ARTICULATION OF CHILDREN IN PRESCHOOL PREPARATORY PROGRAM

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Abstract. The development of speech and language culture of pre-school children is one of important (if not the most important) tasks of preschool education. The paper contains the results of research on pronunciation of preschool children realized on a sample of 243 children aged 3 to 7 years, of which 119 children of pre-school preparatory program. We have presented a standardized test of articulation. Research has highlighted the particular importance of early treatment of disorders in sound pronunciation of preschool children. Early identification of difficulties in pronunciation of children provides more adequate help and support from teachers, which help children with difficulties in articulating to get better achievements, not only in pre-school, but also later in school.

This emphasizes the need for training teachers to determine the speech-language status of children, to use the articulation exercises of critical sounds in Serbian language sound system, and thus to correct the articulation disorders which do not belong to the etiology of speech pathology. For this purpose it is specially emphasized that 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 the later stages of the formation of children’s vocabulary, logically connected and cultivated speech, expressive speech and a number of other targeted activities. Accordingly, in this paper we analyzed the role of the so-called "nonsense", "playful" children's literature and practically presented papers that can be used in order to develop the speech of preschool children.

Key words: language development, preschool children, articulation, children’s literature
During the last three decades there has been significant development of institutional preschool education in Republic of Serbia. However, it can be said that this development of pre-school education is reflected more in qualitative than quantitative terms. The exception to this statement is only short preparation program for school in which is almost one hundred percent coverage.

In the last two decades in Republic of Serbia, despite the extremely unfavorable socio-economic conditions, significant results have been achieved in terms of developing the theory of pre-school education, training practice and continuing professional development of practitioners. In maintaining the quality of pre-school educational programs and services, including the expansion of inclusion of especially vulnerable and neglected groups of children, as well as improving the working conditions, significant contribution over the last two decades have been provided by numerous programs and projects carried out and/or supported by certain funds and non-governmental organizations.

The basics of preschool education in Serbia represent 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 surroundings in order to achieve the function of preschool institution. Model A basically gravitates to an open system of education and an active development of program depending on the interests of children. Model B has the characteristics of cognitive-development program and elaborated educational goals, teachers’ tasks and types of activities (teacher may choose, and elaborates them according to the needs, abilities and interests of children).

General Bases of the preschool program give teachers general guidelines and certain degree of freedom in the implementation of the preparatory preschool program. Educational contents are not assigned, but general indications of them are described, and desired outcomes of education are formulated in the forms of general and specific goals and objectives of preschool education. In this way, the educator has the role of creator with great responsibility to prepare children for school due to vague outcomes in the areas that would be the basis of the knowledge that every child should have when he/she starts school.

The functions of pre-schools in 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;
- To integrate children with special needs, to provide preparation for school.

1.1. The speech of preschool

Neurobiological basis which child brings to the world by his birth only in interacting with the environment makes it possible to formulate speech in terms of complete valuable communication. Although speech is related to cortical activity it cannot be developed on its own without drivers which are in the social field of child (Bojanin, 1985).

Speech, according to opinion of many scholars who have studied the problem of its origin and development, begins to be learned from the moment the baby began to cry.
This is the beginning of the so-called pre-linguistic stage in speech development of child. From that moment learning of speech in the first days of life consists of learning sound articulation. During the first months of child’s life learning of speech is limited to vocalization and production of sounds. A careful study of speech development of child from birth to the first or second year of life shows that sounds which child manifested during this period resulted from a specific emotional state of child. So first child sounds express the state of pleasure or nuisance of child and have certain emotional charge that is the child in a state of pleasure produces one kind of sounds, and in the state of inconveniences other (Bojanin, 1985; Vasić, 1974, 1994).

It is believed that the child started talking at the moment when he first uses the word consciously. Conscious use of the first word ends pre-linguistic stage and begins linguistic phase in speech development of a child. The first word, according to some studies, occurs in 15-16 month. From that moment there is a sudden increase in the volume of children's vocabulary and development of children’s curiosity. The child begins to connect two or three words in a sentence string. During the third and fourth year of life the child articulates certain sounds with roughly correct pronunciation and the child begins to use more complex sentences. At the level of the fifth and sixth year the volume of children's vocabulary increases further, the child begins to use all kinds of words and certain terms of 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 up to beginning of school, they master the sufficient volume of 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 the child at this age is not finished but still continues with his entry to school (Dobrota, 2003).

"The development of children's sounds runs through periods where the pronunciation of sounds evolves from simple to more complex ones. The development of articulation itself is continuous process because between successive ages there are no significant differences" (Djordjević, 2008: 167). However, in addition to continuity, the articulation development in preschool children’s lives has one more characteristic of permanence which is characterized by the fact that each child's age differs qualitatively and quantitatively in terms of the articulation of sounds on the age that precedes it. In fact, at certain ages children’s progress in the articulation of sounds is faster, while in the others is slower. Thus, the pace of the articulation development of children at different ages is different.

"The total development of sounds lasts averagely up to the age of seven but individual variations are possible in both directions. In fact, there are children who are able to properly pronounce the 30 sounds of our voice system at the age of four, while in others the articulation developing extends for a year or two. The articulation development in children reaches adult levels by the age of seven or eight. (Boys at seven and girls at the age of eight), but the pronunciation of sounds of a child can be changed up to nine or even ten, when it is automated and stabilized. However, these changes are not essential for the quality of articulation itself" (Djordjević, 2012: 208-209).

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

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

And finally, a group of healthy children and developed in every way, but which during its development was exposed to the impact of mispronunciation within the family and the community where they lived, which developed the kind of pronunciation that they heard or that they were stimulated by (Vasić, 1994).

"What should be stressed here is the fact that it is necessary to know the tolerance time for maturation of each sound in order to be valid basis for conclusions whether the pronunciation of particular sound for a certain child is delayed or not. Damage of pronunciation is compared to the norms of sound pronunciation for certain age groups of children, and according to that it is determined whether we have a disorder of pronunciation or deviations from standard pronunciation which is normal for particular age periods. 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 the normal distortion of the remaining sounds and substitution of only sounds lj and nj with sounds l and n, while every other substitutions 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 č, Ž, Ć and dž. All other differences in pronunciation are considered pathological or more fall behind in the development of pronunciation. From the above it is obvious that the sequence in the development of certain groups of sounds is as following: vowels, sonants, nasals, fricatives, affricates, laterals " (Djordjević, 2010: 88). 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 sound.

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

- Biological factors,
- Status and effectiveness of verbal stimulation of social milieu,
- Psychological factors and
- The development of auditory perception.

The above means that the process of identifying and establishing phonemes span from the period of the appearance of the first word in the first year of life up to acquiring skills for management of effectors mechanisms, especially the articulator mechanism at the age of eighth year of life.

The sound system of the Serbian language emphasizes he twelve critical sounds among the children most often encountered as irregular: s, c, z, č, š, ž, h, r, Ć, l, lj, and đ. Although articulation disorders affectal ways the same group of sounds, one and the same sound can be damaged in many different ways. When it comes to the types of articulation differences in pre-school children are present: 1) omission, 2) substitution and 3) the distortion of sounds (Vladisavljević, 1981, Dobrota, 2003).
2. RESEARCH METHODOLOGY

The object of our wider study was to determine the state of pronunciation of sounds in preschool children ages 3 to 7 years. The state of the pronunciation of sounds means perspicuity of speech sounds that is acoustic impression.

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 preschool "Naša radost" in Surdulica. 243 children aged 3 to 7 years were tested. Distribution of tested children by age groups is given in Table 1. However, at this point we must stress out that the subject of this article was the research results analysis of state of sound pronunciation of children in preschool preparatory program.

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 children in preschool preparatory program,
- Compare the situation the pronunciation of sounds to standards of the development of sounds of children ages 6 to 7 years and
- Determine which sounds are particularly difficult for pronunciation and to determine the number and type of incorrectly spoken sounds.

### Table 1 Distribution of tested children by age groups

<table>
<thead>
<tr>
<th>Children's age group</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>3-4</td>
<td>42</td>
</tr>
<tr>
<td>4-5</td>
<td>34</td>
</tr>
<tr>
<td>5-6</td>
<td>48</td>
</tr>
<tr>
<td>6-7</td>
<td>119</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>243</td>
</tr>
</tbody>
</table>

During research the instrument applied was *Triage articulation test* (Vladisavljević, 1977; Vladisavljević, Kostić, Petrović, 1983) in all children sample and *Global articulation test or a seven-member grading scale for sounds* (Vladisavljević, 1977; Vladisavljević, Kostić, Petrović, 1983), which is applied only for those children where applied Triage test showed the presence of articulation disorders.

3. RESEARCH RESULTS AND DISCUSSION

Based on the processing of research results obtained by testing pre-school children it was found to be present in each age group of children certain articulator deviations from the standard pronunciation of sounds for a particular children age. These results and their distribution will not be mentioned for all age groups, but only for a group of children of preschool preparatory program 6-7 years. The reason for this preference is that the children of this age should rule the correct pronunciation of all 30 sounds of the Serbian language sound system. A pronunciation condition of sounds in this educational group is shown in Table 2. We have presented a standardized test of articulation.

From the shown Table 2 of the results of the sound pronunciation conditions of children included in preschool preparatory program, we can conclude that in this age period, there are some differences in articulation of correct pronunciation of some sounds of Serbian sound system, which belongs to the group of critical sounds. Bearing in mind that at this age, in addition to distortion and substitution of sounds, omission of speech sounds appears in 16.81 % of cases, it can be concluded that for some children of this
calendar age there is present more lag in the development of correct pronunciation and that these children require special treatment. Acquired results are in correlation with of the articulation disorders research in preschool children and younger pupils of primary school (Brakus & Golubović, 1995; Golubović & Čolić, 2010; Djordjević, 2008, 2010).

Table 2 State of sound pronunciation of children in preschool preparatory program

<table>
<thead>
<tr>
<th>Articulatory disorder</th>
<th>Preschool prep program age 6-7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total number of tested children</td>
</tr>
<tr>
<td>1. <strong>Substitution</strong> (sound replacement) Š, Ž, Č, Đţ with sounds S, Z, C, D</td>
<td>119</td>
</tr>
<tr>
<td>2. <strong>Substitution of sounds</strong> L in sound J, K in sound T, G in sound D</td>
<td>119</td>
</tr>
<tr>
<td>3. <strong>Substitution of sounds</strong> Lj in sound J</td>
<td>119</td>
</tr>
<tr>
<td>4. <strong>Interdentally stigmatism</strong> (sound pronunciation between teeth) S, Z, C, Š, Ž, Č, Đţ, Nj, Lj</td>
<td>119</td>
</tr>
<tr>
<td>5. <strong>Bilabial L</strong> (guttural L)</td>
<td>119</td>
</tr>
<tr>
<td>6. <strong>Omission</strong> (omission of sounds)</td>
<td>119</td>
</tr>
</tbody>
</table>

As the preschool age represents the period in which the development of complete children’s speech is not yet finished, it is necessary for all children, especially for those who are slower in speech development, to make a stimulating and remedial programs of articulation exercises to speed up and normalize development path of sound speech in children. For this age group, as we have seen, it is characteristic intense growth of speech development and the emergence of the so-called physiological speech disorders which under normal circumstances and with pedagogical behavior of teachers overcome themselves.

The special function of preschool institution, as we have pointed out, is in mitigating the difference and preparing a child for school. That preparation, in terms of speech development would consist of:

- The normalization of articulation,
- Enrichment of verbal expression and
- Acquisition of knowledge that children of this age should have to enter the school with more security.

Studies have shown that children during their speech development do not learn individual sounds in isolation, but the words and vocal groups, in which the sounds are present. Such findings, which are consistent with the basic principles of development in general, clearly point to the fact that in speech first is learnt a whole, but not separate parts and components. Bearing this in mind, those who have the intention to stimulate the rapid development of articulation, teachers primarily, must ask from a child not to pronounce isolated individual sounds which we want to develop, but that the child uses the appropriate words in a game which the child does not perceive as a constraint but as fun and entertainment. Therefore, the practice of sound articulation must consist of words and, above all, of a short ditty. Learning a short ditty through appropriate melodic and
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rhythmic parts makes faster and more easily digestible articulation of certain sounds. Children through appropriate children's rhyme learn more easily these words, parts of words, and even individual sounds as the smallest unit of speech (Kostić et al., 1994).

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

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

3.1. Exercises for sound discrimination

We can say that auditory perceptions the driving force for the development of the child's voice. What is important is the fact that the auditory perception is developed and its development depends on the condition and efficiency of verbal stimulation by the social milieu. If the influences of the social environment are good and the development of auditory perception of the child will be fine. Stages in audio-perceptual development are: a) general spotting, b) recognition of similarities (similarity), and c) recognition of distinctive differences (discrimination).

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

3.2. Exercises for sound articulation

As outlined in the pre-school period, from birth onwards, learning speech of consists of learning the sound articulation. Articulation in broader meaning includes formation and pronunciation of sounds. Stimulating rapid development of articulation in children is possible by applying nonsense literature where the teacher must take into consideration the age group of children with whom he works and in focused activities he would choose songs that match state of sound articulation of children of that age. Selected poems must be saturated with those sounds whose development is stimulated. So, for example, to stimulate articulation of affricates (which belong to the group of critical sounds) in children aged five it is suitable rhyme by J.J. Zmaj "Little Horseman" because it contains all the affricates whose pronunciation can be trained.

For the development of sound articulation of preschool children from nonsense literature can be used tongue twisters, line up poems and rhymes. In tongue twisters,

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1 Nonsense (Latin non-sensus) - ridicule, stupid, without sense. That is why this literature is also called “without sense”, “unreal”
rhymes and line up poems main motivation for children is to win in fast speech without
being aware that this is the best way by applying them to go through the most appropriate
exercises for proper sound articulation.

3.3. Enrichment of vocabulary (active in relation to passive)

Words represent certain elements of thoughts necessary for future very complex
activity such as thinking process. Words like certain parts of language, thus, proceed to
the later more complex forms of verbal behavior.

Most researchers who deal with the issues of children's vocabulary and its development
dealt with the most quantitative analysis of children's vocabulary, determining the scope of the
vocabulary of a certain age children. However, we must know that apart from the number
of words in a children's vocabulary, the important question of the development of children's
vocabulary is the frequency development of different meanings of the same word. So, when
working on the development of children's vocabulary the important issue will not be only
the number of words, but also work on increasing meanings in the framework of the same
word, their quality, that is the true meaning of words used by the child during his speech.
Enriching the vocabulary of preschool age children is proportional to the enrichment of
his immediate experience. Enriching this experience through observing, identifying and
talking about everything can be achieved much more than by simple increase of children's
vocabulary. Such an approach influences the increase in the active vocabulary of children in
relation to passive vocabulary, which according to many studies is ten times richer.

For the purposes of enriching the vocabulary of preschool children listing is 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, 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 gifted educator must encourage
to further development of speech primarily by further enriching of their vocabulary and
linguistic skills.

4. CONCLUSION

For the development of pre-school children, among other things, an intense increase
in speech development and the emergence of the so-called physiological speech disorders
are characterized but under normal circumstances and the pedagogical work of teachers
they overcome themselves. Although the development of speech is related to cortical
activity it cannot develop on its own without drivers which are in the social field of a
child. In addition to family, the second most important social field of child development
in general is a preschool institution with a special function, among other things, to reduce
the differences among children and prepare children for school. That preparation, in
terms of speech development, would consist of: normalizing articulation, enriching
children's verbal expressions and acquiring knowledge that children of this age should
have to enter the school with more security.
Based on the results from the research on the conditions of sound pronunciation in preschool children it can be concluded that certain articulatory deviations are present at all age levels of preschool children and the problem of stimulation and correction of articulation must be dealt by teachers, too. Here, above all, we think about articulation disorders that are caused by social milieu rather than by organic factors, as well as linguistic problems of sub-cultural backgrounds.

When it comes to children's literature and its function in the development of speech in children of preschool age, we can say that at this age it can be used the so-called "nonsense" literature which at playful children’s spirit encourages curiosity, imagination, play and serenity of a child. It is because of its characteristics that such literature is the most appropriate for the preschool age and it is almost the only source of texts for focused activity. Functionality of nonsense literature can be achieved at several levels and in all forms of teacher’s work in the development of speech, especially in the area of exercises for sound discrimination, articulation and vocabulary enrichment.

Future educators should be trained to determine the speech-language status of children, to use the exercises for articulation of critical sounds of the Serbian language sound system and thus to stimulate and correct articulation disorders which do not belong to the etiology of speech pathology.

In addition to caring for children who fall behind in their speech development, 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 gifted, educator must encourage to further development of speech primarily by further enriching of their vocabulary and linguistic skills.

Finally, we would point out that there are many ways to help a child whose pronunciation digresses from the standard pronunciation of children of a certain age, but that help sent in time is the real help.

REFERENCES


ARTIKULACIJA DECE PRIPREMNOG PREDSKOLSKOG PROGRAMA

Razvoj govora i jezičke kulture dece predškolskog uzrasta jedan je od značajnih (ako ne i najznačajnijih) zadataka predškolskog vaspitanja i obrazovanja. Rad sadrži rezultate istraživanja o stanju izgovora glasova dece predškolskog uzrasta realizovanog na uzorku od 119 deteta pripremnog predškolskog programa. Dat je prikaz standardizovanog testa artikulacije. Istraživanje je ukazalo na poseban značaj ranog tretmana poremećaja u izgovoru glasova kod dece predškolskog uzrasta. Rano uočavanje teškoća u izgovoru kod dece pruža veću pristupačnost adekvatnoj pomoći i podršci od strane vaspitača, čime decu sa teškoćama u artikulaciji stiču mogućnost za bolja postignuća, ne samo u predškolskoj ustanovi, nego i kasnije u školi. Time je naglašena potreba da se vaspitači osposobljuju za utvrđivanje govorno-jezičkog statusa dece, primenu artikulacionih vežbi kod kritičnih glasova glasovnog sistema Srpskog jezika, a samim tim i korekciju poremećaja artikulacije koji po etiologiji ne spadaju u govornu patologiju. U tu svrhu posebno je naglašeno da književnost za decu predstavlja osnovu za ostvarivanje aktivnosti kako u delu diskriminacije i artikulacije glasova i govora uopšte, tako i u kasnijim fazama formiranja dečjeg rečnika, logički povezanoj i kultivisanoj, izražajnom i niza drugih ciljanih aktivnosti. Shodno tome, u radu je posebno analizirana uloga takozvane „nonsensne”, „igrovne” dečje književnosti i praktično ponuđeni tekstovi koji se mogu koristiti u cilju razvoja govora dece predškolskog uzrasta.

Ključne reči: razvoj govora, deci predškolskog uzrasta, artikulacija, književnost za decu