

# PERSONALIZED CONTENT IN THE INTERVENTION PROCESS – A KEY TO THE SUCCESS IN SPEECH THERAPY FOR PRE-SCHOOLERS

Sarmite Tubele

University of Latvia

## ABSTRACT

The paper is devoted to reveal the importance and necessity of the personalized content for a child in the intervention process in speech therapy. Every child is special and unique; his interests and desires are important for speech therapist. Child has to be an active participant in speech therapy sessions. His strengths are the basement for the development. New knowledge for pre-schoolers is formed on the basis of the existing knowledge; it needs to be purposefully developed by teachers and this can be done if a child is engaging in the learning process. The active participation of a child in speech therapy sessions increases the child's motivation and attachment to the task to be performed, thus contributing to a faster and more effective result. This research is topical according to the tendencies in teaching-learning and due to the education processes in pre-school. The aim of the study is to reveal the possibility to find effective approach in speech therapy sessions for the pre-schoolers using materials interesting for them.

Methods used are: literature review, questionnaire for parents and observation of children in speech therapy sessions. Theoretical background is not only the personalized content; it is linked also with speech therapy, intervention process and children participating in speech therapy sessions.

Main findings reveal the improvement of the pronunciation of pre-school children and besides the satisfaction and good mood during all observed speech therapy sessions.

**Keywords:** *intervention process, personalized content, pre-schoolers, speech therapy, speech therapy sessions.*

## Introduction

When a speech therapist works with pre-school children the question often arises – how to better choose the materials to strengthen the correct pronunciation of speech sounds and promote phonological skills. Recent trends in education provide for conscious learning school-age children as

well as pre-schoolers using methods that promote the development of sustainable skills in the pre-school learning process (Namsone & Oliņa, 2018). To achieve this, more attention must be paid to make the learning process more attractive and the engagement give pleasure and effective result. There is a lot of talk about meaningful learning (Agra et al., 2019; Silva, 2020; Sousa et al., 2015), deep learning (Mystakidis, 2021) nevertheless in pre-school age it is a little more complicated. It is difficult for a pre-school child to concentrate, to switch attention from one type of activity to another, to fully perceive what is being said. Perseverance, a desire not to finish the job, difficulties in engaging in activities that do not seem interesting are often observed. The child's conscious participation in speech therapy sessions is required (Tübele, 2019). Children need to find a joy as well as interest in what is happening. Learning by playing requires a lot of preparation on the part of teachers. Useful information is found in the article on systemic literature review in the context of the chosen topic, looking directly at the terminology of personalized learning. First of all, it was already noted that the number of publications has been constantly growing since 2002, reaching approximately 5,000 articles in 2012. A. Shemshack and J. Spector analyzed 56 studies in the systematic literature review. The main findings are related to the definition of personalized learning, which emphasizes the creation of a personalized learning environment in such a way that it corresponds to the knowledge, experience and interests of each individual. Then an effective outcome will be ensured. Although different concepts are used in the analysis – personalized learning, individualized learning, individualized instruction, customized learning and others, in this article there are indications of the need for specific personalized content (Shamshock & Spector, 2020).

Based on the theoretical findings, a study was developed using the content that is personally important to a child in speech therapy sessions, both in the correction of sound pronunciation disorders and in the improvement of phonological awareness. The techniques used in the intervention process must be used in a certain order, however, the speech therapist may introduce several changes in the materials, structure of the session and progress. To achieve this, the child must be observed, his interests must be evaluated, then the selected materials will be binding for each individual child. A pre-schooler with speech and language disorders cannot independently distinguish speech sounds, analyze the composition of word sounds. Speech and language disorders affect the child's general development, in essence, speech and language express the child's inner world, his thoughts, beliefs, feelings, form actions. Failure to detect and reduce interference in a timely manner affects communication skills and has further consequences. This will create persistent difficulties in learning to read and write at school

(Tübele, 2019). The child must be offered a varied and meaningful involvement, thinking about the learning process itself, through which the child acquires skills, abilities and knowledge. When a child gets acquainted with the new content, it should be evaluated and linked to the previous experience, thus the understanding of the new content is formed by expanding the previously acquired and will develop more stable ideas and more stable skills and knowledge in the long run, as opposed to the knowledge that is passed on to the child in a ready-made way and that the child acquires mechanically. From this it can be concluded that meaningful learning is related to the child's active participation in the formation of his/her own understanding (Patel-Junankar, 2017), and the learning outcome will be greatly influenced by the process as it is done (Namsone, Oliņa, 2018).

Personalized learning improves student activities more than other educational approaches. There is no single definition, although some authors offer a relevant explanation: Personalized learning prioritizes a clear understanding of the needs and goals of each individual student and the tailoring of the instruction to address these needs and goals. These needs and goals and progress toward meeting them are highly visible and easily accessible to teachers as well as students and their families, are frequently discussed among these parties and are updated accordingly (Pane et al., n. d.). Personalized learning can improve student achievement, however, there is no direct evidence of the effectiveness of personalizing the learning process in preschool. There are also quotes about online personalization, however, significant connections are taking place, as all aspects of individualization of the intervention are observed (Zanker, Rook & Jannach, 2019). Here, in the personalization process, an increased interest in learning contents is observed, which in turn increases the achieved results. Some authors talk about customized age-appropriate content. The possibility of choice endows learners with feelings of motivation and autonomy, which support their engagement in learning. There are also ideas for content that is neither too easy nor too difficult for students. Children feel alienated particularly in relation to their cultural background and language skills (Kucirkova, Gerard & Lim, 2021). Attention is drawn to the fact that personalization prepares children for educational activities and promotes their interest. For preschool children, personalized learning material ensures active involvement and improves various skills – language, speaking, reading. An increase in self-esteem, improvement of communication skills and positive behavior have also been observed (Kucirkova, Messer & Sheehy, 2014). There is a study that talks about the choice made by the teacher or another adult (including a speech therapist) based on the previous assessment of the children (Kucirkova, 2019). At the session level, in-depth learning by a teacher-speech therapist means setting clear goals,

updating the child's experience, providing and monitoring support, guiding and observing the child's learning, participating, setting benchmarks against which to measure progress and providing developmental feedback. In turn, the child must have a clearly achievable result and be active in achieving it (Urbāne, 2021). J. da Silva analyzes D. Ausubel's theory of meaningful learning, during which the learning process will be influenced by the previous knowledge in the child's cognitive structure. These are called "anchors", which can serve as reinforcements for new information (Silva, 2020). Prior knowledge is responsible for supporting and managing the acquisition of new content, and the relevance of new knowledge will depend to a large extent on previous knowledge. J. da Silva points out that, according to D. Ausubel's theory, two more conditions are needed for meaningful learning:

- potentially relevant teaching material and
- potentially significant content (Silva, 2020).

The idea of personalized learning itself is not new. From a historical perspective, personalized learning has been mentioned for more than 200 years to provide scalable, mass, public education that also addresses the variable needs of individual learners (Dockterman, 2018).

Despite the fact that the material is potentially significant for the child, he/she must also be psychologically motivated to perform important activities in the learning process, which is not easy. In order for a child to learn meaningfully, he or she must be motivated to learn, which is the most difficult condition for a child to acquire the content necessary for development. The development of the child's intrinsic motivation should be encouraged so that the child understands that the content that is gradually incorporated into his or her prior knowledge is useful for his or her future life (Urbāne, 2021). Creating potentially relevant material is important, but you have to keep in mind that material that is important to one child may be insignificant to another. When organizing speech therapy intervention process, it is meaningfully to ensure positive motivation for completing tasks. If the speech therapist includes in the sessions what is important for the child personally, it will increase his/her desire to work and help him/her achieve the set goal. What a child does with joy and enthusiasm drives his or her development forward because he or she is motivated to act and the information obtained is better remembered. In turn, what remains in the memory helps to connect what is learned with what is already existing, and opens up opportunities for new skills and abilities, as it stimulates the child's interest in new activities. The child's perception of the possibilities of using his/her interests expands and he/she develops confidence in his/her ability, self-confidence grows and it helps to overcome the difficulties the child faces.

## Methodology

The analysis of the theoretical literature in the context of the research problem is used. Selected articles in Google Scholar by a few key words (personalized content, pre-schoolers, speech therapy sessions) and scientific literature. Theoretical articles were searched for information on personally relevant or personalized content for preschool children in speech therapy sessions. Such wording was apparently too specific and no such information was found. By varying the combinations of keywords, individual articles proved useful, especially the systematic literature review (Shemshack & Spector, 2020). Other ideas were analyzed in articles on personalized learning, meaningful learning, and personalization.

In order to find out the content that is personally important for the child from the parents' point of view, the written form of the survey method was used – a questionnaire with open and closed questions. The questions (10 in total) were designed to find out the child's favorite activities at home, favorite book, favorite cartoon and joint activities at home, interests, passions, thus the answers showed the general trends in the interests of one specific group of children. Therefore, all parents of children in the group (20 in total) provided answers to the questions, which were anonymous and the answers were used only in aggregated form. 6 children from the same group with phonetic phonemic disorders were involved in the study. Parents have given written permission for speech therapy sessions. Children's speech evaluation process and intervention is the part of this activity and the names of the children in the study have been changed for ethical reasons.

The observation of pre-school children and intervention to reduce speech sound disorders was performed. As the result of observation, conversations, and the common trends taking into account the survey results, the interests of each child were noted in order to be able to choose the appropriate and personalized speech material.

## Results

The study was conducted on the basis of theoretical findings and speech therapy sessions were organized for preschoolers with phonological disorders. There were six children and 20 parents included in the study<sup>1</sup>. The questionnaire for parents (number of respondents 20) was used to find out more precisely the interests and wishes of children, the environment in

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<sup>1</sup> Permission from Aija Urbane was received by e-mail on 21<sup>st</sup> of January 2022 to use the research data.

which they grow up. Questions (10 in total) were asked about children's most beloved books and interest in them. Here, the answers also depended to a large extent on the parents' own attitude towards the books. As for the interest – there was even an answer that the child is not given books, because he only tears them, but most emphasized the children's interest in books. Children's favorite books by parents: picture books – 3 (15%), fairy tale books – 6 (30%), books with surprises – 2 (10%), books with stickers – 2 (10%), books with tasks – 4 (20%), small story books – 1 (5%). For younger children, these are books with more illustrations and books with stickers. In its turn, in the 4–5 age group, content, dynamic events and adventures are becoming more and more important. When asked whether to look at and read books with their child, many parents admitted that they do so often, but most indicated that they do so occasionally. When asked if a child is offered to listen to audio recordings, most parents answered that they do not offer (75%), some answered that they do it very rarely (10%) and 3 parents answered that they do it sometimes (15%) when they feel tired and the children are offered a recording of an evening tale instead. From this it can be concluded that there are parents who find a way to promote the development of children's listening skills and interest in fiction in another format that promotes the expansion of the vocabulary. Smart devices are increasingly entering children's lives. The speech therapist must also take this into account in order to diversify the daily intervention process.

As the time spent together with parents is very important in a child's life, the next question was whether the parents watch cartoons together with the children. The answers to this question were equally proportional – 10 (50%) parents answered that they do it often and 10 (50%) parents answered that they sometimes watch cartoons together. There were no answers – very few.

When asked about a child's favorite toy, most parents also list it and many indicate that it is lovely from an early age, while 2 parents indicate that the child does not have one particular favorite toy. The number of toys includes – dolls, bears, pony, princess, orange bunny, giraffe, unicorns, cars, magnet figures, dinosaurs.

When answering the question about what the child likes to do best at home, the parents most often point out – to draw, paint, play with lego blocks, kinetic sand, dance, play with the sister, brother, watch cartoons. Two of the answers mentioned games on the phone, some help with homework, cooking. One answer was related to leisure activities together – the child likes to dig for worms.

On the other hand, parents mention walking, cycling and visiting playgrounds when it comes to common activities and interests. One questionnaire indicated fishing. The survey was conducted before the intervention

process in order to be able to take into account general trends in the specific group of children. These were integrated with the results of the observation of the 6 children, thus providing a personalized learning process.

Each of the parents' questionnaires is of great value, as it gives an idea of what is important to the child personally and which could be used in speech therapy sessions as well as to create a contact with the child and a friendly, pleasant atmosphere as part of a successful intervention. The obtained information opens wide opportunities for creative activity and individual approach to each child.

6 children with phonological disorders of different ages were selected for the study, Personal conversations with each child were conducted, group activities involving the 6 children included in the study were observed. Thus, the speech therapist prepares for individual lessons with the child, because it has been observed how the child is able to organize himself for work, what is the activity pace, interests and communication skills. Informal discussions with the children's group teachers were carried out, which provided information about the child's development, skills and abilities in other areas of study, interests, communication and cooperation skills in the group environment.

All the obtained information provided an opportunity to evaluate the strengths of each child, which includes both the child's interests and what he or she likes to do and what activities the child has a positive attitude towards. These are the child's internal resources that will help him or her move forward in the development. By promoting their development, the child is given the opportunity to show their skills and see their abilities. This in turn affects the child's self-confidence, self-esteem, and the child's development of believe in his/her own strength.

Initial evaluation was performed by different tasks: distinguishing non-linguistic sounds, repeating a whispered word, repeating a rhythm, repeating syllable rows, listening to the word in a line of another words, listening to the sound in a line of other sounds, naming a word with a certain starting sound, listening to the acoustically similar words, determining the number of syllables in a word, determining the first sound in a word, determining the last sound in a word, naming a word by sounds, merging sounds in a syllable, merging syllables in a word. The methodology of studying phonemic perception using specific tasks is based on the recommendations of S. Tubele (Tübele, 2019). In the evaluation process, children get a certain number of points, which are later compared with the points obtained in the repeated evaluation, determining changes.

Intervention process was planned step by step to strengthen the correct pronunciation and to promote phonological awareness. Main steps were: listening to the rhytm and repeating it, repeating different syllable rows,

listening to the word in a word row, listening to the sound in a row of sounds, naming a word with definite sound, the differentiation of mixed sounds in the pronunciation, division of sentences into words, division of words into syllables, determining the first sound of the word, determining the last sound of the word, merging syllables into word. Although the schedule was more or less the same for all children, individual approach with personalized content was used. Many games were used in the intervention process: syllable game, catch the word, funny words, listen and watch, catch the sound, funny sentences, secret word, and others. Since all children have phonological disorders, the main difficulties are in sound recognition and differentiation. With the before mentioned intervention process, these problems are diminished.

After repeated evaluation of the phonological skills positive dynamics was found. Using content that is personally important to the child and is related to the child's interests, it means the child's strengths, in improving the phonemic perception, its development takes place. The joy and satisfaction that the children gained during the games, the awareness of their abilities, encouraged the children to act and the achievements were not missed. Children's names have been changed by ethical reasons. Mark's results improved by 16 points or 19.1%, Ben's results improved by 18 points or 21.4%, Andra's results improved by 19 points or 20.7%, Gatis' results improved by 16 points or 19.1%, Anta's results improved by 18 points or 20.7% and Kate's results improved by 12 points or 14.2%. The analysis concluded that none of the children had profound phonological insufficiency. As it is difficult for all children to repeat rows of syllables, more attention should be paid to differentiating the sounds to be mixed and replaced in the pronunciation. All the children attended the speech therapy sessions with pleasure and looked forward to the next meeting.

## **Conclusions**

From theoretical findings in order for a child to develop and improve, it is very important to take into account the child's individuality, experience, background and interests. The child's interests are linked to his or her strengths. They need to be noticed and used because they significantly change a child's attitude towards the new, the incomprehensible and the difficult.

It takes time for a speech therapist to research, talk to both children, parents and teachers. However, the results and skills acquired will be more sustainable and the child's quality of life will increase significantly. It will also have further consequences at a later stage of education (school).



This is especially true for children with speech and language disorders, as the process of exploring their world is partially limited, but it can be overcome with a successful speech therapist and a targeted intervention process.

The results obtained in the study indicate the reduction of phonological perception disorders by using personally relevant content in speech therapy sessions for preschool children.

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