et al., 2019).

However, during the experiment, we realized that a new form of work – reading and analysis of media educational tales – increase the motivation of kindergarten teachers to media educational activities. At the same time, the problems have remained. Kindergarten teachers are primarily trying to implement the State Standard for Preschool Education (it is gratifying that critical thinking is now mentioned as a cross-cutting skill of preschoolers), and also do everything to meet the expectations of parents. Traditionally, parents want their children learn to read, write and count in preschool educational institution. Consequently, it is precisely for this purpose that their main efforts are directed. The obstacle for media education is the high level of groups filling (up to 35 children in a group) in the preschool educational institution. Tired of the difficult work, during which it is necessary to constantly meet the requirements of parents, methodologists, managers, kindergarten teachers often do not want to assume additional responsibilities for the implementation all directions of media education. And

Table 2: The dynamics of the formation of media literacy levels of the older preschool children.

Levels	Control group (110 children)		Experimental group (115 children)	
	Before experiment	After experiment	Before experiment	After experiment
High	–	–	–	24 (20.9%)
Sufficient	41 (37.3%)	44 (40%)	44 (38.3%)	71 (61.7%)
Low	69 (62.7%)	66 (60%)	71 (61.7%)	20 (17.4%)

after that we look forward to enthusiasts, especially those who were trained, attended the courses at the Academy of Ukrainian Press.

Studies conducted in higher education pedagogical institutions among undergraduate part-time students (more than 90% of them are kindergarten teachers) have shown that they do not know what media and media education are. Only 2% of the polled masters are familiar with the Concept of Media Education Implementation in Ukraine. Approximately 50% of the masters-kindergarten teachers who are part-time students are convinced that media education is education with the help of the state-of-the-art computer technology (Yankovych et al., 2018).

All the students we have interviewed were women aged 23 to 46. Studies were conducted only in absentia, since more than 90% of the students of this form of study work as kindergarten teachers and must implement media education. But in reality, they have a very low awareness of media literacy.

Consequently, on the one hand, kindergarten teachers need to increase media literacy, on the other hand – they have insufficient motivation for this. The exception is such a direction of media education as the prevention of threats of the modern computer equipment for a child, which is not surprising, because this is one of the tasks of the kindergarten teacher, defined by the State Standard for Preschool Education.

Thus, the research has shown, on the one hand, the feasibility of implementing the media educational technology at preschool educational institutions, on the other – the need for further education of future kindergarten teachers; creating better working environment for them. However, the fulfillment of the latter task depends on the economic development of Ukraine; of the funds that will be invested in the educational sector.

3 CONCLUSIONS

The manipulation of the consumers' media consciousness, the saturation of television programs by the scenes of aggression and violence, the uncontrolled use of modern technical devices by children already at preschool age, determine the relevance of media education, which results in the formation of media literacy (preschooler's awareness of the feasibility of media education classes and their positive attitude towards their realization, knowledge of media diversity, its functions, computer as the latest media tool, awareness of the threats of modern technology, the ability to choose sources of information, create photo papers, comics, drawings, fairy tales, critically, consciously and responsibly perceive information).

The research has proved the necessity of implementing the media educational technology at preschool educational institutions, the cycle of classes "Grains of Media Education", the content of which is supplemented by media educational tales as a printed innovative media product. The effectiveness of the technology is confirmed by the positive dynamics of the levels of media literacy formation. Before the experiment, 61.7% of children were at a low level of media literacy, 38.3%) – at a sufficient level. No child was at a high level of the media literacy formation. Due to the implementation of the developed technology, 20.9% of children achieved a high level of media literacy development (61.7% were at middle and only 17.4% – at low levels). The number of children at low level decreased by 44.3%.

The analysis of the results of experimental work confirms the necessity of raising the level of media literacy of the kindergarten teachers themselves who need to improve the conditions of professional activity, as well as finding non-starting solutions, developing innovative products for the implementation of media education.

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