

UDC 373.2.016:81–028.31(497.11)

DOI: 10.12958/EPS.1(162).Djordjevic\_S

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## **SPEECH DEVELOPMENT OF PRESCHOOL CHILDREN**

During the last three decades, there has been a significant development of the institutional preschool education in the Republic of Serbia. However, it is true to say that this development is more qualitative than quantitative. The only exception to this statement is a short preparation program for school, which covers 100% of preschoolers.

In the last two decades in the Republic of Serbia, despite extremely unfavorable socio-economic conditions, significant results have been achieved in terms of developing the theory of preschool education, training practice and continuing professional development of education practitioners. Maintaining the quality of preschool educational programs and services, including their expansion to embrace most vulnerable and neglected groups of children, as well as improving the working conditions, have been possible over the last two decades, in large part, thanks to numerous programs and projects carried out and/or supported by certain funds and non-governmental organizations.

Preschool education in Serbia represents a unique educational program that is developed in two models (Model A and Model B). Both models can be equally applied and combined in practice. A common feature of both models is cooperation with the environment in order to achieve the purpose of preschool institution. Model A is closer to an open system of education and presupposes an active development of programs depending on the interests of children. Model B has the characteristics of a cognitive-developmental program and contains elaborated educational goals, teachers' tasks, and

types of activities (teachers may choose to elaborate them according to the needs, abilities, and interests of children).

General Basis of the preschool program gives teachers general guidelines and certain freedom in the implementation of the preparatory preschool program. Educational content is not strictly prescribed; instead, general recommendations are provided and desired outcomes of education are formulated in the form of the general and specific goals and objectives of preschool education. In this way, the educators' responsibility is understandably higher, as they have to prepare children for school under the conditions when the learning outcomes in the areas that would be the basis of the knowledge that every child should possess when he/she starts school are vague.

The functions of preschools in the Republic of Serbia in the General Plans of the preschool program are:

- to provide a safe environment in which children can improve their physical and mental health;
- to provide a variety of contacts with peers, adults, different behavioral models;
- to supplement and enrich the family education;
- to mitigate cultural, educational, and medical differences preventively and compensatory; and
- to integrate children with special needs, to prepare them for school.

The text below is devoted to the peculiarities of the speech development of preschool children and its implications for the preschool education.

Neurobiological basis that a child brings to the world with the birth only through the interaction with the environment can develop into speech to sustain value communication. Although speech is related to the cortical activity, it cannot develop on its own without the drivers functioning in the social field of child.

Speech, according to the opinion of many scholars who study their origin and development, begins to be learned from the moment the baby first cries. This is the beginning of the so-called pre-linguistic stage in the speech development of the child.

From that moment, the learning of speech in the first days of life consists in learning sound articulation. During the first months of the child's life, learning speech is limited to the vocalization and production of sounds. A careful study of speech development of the child from birth to the first or second year of life shows that the sounds the child utters during this period result from his/her specific emotional state. So, the first sounds express the state of pleasure or nuisance and are emotional charged, that is the child in a state of pleasure produces one kind of sounds and in a state of need - another.

It is believed that the child starts talking when he/she first uses a word consciously. Conscious use of the first word ends pre-linguistic stage and starts linguistic phase in the speech development of children. The first word, according to some studies, occurs in 15-16 month after the birth. From that moment on, there is a sharp increase in the volume of children's vocabulary and the development of children's curiosity. The child begins to connect two or three words in a sentence string. During the third and fourth years of life, the child articulates certain sounds with almost correct pronunciation and begins to use more complex sentences. Fifth and sixth years of life are marked by further increase in the volume of children's vocabulary; the child begins to use all kinds of words and certain terms denoting space, time, and feelings. With the development of logical thought, somewhere around the age of six, children also master the rules of grammar. From that moment and to beginning of school, they master sufficient vocabulary, adopt the basic syntactic structures and grammar of their native language, and succeed in developing different forms of speech. However, the language development of children at this age is not complete, but still continues with their entry to school.

“The development of sounds goes from simple to more complex ones. The development of articulation itself is a continuous process because there are no significant differences between successive ages” [4, p. 167]. However, in addition to the continuity, the development of articulation in preschool children has one more characteristic – that of permanence, which means that each age differs qualitatively and

quantitatively in terms of the articulation of sounds from the age that precedes it. In fact, in certain ages children's progress in the articulation of sounds is faster, while in others it is slower. Thus, the pace of the development of articulation in different ages is different.

“The development of sounds spans, on average, seven years, but individual variations are possible in both directions. In fact, there are children who are able to properly pronounce 30 sounds of Serbian voice system in the age of four, while others need a year or two more. The development of articulation in children reaches adult levels by the age of seven or eight (boys at seven and girls at eight), but the pronunciation of sounds can continue to change until nine or even ten years of age, when it is automated and stabilized. However, these changes are not essential for the quality of articulation itself” [5, p. 167; 6, pp. 86 – 87; 7, pp. 208 – 209].

As in general development, in the development of sounds, too, each child has his/her own pace of development, which, to a greater or lesser extent, may deviate from the standards of certain age group of children. In fact, psychomotor development in some children is slower than in others, so at the time when they start school the maturation process is still ongoing. Other children, who come from so-called sub-cultural, deprived backgrounds, although potentially ready, are not sufficiently stimulated positively to develop their potential benefits to the level appropriate for that calendar age.

There are children with a delay in the general psychomotor development or only with a delay in the articulation of sounds caused by objective reasons. These objective reasons may be a disease in the early childhood, anatomical and neurological problems, in fact, pathological cases.

And, finally, there is a group of healthy and well-developed children who, during their development, have been exposed to the impact of mispronunciation within the family and the community where they lived and developed the kind of pronunciation that they heard or that they were stimulated by [5 – 7].

“What should be stressed here is the fact that it is necessary to know the tolerance time for the maturation of each sound in order to have a valid basis for conclusions whether the pronunciation of a particular sound in a child is delayed or not. Individual pronunciation patterns are compared to the norms for certain age groups, and, according to that, it is determined whether we have a disorder of pronunciation or deviations from standard pronunciation that are normal for particular age. Correct pronunciation of all five vowels: a, e, i, o, u; sonants: m, n, v, j, l; consonants: p, b, t, d, k, g; and fricatives: f, h, should be relevant for child at the age of three to four. Other sounds in a child of this age may be damaged, but not omitted. After this age, normal is the distortion of the remaining sounds and the substitution of the sounds *lj* and *nj* with the sounds *l* and *n*, while other substitutions are considered pathological. At the age of four, the following sounds are formed: *s, z, c, š*; between the fifth and sixth year, sounds *r, nj, lj, f* should be stabilized, and after the sixth - *ć, ž, č, and dž*. All other differences in pronunciation are considered pathological or manifest a delay in the development of pronunciation. The above suggests that the sequence of the development of certain groups of sounds is as following: vowels, sonants, nasals, fricatives, affricates, laterals” [5, p. 169; 6, p. 88; 7, p. 209]. Knowledge of the above sequence is important for teachers because it facilitates the creation of a work plan for developing the culture of speech in children when it comes to building sounds.

The expressive form of language has a motor characteristic and a very complex function, and the process of its mastering extends at least up to the age of eight. The main factors of its acceleration and deceleration are:

- biological factors,
- status and effectiveness of verbal stimulation of the social environment,
- psychological factors, and
- development of auditory perception.

The above means that the process of identifying and establishing phonemes spans from the period of the appearance of the first word in the first year of life up to acquiring

the skills of the management of effector mechanisms, especially the articulator mechanism at the age of eight.

In the sound system of the Serbian language, the following twelve critical sounds cause difficulties: *s, c, z, č, š, ž, h, r, ć, l, lj*, and *đ*. Although articulation disorders affect always the same group of sounds, one and the same sound can be damaged in many different ways. The following are the types of articulation differences in preschool children: 1) omission, 2) substitution, and 3) the distortion of sounds.

The objective of our study was to determine the state of the pronunciation of sounds in preschool children aged 3 to 7 years. The state of the pronunciation of sounds means perspicuity of speech sounds, i.e., acoustic impression.

With the aim to determine the state of the pronunciation of sounds in preschool children, the main research tasks were to:

- determine the status of pronunciation and sound development of four age groups of children who attend preschool,
- compare the pronunciation of sounds to the standards of the development of sounds in children of certain calendar age, and
- determine which sounds constitute difficulty for pronunciation that is to determine the number and type of incorrectly spoken sounds.

The nature and importance of the research of the selected problem was the decisive factor for the selection of the survey sample. The research was conducted in the preschool “Naša radost” in Surdulica. 243 children aged 3 to 7 years were tested. Distribution of these children by age groups is given in Table 1.

Table 1.

**Distribution of research participants by age**

Preschool “Naša radost“ in Surdulica	Children's age group				Total
	3 – 4	4 – 5	5 – 6	6 – 7	
	42	34	48	119	243

The instruments applied during the research were *Triage articulation test* (Vladisavljević, 1977; Vladisavljević Kostic, Brown, 1983) and *Global articulation test or a seven-member grading scale for sounds* (Vladisavljević, 1977; Vladisavljević Kostic, Brown, 1983), which was used only for those children whose Triage test demonstrated the presence of articulation disorders.

The processing of research results suggested the presence in each age group of certain deviations from the pronunciation of sounds standard for this age group. These results and their distribution will not be mentioned for all age groups, but only for a group of children of preschool preparatory program aged 6-7 years. The reason for this preference is that children of this age are expected to correctly pronounce all the 30 sounds of the Serbian language sound system. The pronunciation of sounds in this group is shown in Table 2.

Table 2.

**Pronunciation of sounds by children in preschool preparatory program**

Articulatory disorder	Preschool prep program, age 6-7		
	Total number of tested children	Number of children with disorder	Shown in %

1.	<b>Substitution</b> (sound replacement) Š, Ž, Č, Dž with sounds S, Z, C, Đ	119	28	23,53 %
2.	<b>Substitution of sounds</b> L in sound J, K in sound T, G in sound D	119	4	3,36 %
3.	<b>Substitution of sounds</b> Lj in sound J	119	34	28,57 %
4.	<b>Interdental stigmatism</b> (sound pronunciation between teeth) S, Z, C, Š, Ž, Č, Dž, Nj, Lj	119	18	15,13 %
5.	<b>Bilabial L</b> (guttural L)	119	21	17,65 %
6.	<b>Omission</b> (omission of sounds)	119	20	16,81 %

The results featured in Table 2 suggest the existence of certain problems in the articulation of the critical sounds of the Serbian sound system in this age group. Bearing in mind that, in addition to the distortion and substitution of sounds, omission of speech sounds was registered in 16,81 % of cases, it can be concluded that the development of correct pronunciation is delayed in some children and that these children require special treatment<sup>1</sup>.

As the development of speech is not yet complete in preschool children, it is necessary for all of them, especially for those who are delayed in speech development, to participate in stimulating and remedial programs of articulation exercises to speed up

<sup>1</sup> Acquired results are in correlation with the results of the research of articulation disorders younger pupils of primary school: Djordjevic, 2008a,b 2010.

and normalize the development path of sound speech in children. As we have seen, intensive speech development and the emergence of the so-called physiological speech disorders, which, under normal circumstances and with appropriate pedagogical interventions, correct themselves with time, are typical for this age group.

Prominent among the functions of preschool institution, as we have pointed out, is mitigating differences and preparing children for school. This preparation, in terms of speech development, consists of:

- normalization of articulation,
- enrichment of verbal expression, and
- acquisition of knowledge that children of this age should have to enter school with more confidence.

This said, we shall proceed to the analysis of the literature texts for children as the basis for the development of their speech. For all those involved in the language development of preschool children, it is important, first, to understand how children acquire the proper articulation. Studies have shown that children during their speech development do not learn individual sounds in isolation, but the words and vocal groups, in which these sounds are present. Such findings, which are consistent with the basic principles of development in general, clearly point to the fact that in speech the whole, but not separate parts and components, is learnt first. Bearing this in mind, those who intend to stimulate a more rapid development of articulation, primarily teachers, should ask children to pronounce not isolated individual sounds that we want to develop, but use appropriate words in a game, which children do not perceive as a constraint, but as fun and entertainment. Therefore, the practice of sound articulation must consist of words and, above all, of short ditties. Learning a short ditty through appropriate melody and rhythm makes the articulation of certain sounds develop faster and easier. Children, through appropriate children's rhymes, learn words, their parts, and even individual sounds seemingly effortlessly.

When it comes to children's literature and its function in the development of speech in the children of preschool age, we can say that in this age the use of the so-called "nonsense"<sup>2</sup> or "playful" literature encourages, in a playful spirit inherent in children, their curiosity, imagination, play, and serenity. It is because of these characteristics that such literature is the most appropriate and almost the only source of the material for the organization of focused activities in this preschool age. Nonsense literature seems to awaken emotional responses of a child, and the speech proper really begins with their awakening. Affective reactions are not only an expression of love, but also of will, and there is always some hidden thought behind every act of will: what a child wants or does not want. And as soon as a child knows what he/she wants or does not want, he/she knows how to think.

In the Serbian literature for children, the creator of all the genres in which nonsense is present is the poet J. J. Zmaj. After Zmaj, our greatest children's writers are Dusko Radovic (*Once there was a lion*), D. Lukic (*A doll without head*), and Lj. Ršumović, who cherish the poetry of nonsense more and more.

Functionality of the nonsense literature can be achieved at several levels and in all forms of teachers' work in the language development of preschool children.

1. *Exercises on sound discrimination.*

We can say that the auditory perception is the driving force for the development of the child's voice. What is important is the fact that auditory perception is fully developed, and its development depends on the conditions and efficiency of verbal stimulation by the social environment. If the influence of the social environment is positive, the development of auditory perception goes properly. Stages in audio-perceptual development are: a) general spotting, b) recognition of similarities (similarity), and c) recognition of distinctive differences (discrimination).

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<sup>2</sup> Nonsense (Latin non-sensus)-ridicule, stupid, without sense. That is why this literature is also called "without sense", "unreal"

In order to be “impressed” in child’s consciousness, what he/she hears, his/her ability to listen should be developed first. Thus, the discrimination of sounds is achieved by active listening and implemented through appropriate games, which have their content and purpose. These are certain speech and lexical games, which are rich in words-images that differ in similar pairs.

2. *Exercises on sound articulation.*

As outlined in the description of the preschool period above, from the birth onwards, learning speech consists in learning sound articulation. Articulation, in a broader sense, includes the formation and pronunciation of sounds. It is possible to stimulate a more rapid development of articulation in children by using nonsense literature, but the teacher must take into consideration the age of the children he/she works with and select only those songs that match the developmental profile of children in terms of sound articulation. Selected poems must be saturated with those sounds the development of which is stimulated. So, for example, to stimulate the articulation of affricates (which belong to the group of critical sounds) in children aged five, the rhyme by J. J. Zmaj “*Little Horseman*” is most suitable because it contains all the affricates.

*Tongue twisters, line up poems, and rhymes* also can be used for the development of the sound articulation of preschool children. Children enthusiastically compete against each other to win in a “fast speech tournament” without being aware that these nonsense literature pieces are, actually, the most appropriate exercises for proper sound articulation.

3. *Enrichment of vocabulary (active in relation to passive)*

Words represent certain elements of thought necessary for a very complex activity such as thinking process, which is yet to be formed. Words are certain parts of the language, thus they precede later, more complex forms of verbal behavior.

Most researchers who study children’s vocabulary and its development focus, in the first place, on the quantitative analysis of children’s vocabulary, determining the scope of the vocabulary of children in certain age. However, we must know that, beside

the number of words in a child's vocabulary, the important question of its development is the development of the frequency of using the same word in different meanings. So, when working on the development of children's vocabulary, the important task is not only to increase the number of words, but also to increase the number of meanings in the framework of the same word, their quality, that is the true meaning of words used by the child during his/her speech.

Enriching the vocabulary of preschool children is proportional to the enrichment of their immediate experience. Enriching this experience through observing, identifying, and talking about the things around is more effective than through attempting to simply increase the child's vocabulary. Such an approach contributes to the increase in the active vocabulary of children in relation to their passive vocabulary, which, according to many studies, is ten times richer.

For the purposes of enriching the vocabulary of preschool children, various listings are suitable - the accumulation of words where unrelated words of similar or same meanings are listed (synonyms). For the above are suitable *proverbs*, *line up poems* (J. J. Zmaj: *Fingers of the Hand*), *lexical sound games* (*How who goes; How who welcomes who*) and a *giber* (*For two coins; Trimmed kid*, etc.).

Finally, let us emphasize that, in addition to caring for children who fall behind in their speech development, the teacher has to take care of those children who in their oral presentation, with richness of their vocabulary and linguistic skills, are apart from other children. Those children who belong to the population of the gifted must be encouraged by the teacher to further develop their speech, primarily by further enriching their vocabulary and linguistic skills.

The results of the research on the sound pronunciation in preschool children led to the conclusion that certain articulatory deviations are present in preschool children of all ages and that correct articulation must be stimulated and corrected by teachers, too. It is important to stress, however, that this conclusion, in the first place, applies to the

articulation disorders that are caused by the social environment, rather than by organic factors, as well as by the linguistic problems of children's sub-cultural backgrounds.

Functionality of the nonsense literature can be achieved at several levels and in all forms of teacher's work in the development of speech, especially through the exercises on sound discrimination, articulation, and vocabulary enrichment.

Future educators should be trained to diagnose the speech-language status of children, to use the exercises on the articulation of the critical sounds of the Serbian language sound system, and, thus, to work on and correct articulation disorders not belonging to the etiology of speech pathology.

In addition to working with the delays in speech development, teachers should also pay attention to gifted children, encouraging further development of their speech primarily by enriching their vocabulary and linguistic skills beyond the level already reached.

Finally, we would point out that help sent in time is the real help. There are many ways to help children whose pronunciation deviates from the standard pronunciation of children of their age and among prospective lines of research in this field is to outline them.

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### **Ђердџевич С., Ђердџевич Л. Мовленневий розвиток дітей дошкільного віку**

Розвиток мови й мовленневої культури дітей дошкільного віку є одним з найважливіших завдань дошкільної освіти. Учитель має постійно стимулювати й заохочувати розвиток мови в дітей дошкільного віку. Виконання цього завдання значною мірою залежить від правильного вибору літературних текстів для дітей. У цій статті проаналізовано розвиток мови в дітей дошкільного віку й роль дитячої літератури в його стимулюванні.

Подано результати дослідження стану розвитку мовлення дітей дошкільного віку. У дослідженні взяли участь 243 дітей віком від 3 до 7 років, які виконували стандартизований тест з артикуляції. Дослідники підкреслюють особливу важливість раннього виявлення та виправлення порушень у вимові дітей дошкільного віку, що забезпечує більш адекватну допомогу й підтримку з боку

вчителів, завдяки чому діти, які відчують труднощі з артикуляцією, можуть досягти кращих результатів не лише в дошкільних установах, але й надалі в школі. Це підкреслює необхідність підготовки вчителів до визначення рівня мовленнєвого розвитку дітей, застосування артикуляційних вправ для корекції звуків, характерних для сербської мови, а, отже, і до корекції порушень артикуляції, що не належать до мовленнєвої патології. Автори наголошують, що дитяча література є основою для реалізації заходів у сфері розпізнання й артикуляції звуків і мови загалом, а також на більш пізніх стадіях для формування лексичного запасу дитини, зв'язного та грамотного мовлення, засобів мовної виразності тощо.

*Ключові слова:* мовний і мовленнєвий розвиток, діти дошкільного віку, артикуляція, дитяча література.

### **Джерджевич С., Джерджевич Л. Речевое развитие детей дошкольного возраста**

Развитие речи и речевой культуры детей дошкольного возраста является одной из важнейших задач дошкольного образования. Таким образом, учитель должен постоянно стимулировать и поощрять развитие речи у детей дошкольного возраста. Выполнение этой задачи в значительной степени зависит от правильного выбора литературных текстов для детей. В этой статье проанализировано развитие речи у детей дошкольного возраста и роль детской литературы в её стимулировании.

Представлены результаты исследования состояния развития речи детей дошкольного возраста, в котором принимали участие 243 детей в возрасте от 3 до 7 лет, выполнявшие стандартизированный тест на артикуляцию. Исследователи подчеркивают особую важность раннего выявления и лечения нарушений в произношении детей дошкольного возраста, что обеспечивает более адекватную помощь и поддержку со стороны учителей, благодаря чему дети, испытывающие

трудности с артикуляцией, могут достичь лучших результатов не только в дошкольных учреждениях, но и в дальнейшем в школе. Это подчеркивает необходимость подготовки учителей способных определить уровень речевого развития детей, применить артикуляционные упражнения для коррекции звуков, характерных для сербского языка, и, следовательно, корректировать нарушения артикуляции, не относящиеся к речевой патологии. Авторы отмечают, что детская литература является основой для реализации мероприятий в сфере распознавания и артикуляции звуков и речи в целом, а также, на более поздних стадиях, для формирования лексического запаса ребенка, связной и грамотной речи, средств языковой выразительности и т.д.

*Ключевые слова:* языковое и речевое развитие, дети дошкольного возраста, артикуляция, детская литература.

### **Djordjevic S., Djordjevic L. Speech Development of Preschool Children**

The development of speech and language culture is one of the most important tasks of preschool education. That is why instructors working with preschool children need to constantly stimulate and encourage their language development. Careful selection of children's literature texts is essential to the accomplishment of this task. This paper analyzes the development of speech in preschool children and the role of children's literature in its stimulation.

In a research on the pronunciation of preschoolers, a sample of 243 children aged 3 to 7 years was given a standardized articulation test. The research findings give prominence to the early identification and treatment of disorders in sound pronunciation of preschool children to ensure a more adequate help and support from teachers and help children achieve better results, not only in preschool, but later in secondary school years. This emphasizes the need to train teachers to diagnose the speech-language status of children, to use the articulation exercises to practice critical sounds in the Serbian

language sound system, and, thus, to correct the articulation disorders not belonging to the etiology of speech pathology.

In this regard, children's literature is the basis for the realization of activities in the area of discrimination and articulation of sounds and speech in general and, in later stages of the formation of children's vocabulary, logically connected and cultivated speech, expressive speech and a number of other targeted activities.

*Key words:* language development, preschool children, articulation, children's literature.

*The article was received by the Editorial Office on 22.11.2013*

*The article was put into print on 28.11.2013*

*Peer review: Horoshkina O. M., Doctor of Pedagogical Sciences, Professor*