THE POTENTIAL OF DIGITAL TOOLS FOR DEVELOPING PRE-SCHOOL CHILDREN'S LANGUAGE SKILLS: TEACHERS' EXPERIENCES

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ABSTRACT

The article analyses teachers' experiences of the use of digital tools in the development of pre-school children's language skills. Findings from the qualitative research revealed that the use of digital tools helps to open up these possibilities for preschoolers' language development: improving children's speaking and active listening skills; meeting children's different educational needs; developing fine motor skills; developing reading skills; facilitating spontaneous learning; helping teachers to plan educational activities; individualising and differentiating the content of education; ensuring quality parent-teacher cooperation; etc. Teachers face the following difficulties when using digital tools to develop pre-school children's language skills: a lack of funds to purchase digital tools; inaccurate information in digital space; inappropriate educational content for children; lack of methodological hours to create interactive tasks; etc. In the opinion of the informants, the success of the use of digital tools is determined by the teacher's personal qualities, motivation, and the ability to apply effectively innovative educational methods. This is why teachers regularly participate in seminars and conferences, share best practices on social networks, etc.
KEY WORDS: *digital tools, language skills, pre-school age.*

Introduction

Language education, the ability to understand, find, adapt and communicate information to others in spoken and written language, is an important part of education, which is a prerequisite for the development of intellectual and creative abilities, emotional, social and cultural maturity, and the civic and national self-awareness of pre-school children (Priešmokyklinio ugdymo bendroji programa, 2022). Scientific and methodological literature (Beinorienė et al., 2016; Kamandulytė-Merfeldienė, 2021; Braslauskienė et al., 2022) emphasises that good linguistic abilities allow a person to know themselves and the world, to communicate effectively, to participate in society, and to act successfully. By learning about language as a socio-cultural phenomenon, children become aware of the value of traditions, their mother tongue, and the meaning of their personal contribution to the creation of culture. By analysing, interpreting, evaluating and creating

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their own stories and texts of various kinds, children develop critical thinking skills and learn to debate in an argumentative manner. By analysing fiction, children gain emotional experience, and develop imagination and creative thinking. Developing linguistic skills becomes a means of self-awareness, self-development and self-expression. Children understand how the use of language depends on the situation and the addressee, and learn to use language effectively.

Today's world is changing rapidly and getting cleverer. Constant change and the development of information and communication technologies are transforming the educational environment and its content, and encouraging the search for new ways and methods of education, taking into account the needs and potential of each student. Pre-primary teachers are increasingly using digital tools to help pre-school children acquire the competences necessary for everyday life and educational success (communicative, cultural, creative, cognitive, civic, digital, social, emotional, and a healthy lifestyle). And although digital tools have not been used recently as a substitute for the main group activities, learning experiences and teaching materials, they can be useful when properly integrated into the educational process (Sudeikienė et al., 2020). As R. M. Yilmaz et al. (2019) state, providing digital or multimedia elements such as voice, video or animation, besides visual elements, is essential in supporting vocabulary learning. In this regard, the authors suggest the integration of interesting and effective digital materials in order to overcome challenges posed by external factors and to yield more effective results in language teaching and the learning process. Within this context, educators have been observed to adopt different materials, develop activities, benefit from technology and integrate multimedia materials, in order to increase learners' willingness to learn language. The purposeful use of digital tools increases the efficiency of the educational process, enriches the educational environment, and helps to use the latest resources, explore and integrate different topics, develop critical thinking skills, apply active learning methods, highlight the child's individual abilities and experiences, etc (Stazdienė et al., 2018; Kurvinen et al., 2020; Gražienė et al., 2021; Schleicher, 2021). K. Nikolopoulou (2020), reviewing a number of recent studies, argues that digital tools can be used as a tool to support children's learning and development, a tool that can help young children's communication, cooperation, creativity and language development. Studies have shown the positive effects of using digital technologies on children's literacy skills, problem solving, and independence.

V. Gražienė et al. (2021) point out that the challenge for the 21st-century teacher is to effectively help the *alpha* generation of children to enter the knowledge society, the world of digital technologies, and to become not only users of digital tools, but also creators. In order to successfully integrate digital technologies into the educational process, the following activities are detailed, covering the key information literacy competences to be acquired at the end of the *Pre-primary Framework Programme* (2022): familiarity with the variety of digital content; understanding of the importance of algorithms and software for problem solving; skilful and creative use of digital technologies for the development of all competences; understanding the purpose and benefits of data and information management using digital technologies; understanding the purpose and importance of virtual communication; the protection of personal data. It should be noted that, according to A. Macijauskienė and A. Norvilienė (2018), preschools are currently attended by children of the *alpha* generation, who quickly become bored. This is because, having learned to use smart devices from an early age, they eventually become accustomed to 'scanning' information quickly, always looking for something that will catch their attention, at least for a short while. It is also important that children need to be able to access information immediately. Children in this period want their questions answered immediately, and if the interlocutor cannot do so promptly, he or she may lose the child's interest. Children in the *alpha* generation can do several things at once, but it is much harder for them to concentrate on one activity for longer. They are seekers of meaning. Exploration, testing and discovery are important in their learning. These children are much less dependent on formal rules. They also value relationships with their peers. In order to involve them in activities, it is necessary to encourage communication and cooperation, and to build a cohesive team of learners.

Various aspects of the use of digital tools in children's education have been explored by foreign and Lithuanian researchers. S. K. Davis et al. (2018) noted that the use of digital learning tools enhances students' engagement in the education process. N. Strazdienė et al. (2018) investigated trends in the development of information technologies, and highlighted the specificities of creating a child-friendly learning environment.

R. Kondratavičienė (2018) evaluated the suitability of the functions of the virtual learning environment *Eduka KLASĖ* for the individualisation and differentiation of educational content. I. Sudeikienė et al. (2020) developed recommendations for parents/guardians and teachers on how to teach children how to use information technologies safely from an early age. V. Gražienė et al. (2021) highlighted the peculiarities of the development of informational thinking skills in pre-school educational projects, and pointed out the role of the teacher in the development of informational thinking in pre-school children. R. Vaičiulė (2022) revealed the influence of the information space on the communicative abilities of pre-school children. R. Wajszczyk (2014) and M. D. Akmalovna (2023) identified the impact of digital tools on children, and highlighted trends in the use of digital tools.

A review of scientific literature and documents suggests that the use of digital tools for the integral development of different skills in pre-school children is a hot topic in the modern world. However, teachers' experiences of using digital tools to develop pre-school children's language skills have not been extensively analysed by researchers. Therefore, this paper raises the problematic question: what are teachers' experiences of the use of digital tools in developing preschoolers' language skills?

The object of the study: teachers' experiences of the use of digital tools in the development of pre-school children's language skills.

The aim of the study is to explore teachers' experience of the potential of digital tools for developing pre-school children's language skills.

Research methods: theoretical (analysis of scientific literature and documents); empirical (semi-structured interviews); qualitative content analysis.

1. Research methodology

A qualitative study was chosen to explore teachers' experiences of the use of digital tools (DTs) in the development of pre-school children's language skills. The study was organised in several stages. Firstly, the information provided in the scientific literature and documents was analysed; then the research strategy was chosen, the research instrument was designed, semi-structured interviews were conducted, the data were processed and analysed, and the research report was prepared. According to B. Bitinas et al. (2008), qualitative research helps to understand and interpret the social world, while people's behaviour is perceived as dynamic, situational and case-based, without seeking to be representative.

Participants in the study. J. Aleknavičienė et al. (2020) point out that in qualitative research, the purpose of the research is usually taken into account when selecting research participants. In this study, the sample units were selected from the general population on the basis of non-probability purposive sampling. Given the purpose of the study, the sample was selected from individuals who have accumulated meaningful information on the use of DTs in the development of language skills in pre-school children. In this case, teachers who use DTs in the development of pre-school children's language skills. The demographic data of the informants are presented in Table 1.

Table 1. Demographic characteristics of the informants

Code	Gender	City	Years of teaching experience	Qualification category
M1	Female	Kretinga	5	Senior teacher
M2	Female	Palanga	7	Senior teacher
M3	Female	Klaipėda	8	Senior teacher
M4	Female	Klaipėda district	14	Teacher methodologist
M5	Female	Klaipėda	10	Teacher

Source: The authors, 2024

The data in Table 1 shows that five pre-primary teachers participated in the study. This is a sufficient sample, as five participants are enough for an individual interview (Brinkmann, 2018). This is an adequate sample, as the recommended sample size for individual interviews is between five and 30 people (Rupšienė, 2007, 34). All five informants were women: M1 works in educational institutions in Kretinga city, M2 in Palanga city, M3 and M5 in Klaipėda city, and M4 in the Klaipėda district. The average work experience of the teachers is nine years, with one teacher, three senior teachers, and one teacher methodologist.

The study was carried out between January and February 2024. The method of data collection was a semi-structured interview, which is conducted using a pre-defined questionnaire-guideline, but the questions can be changed, and the researcher can ask additional questions, depending on the situation (Aleknavičienė et al., 2020). I. Gaižauskaitė et al. (2016) argue that semi-structured interviews allow for the collection of in-depth, contextualised, open-ended responses from the research participants, expressing their attitudes, opinions, feelings, knowledge and experiences.

B. Bitinas (2013) emphasises that in qualitative research, the research instrument is the researcher (interviewer), who is a reflexive participant in the interaction. Therefore, although the research instrument tries to remain neutral with regard to the results of the research, and tries to pay attention to what the participants want to say rather than to what the researcher wants to hear, the objectivity of the educational research is partial.

Qualitative content analysis was used to process the data. A three-stage data analysis sequence was applied (Nyumba et al., 2018). The first stage involved reading transcripts and annotating notes, while the second stage involved initial coding of the data, which involved generating categories without limiting the number of categories. The third stage (focused coding) involved combining the categories extracted in the second stage, noting recurring ideas and themes that emerged across the different groups. V. Žydžiūnaitė (2011) emphasises that the main goal of qualitative content analysis is to reveal the essential aspects of the phenomenon under study. K. Kardelis (2017) points out that content analysis allows us to draw qualitative and reasonable conclusions by objectively and systematically analysing the text's features.

Validity and reliability of the study. To ensure the validity of the study, efforts were made to create an environment of mutual trust between the participants and the researcher by explaining to the informants that the study data is confidential (informants are coded), and by formulating clear questions. According to V. Žydžiūnaitė et al. (2017), the limitations of qualitative research are related to the inevitable subjectivity in qualitative research. The generalisation of the results of this study was limited by the small number of participants. To demonstrate the accuracy and validity of the study findings, the following internal validity methods were used: direct involvement of the researchers in the study, coordination of the report with the study participants, and eliciting their views on the accuracy of the results. After the data collection and analysis, the information was re-clarified, and checked for accuracy and understanding. Qualitative research results are unique, allowing for the collection of unique data and insight into the perspectives of research participants (Aleknavičienė et al., 2020).

Ethics is a key consideration in qualitative research. 'The qualitative interview process is, by its very nature, a very intense interaction between the researcher and the research participant, which poses some unique ethical challenges: to remain as neutral as possible during the interview; not to judge the research participant; not to engage in discussion [...] and at the same time to remain reflexive, responsive, to manage and stimulate the interview' (Aleknavičienė et al, 2020, 56). The ethical principles of the research: voluntariness, anonymity and confidentiality were respected in the conduct of this study.

2. Research findings

The aim of the study was to find out which DTs are used by teachers to develop pre-school children's language skills (Table 2).

Table 2. Teachers' use of DTs to develop preschoolers' language skills

Category	Subcategory	Excerpts from interview texts
Using DTs to develop preschoolers' language skills	Optical mice	*Special optical mice* (M2)
	Interactive whiteboard	*Interactive whiteboard* (M1, M3, M4, M5). [...] *Children complete tasks in the digital learning environment 'EdukaKLASĖ', play Wordwall, LearningApps games* (M1) [...] *solve EMA exercises,* [...] *try the Paint tool* (M4)
	Interactive floor	*Interactive floor* (M2)
	Infinity tunnel	*We have an infinity tunnel, an optical illusion created on screen to give the impression of infinite depth* (M2)
	Mobile, interactive sandbox-table	*We have a mobile sandbox table* (M1)
	Educational *Bee-bot*	*We have a robot bee* (M4)
	Computer	*Using a computer* (M4, M1, M2)
	Tablet	*Using a* [...] *tablet* (M1)
	TV	*Using TV* (M4)
	Mobile phone	*We use our mobile phones to organise interviews, scan, create* [...] *QR codes, listen to various recordings, and watch videos* (M2)

Source: The authors, 2024.

The results of the study show that teachers use the following DTs to develop children's language skills: *an interactive whiteboard* (M1, M3, M4, M5), where children can perform tasks in different electronic learning environments (*EdukaKLASĖ*, *EMA*, etc), play online games, get to know and try out different programs (*Paint*, *TuxPaint*, *Mozabook*, etc). *Computer* (M4, M1, M2), *optical mice* (M2), which enable the device to be operated with the eyes, mouth and nose, which is of great interest to children with movement and positional difficulties or disorders. *Interactive floor* (M2); *infinity tunnel* (M2); *mobile, interactive sandbox-table* (M1); *educational 'Bee-bot'* (M4); *tablet* (M1); *TV* (M4); and *mobile phone* (M2), which allows children to do individual tasks, scan, create QR codes, listen to various recordings, use a Dictaphone, etc.

In the interviews, M1 and M2 noted that they use the *EduSensus* as a DT kit to develop pre-school children's language skills, which helps to enrich children's vocabulary, revise grammatical structure, improve storytelling skills, and build reading skills. The participants were pleased to see that, for the time being, they can use the kit for free. According to A. Dirvonskienė et al. (2022), *EduSensus* consists of six parts:

1. *Logorhythmics*, a music-based therapeutic intervention that helps develop speech, auditory motor coordination, hearing and speech fluency.

2. *Logogames*, which help to develop articulatory movements, encourage the pronunciation of sounds and words, improve active listening skills, and teach the control of voice timbre, tempo, loudness, intonation, etc.

3. *Words games* are designed to develop children's speech and language skills.

4. *Look and tell* is a tool to expand your child's active and passive vocabulary, and develop communication skills.

5. *Talking pictures* help children learn to distinguish between different sounds in the environment.

6. *Step by Step* is a tool with activities to help develop children's hearing, pronunciation and discrimination of sounds, logical thinking, problem-solving skills, and more.

It is worth mentioning that the *EduSensus* tools are complemented by print-ready materials, such as worksheets, colouring pages, etc. All of these facilitate the work of the teacher, speech therapist, speech and language therapist, sign language therapist, and other professionals (making it easier for them to prepare teaching materials); they also enable children to consolidate their knowledge and skills (Dirvonskienė et al., 2022).

The choice of DTs is wide. It is therefore up to each teacher to choose when and which DT to use. The empirical study sought to find out how teachers choose DTs for pre-school children's language development (Table 3).

Table 3. Criteria for selecting DTs for pre-primary children's language education

Category	Subcategory	Excerpts from interview texts
Criteria for selecting DTs for language education(s) for pre-school children	Age of children	*It is very important to take into account the age of the children* (M1, M3, M5)
	Individual abilities, special educational needs	*It is important to take into account children's* [...] *abilities* (M1, M5); *special needs* (M2.
	The aim and objectives of education	*When choosing tools, it's important to consider what we are trying to achieve, the theme of the week, the lesson, the event, the objectives* (M4)
	Recommendations of other specialists	*Hear other teachers' experiences, try them in your group* (M1) *Colleagues share experiences, I try to adopt good practices* (M5)

Source: The authors, 2024.

The survey showed that the participants in the study take into account: *the age of children* (M1, M3, M5); *individual abilities, special educational needs* (M1, M2, M5); *recommendations of other specialists* (M1, M5); *the aim and objectives of education* (M4). A. Dirvonskienė et al. (2022) emphasise that when deciding which tool to choose, a teacher should assess the abilities of his/her pupils, and select DTs that will motivate the child, comply with the General Curriculum, the educational objectives and the contemporary context. It is also very important to consider how feedback from the teacher and the pupil will be systematically provided when selecting DTs, in order to avoid leaving issues uncovered.

In the survey, the teachers were asked to identify the difficulties they have in using DTs in the process of the language education of pre-school children (Table 4).

Table 4. Difficulties in using DTs to develop preschoolers' language skills

Category	Subcategory	Excerpts from interview texts
Difficulties in using DTs to develop preschoolers' language skills	Technical difficulties	*Sometimes technology fails: the internet goes down, something stops working* (M4) *Technology is unpredictable, the internet goes down, then something else* (M1)
	Competition from children, their excessive interest in digital tools	*Everyone wants to* [...] *use digital tools* [...] *If you let one of them do a task on an interactive screen, the others won't concentrate, they'll watch what their friend is doing* (M3)
	Lack of DTs	*Digital tools are* [...] *expensive, so sometimes there is a lack of funds to buy new digital tools* (M2, M5) *Licenses expire and we don't always have the money to renew them, so we have to make do with limited access, or look for other tools* (M3)
	Lack of time	*It takes a lot of time to develop tasks and games* [...] *after all, we don't just work with digital tools* (M1)

Source: The authors, 2024

Table 4 shows that teachers identified the following difficulties in using DTs to develop preschoolers' language skills:

Lack of DTs (M2, M3, M5). 'Lack of funds to buy new [...] digital tools [...] tools need to be shared with colleagues,' said M2 in an interview.

Technical difficulties (M1, M4); *competition from children, their excessive interest in digital tools* (M3). 'Everybody wants to use [...] digital tools [...] If you let one of them do it [...] the others [...] will watch what their friend is doing,' shared M3.

Lack of time to develop tasks and games (M1). M1 shared the experience that virtual game development requires a lot of time.

Scientific literature (Paulionytė et al., 2010; Zhu et al., 2018; Gražienė et al., 2021) emphasises that teacher agency is an important factor in improving children's educational outcomes. The need to improve the quality of teachers' work is emphasised. This includes teacher training in higher education, support for teachers at the start of their careers, continuous professional development, and support and motivation from school leaders. The professionalism of the 21st-century teacher depends on the ability to innovate creatively, to develop and effectively apply innovative teaching methods. The results of our study are in line with the research logic. All the participants in the study acknowledged that the success of the use of DTs is determined by the teacher's ability to use informational technologies in a targeted way. Therefore, the participants in the study continuously improve their professional competences, learn from seminars, conferences and social networks, and share good practice with colleagues.

The study sought to find out about teachers' experiences of the possibilities to use DTs in the development of pre-school children's language skills (Table 5).

Table 5. Possibilities of using DTs in the development of language skills of pre-school children

Category	Subcategory	Excerpts from interview texts
Possibilities of using DTs in the development of language skills of pre-school children	Self-learning	*A child learns without even realising he is learning* (M1)
	Select an activity	*The child can choose* [...] *tasks* (M4)
	Possibility to work independently	*The correct answer is often given in various games, allowing the child to learn independently* (M3, M5)
	Meeting the educational needs of children with diverse needs	*The tools can be used for children with intellectual, hearing, speech and language impairments and autism spectrum disorders* (M2) *Work at your own pace* (M3) *Promote inclusive education* (M4)
	Individualise, differentiate tasks	*Children with different abilities can do different tasks* [...] *The possibility to give individual tasks to gifted children who work faster* (M4).
	Develop fine motor skills	*The infinity tunnel can help with fine motor skills* (M2) *Colouring, tracing pictures* (M3)
	Calm down	*Helps the child to calm down* (M2)
	Improve speaking skills	*Interaction with sand has a positive effect on the central nervous system, stimulating the parts of the brain responsible for speech* [...] *digital tools teach you to control the timbre, tempo, volume and intonation of your voice* (M2) *It helps to expand children's active and passive vocabulary* (M4) *We create, continue* [...] *stories* (M5) *Clarify unknown concepts* (M1)
	Improve listening skills	*Listen to audiobooks* (M1) *Watch cartoons, YouTube videos* [...] *discuss them* (M4) *Improve listening skills* (M3) *Enables auditory analysis* (M5)
	Developing the beginning of reading	*Playing word games, children start to read, put words together* (M1)
	Planning the content of education	*In our kindergarten system, we plan children's activities* (M4)
	Cooperate with children's parents	*Our kindergarten system provides information for parents and displays children's activities, so parents can enjoy their children's work and achievements, see what their children are doing in kindergarten, and extend their activities at home* (M4)

Source: The authors, 2024.

The analysis of the survey data revealed teachers' experience that the targeted use of DTs opens up the following opportunities for language learning: *it helps teachers to create favourable conditions for improving children's speaking* (M1, M2, M4, M5) *and active listening* (M1, M3, M4, M5) *skills*; *it responds to children's different educational needs* (M2, M3, M4); *it empowers children to work on their own without the teacher's help* (M3, M5); *it develops children's fine motor skills* (M2, M3); and *it builds the beginning of reading* (M1); *develops responsibility for choosing activities* (M4); *helps calm them down* (M2); *facilitates self-directed learning* (M1); *helps teachers to individualise and differentiate the content of education* (M4); *helps to plan education* (M4); *helps to communicate and cooperate effectively with the children's parents/guardians* (M4); etc.

The participants in the study highlighted the advantages of using DTs to develop preschoolers' language skills (Table 6).

Table 6. Advantages of using DTs to develop pre-school children's language skills

Category	Subcategory	Excerpts from interview texts
Advantages of using DTs to develop pre-school children's language skills	Enhancing children's motivation to learn	*Encourages children's [...] desire to learn* (M2) *Enhances [...] motivation to learn, brings joy* (M1)
	Enabling engagement	*Encourages children's participation* (M2) *Increases pupils' involvement in activities* (M4)
	Making teachers' jobs easier	*The interactive whiteboard contains a variety of preps* (M1) *Many digital tools can be found on the internet and can be used in a targeted way* (M3)
	Enhancing the child's self-esteem	*The activity can be repeated many times, the child is no longer afraid to make mistakes, and he/she becomes more self-confident* (M2)
	Enriching and diversifying the educational process	*Enriching, diversifying [...] the process* (M5)

Source: The authors, 2024

Teachers identified the following advantages of using DTs to develop preschoolers' language skills (Table 6): *it brings joy, enhances motivation to learn* (M1, M2); *it enables children's engagement in the activities offered* (M2, M4); *it facilitates the teacher's work* (M1, M3); *it enhances children's self-esteem, enables children to repeat the activity many times, to experience the success of the activity (M2); it enriches and diversifies the educational process* (M5). A. Saylik (2014) points out that one of the most frequently cited benefits of using DTs is an increase in motivation, which leads to better concentration and longer attention spans. The logic of the study by R. Girdzijauskienė et al. (2022) suggests that with the help of DTs, the teacher can offer the child educational methods that correspond to his/her strengths and weaknesses, and adapt the content of the education. S.K. Davis et al. (2018) point out that in order to make the most of the opportunities offered by DTs, it is necessary to strive for every child to experience success.

Despite the many benefits of using DTs, the potential side-effects of using them, such as the ineffectiveness of passive learning strategies, limitations in communication, and cooperation with others, etc, need to be considered (Girdzijauskienė et al., 2022). The following disadvantages of using SPs to develop preschoolers' language skills were identified by the participants (Table 7): *inaccurate and incorrect information in the digital space, inappropriate content for preschoolers* (M3, M5); *DTs are not adapted to learning in Lithuanian* (M2; M4); *the tasks on the screen put a lot of strain on the children's eyes* (M4); *the danger of getting too involved in the virtual world* (M4); etc.

Table 7. Disadvantages of using DTs to develop preschoolers' language skills

Category	Subcategory	Excerpts from interview texts
Disadvantages of using DTs to develop preschoolers' language skills	Tool is not translated into Lithuanian	*'Boardmaker v6' has a disadvantage: no Lithuanian language installed* (M2) *Games are often in English* (M4)
	Inaccurate, incorrect information, inappropriate educational content	*Sometimes there are games with spelling mistakes, the wrong answer is marked as correct* (M3) *We are forced to view all sorts of nonsensical advertisements* (M5)
	High strain on children's eyes	*It is not clear how much time they spend in front of* [...] *screens, leading to poor eyesight and an increasing number of children wearing glasses* (M4)
	The danger of getting too involved in the virtual world	*A generation* [...] *no longer understands where reality is, where virtual space is. In real life, not everything can be repeated again and again* (M4)

Source: The authors, 2024.

Thus, to sum up, it can be said that DTs are changing social life, and the introduction of DTs in the development of pre-school children's linguistic abilities influences children's education and forms new habits in life. Therefore, in today's world, it is no longer a question of whether or not to use DTs. The question should be how to use DTs effectively. Teachers therefore have a responsibility to choose and implement innovative educational strategies that meet the challenges of the 21st century, enable children with different abilities to develop different skills in a targeted way, and enable every child to experience educational success.

Conclusions

The use of DT tools in the development of pre-school children's language skills is relevant to the effectiveness of the educational process, helping the teacher to use the latest resources, integrate different topics, use active learning methods, highlight the child's individual abilities and experiences, etc. The use of DTs also implies a responsibility for teachers to familiarise themselves with the variety of digital content, to understand the importance of algorithms and programs for problem solving, to use DTs in a skilful and creative way to develop all competences, to understand the purpose and benefits of processing data and information with DTs, etc.

From the perspective of the participants' personal experiences, the use of DTs in the development of children's language skills is quite varied and common. The most commonly used tools are: interactive whiteboards, computers, optical mice, interactive floors, mobile, interactive sandbox tables, educational robots, tablets, TVs, mobile phones, etc. All these tools help to enrich children's vocabulary, improve their grammar, improve their storytelling skills, develop their reading skills, etc. Summarising the experiences of the participants in the study, it can be noted that when choosing DTs for the language education of pre-school children, the teachers take into account: the age of the children, individual abilities, special educational needs, recommendations of other specialists, the purpose of the education, the objectives, and the possibilities of providing systematic feedback. The personal experiences of the participants in the study about the limitations of DTs revealed that the most common limitations were: a lack of funds to purchase the tools, a lack of time to create various tasks and games, and technical problems. The experiences shared by the participants in the study also pointed to the potential of DTs in children's language development: helping to create favourable conditions for improving children's speaking and active listening; helping to meet children's different educational needs; empowering children's independence; helping to develop children's fine motor skills and reading skills; helping to individualise and differentiate the content of the education; enabling children to

repeat an activity many times and to experience success in the education process; enriching and diversifying the educational process; etc.

The limitations of a qualitative study assessing teachers' experiences of the use of DTs in the development of pre-school children's language skills are related to the inevitable subjectivity of qualitative research. Although the design and conduct of this type of research have met these requirements, the generalisability and applicability of the findings are partly limited by the small number of participants. The results of qualitative research are unique and specific to the individuals involved. It would be wrong to apply the findings of the study to all teachers, but it is likely that the reflection on the teachers' experiences in this study has revealed the diversity, limitations and possibilities of using DTs to develop the language skills of pre-school children, as well as the multifaceted nature of the activity, which requires professionalism on the part of the teacher in order to get to know each pupil, and the development of his or her own skills. The findings of the study allow us to foresee the continuation of further research on this phenomenon, in order to find out the opinions of pre-school teachers through quantitative research.

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SKAITMENINIŲ PRIEMONIŲ NAUDOJIMO GALIMYBĖS UGDANT PRIEŠMOKYKLINIO AMŽIAUS VAIKŲ KALBINIUS GEBĖJIMUS: MOKYTOJŲ PATIRTYS

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Santrauka

Mokslinėje literatūroje (Beinorienė, Gražienė, 2016; Kamandulytė-Merfeldienė, 2021; Braslauskienė, Turauskienė, 2022) akcentuojama, kad geri kalbiniai gebėjimai leidžia pažinti save ir pasaulį, veiksmingai bendrauti, dalyvauti visuomenės gyvenime, sėkmingai veikti. Pažindami kalbą kaip socialinį kultūrinį reiškinį vaikai suvokia tradicijų, gimtosios kalbos vertę, asmeninio indėlio į kultūros kūrimą prasmę. Siekdami padėti priešmokyklinio amžiaus vaikams įgyti kasdieniam gyvenimui bei sėkmingam ugdymuisi būtinas kompetencijas, priešmokyklinio ugdymo mokytojai vis dažniau naudoja skaitmenines priemones.

Teorinė apžvalga leidžia teigti, kad skaitmeninių priemonių naudojimas integraliai ugdant įvairius priešmokyklinio amžiaus vaikų gebėjimus yra aktuali tema. Tad šiame straipsnyje keliamas p r o b l e m i n i s k l a u s i m a s – kokios yra mokytojų patirtys dėl skaitmeninių priemonių naudojimo galimybių ugdant priešmokyklinio amžiaus vaikų kalbinius gebėjimus?

T y r i m o o b j e k t a s : mokytojų patirtys dėl skaitmeninių priemonių naudojimo galimybių ugdant priešmokyklinio amžiaus vaikų kalbinius gebėjimus.

T y r i m o t i k s l a s – atskleisti mokytojų patirtis dėl skaitmeninių priemonių naudojimo galimybių ugdant priešmokyklinio amžiaus vaikų kalbinius gebėjimus.

Tyrimo metodai: teoriniai (mokslinės literatūros ir dokumentų analizė); empiriniai (iš dalies struktūruotas interviu), kokybinė turinio (*content*) analizė.

Siekiant atskleisti mokytojų skaitmeninių priemonių naudojimo galimybių patirtį ugdant priešmokyklinio amžiaus vaikų kalbinius gebėjimus, pasirinktas iš dalies struktūruotas interviu. Atsižvelgiant į tyrimo tikslą, tyrimui atrinkti mokytojai, sukaupę prasmingos informacijos apie skaitmeninių priemonių naudojimo galimybes ugdant priešmokyklinio amžiaus vaikų kalbinius gebėjimus.

Atliekant tyrimą surinkti duomenys atskleidė, kad skaitmeninių priemonių naudojimas ugdant priešmokyklinio amžiaus vaikų kalbinius gebėjimus yra veiksmingas ugdymo procese, leidžia pedagogui naudotis naujausiais ištekliais, integruoti įvairias temas, taikyti aktyvaus ugdymo(si) metodus, išryškinti individualius vaiko gebėjimus, patirtį ir kt. Tyrimo dalyvių asmeninių patirčių kontekste dažniausiai taikomos tokios priemonės, kaip interaktyvioji lenta, kompiuteriai, optinės pelės, interaktyviosios grindys, mobiliosios, interaktyviosios smėlio dėžės – stalai, edukaciniai robotai ir kt. Visos šios priemonės padeda turtinti vaikų žodyną, tikslinti gramatinės kalbos sandarą, tobulinti pasakojimo įgūdžius ir formuoti skaitymo pradmenis. Pedagogės, rinkdamosi skaitmenines priešmokyklinio amžiaus vaikų kalbinio ugdymo(si) priemones, atsižvelgia į: vaikų amžių, individualius gebėjimus, specialiuosius ugdymosi poreikius, kitų specialistų rekomendacijas, ugdymo tikslą, uždavinius, grįžtamojo ryšio sistemingumo užtikrinimo galimybes. Tyrimo dalyvių asmeninių patirčių dėl skaitmeninių priemonių taikymo trūkumų radiniai atskleidė, kad dažniausiai tai: šių priemonių įsigijimo lėšų trūkumas, laiko įvairioms užduotims ir žaidimams kurti stoka, pasitaikantys techniniai nesklandumai. Tyrimo dalyvių patirtys atskleidė ir skaitmeninių priemonių galimybes, tai: pagalba sudarant palankias vaikų kalbėjimo, aktyvaus klausymo(si) tobulinimo sąlygas; pagalba, siekiant atliepti skirtingus vaikų ugdymo(si) poreikius; vaikų savarankiškumo ugdymo(si) įgalinimas; pagalba ugdant vaikų smulkiąją motoriką, formuojant skaitymo pradmenis; pagalba individualizuojant ir diferencijuojant ugdymo(si) turinį; galimybių vaikui kartoti veiklą daug kartų ir taip patirti ugdymo(si) sėkmę sudarymas; ugdymo(si) proceso praturtinimas ir paįvairinimas, kt.

PAGRINDINIAI ŽODŽIAI: *skaitmeninės priemonės, kalbiniai gebėjimai, priešmokyklinis amžius.*