THE IMPORTANCE OF PHONEMIC PERCEPTION IN SPEECH ACTIVITY

S.S. Qurbonova
University of Information Technology and Management, an assistant teacher of department of "Pedagogy"
https://doi.org/10.5281/zenodo.20625280

Abstract. *This article examines the importance of phonemic perception in speech activity and literacy development among primary school learners. Phonemic perception is described as the ability to hear, distinguish, analyze, and meaningfully interpret speech sounds as linguistic units. The article explains that well-developed phonemic perception supports correct pronunciation, vocabulary enrichment, speech comprehension, and the successful acquisition of reading and writing skills. Special attention is given to the relationship between sounds and letters, the development of analysis and synthesis skills, and the prevention of common literacy difficulties such as sound confusion, incorrect pronunciation, and spelling errors. The study also discusses theoretical, psychological, and pedagogical approaches to phonemic perception and emphasizes its role in forming oral and written speech. It concludes that systematic phonetic exercises, pronunciation activities, didactic games, and interactive methods are essential for developing learners' speech culture, literacy, and independent communication skills in primary education and early language learning contexts today.*

Keywords*: phonemic perception, speech activity, phonemic hearing, sound differentiation, oral speech, written speech, literacy, pedagogy, psycholinguistics.*

Introduction. In the current era of rapid globalization and the development of information technologies, one of the main tasks facing the education system is to form a well-rounded individual who can think independently, speak fluently, and express ideas logically and coherently. In particular, the development of students' speech at the primary education stage is of great importance. This is because it is during this period that a child's thinking, worldview, vocabulary, and communication skills are formed. Speech is one of the most important means of human communication, and its proper development depends on many psychological and linguistic factors. Among these factors, phonemic perception holds a special significance. As a process of distinguishing and recognizing speech sounds, phonemic perception plays an important role at all stages of speech activity. Today, the development of children's speech and the elimination of speech defects are considered urgent issues, and the insufficient development of phonemic perception negatively affects the proper formation of speech. Therefore, studying the role of phonemic perception in speech activity is of great importance.

Analysis of Literature Related to the Topic. In recent years, the concept of phonemic perception has significantly expanded and deepened. Previously, it was considered only as the ability to hear and distinguish sounds, whereas today it is interpreted as a complex, multi-component, and integrative process. The issue of phonemic perception is one of the complex scientific fields studied at the intersection of psychology, linguistics, and pedagogy. An analysis of scientific literature related to the topic shows that research has mainly been conducted in three major directions:

- Theoretical-linguistic approach;
- Psychological and cognitive approach;
- Pedagogical and speech-therapy approach.

When analyzing the theoretical-linguistic approach, the ideas of the internationally recognized scholar Roman Jakobson can be observed. The scholar connected phonemic perception with linguistics. According to him, the process of speech perception is not simply "hearing"; rather, this approach highlights phonological oppositions within the language system. He considered phonemic perception as units that differentiate meanings within the language system.

Regarding the concepts of speech activity and phonemic perception, one of the Russian scholars, Lev Vygotsky, emphasized the close relationship between speech and thinking and particularly pointed out the importance of phonemic perception in the development of children's speech. According to his view, the formation of speech is directly connected with the social environment and auditory perception processes.

In addition, Alexander Luria studied speech activity in relation to brain function and scientifically substantiated the role of phonemic hearing in the perception and reproduction of speech. He emphasized that impairments in phonemic perception can lead to speech disorders.

A representative of the German scientific school, the German scholar Adolf Kussmaul, is considered one of the first researchers to study speech and language disorders in his work Die Störungen der Sprache ("Speech Disorders"), published in 1877. Several of Kussmaul's ideas related to phonemic perception can be observed. The scholar put forward the following views:

- Speech sounds are not merely the result of simple hearing, but of complex mental processing.
- Incorrect differentiation of sounds leads to difficulties in understanding speech.
- This process is connected with brain activity.

According to Kussmaul, speech is not only the production of sounds, but also the process of recognizing heard sounds in the brain and transforming them into meaning. The scholar referred to impairments in speech perception as "word blindness." Although a child may hear sounds, they may fail to understand them as words. Even though Kussmaul did not develop phonemic perception as a separate term, he laid the foundation for the formation of the concept in the fields of speech therapy and neurolinguistics.

Modern studies also widely emphasize the role of phonemic perception, and many scholars particularly note its importance in the processes of reading and writing. In particular, it has been scientifically proven that insufficient development of phonemic perception may lead to problems such as Dyslexia and Dysgraphia. Today, phonemic perception is viewed not merely as "hearing," but as a three-stage process:

- hearing (acoustic) — the sound is received through the ear;
- differentiation (phonemic analysis) — distinguishing similar sounds such as b–d, t–d, and k–g;
- meaningful association (connection to the language system) — linking sounds with words and meanings.

In modern science, phonemic perception is considered not simply the "hearing" of speech, but the process by which the brain processes sounds as linguistic units, and it is regarded as one of the main foundations of literacy.

Sound serves as the basis for literacy instruction. During the literacy teaching period, exercises are conducted on the analysis and synthesis of words and syllables through sounds, as well as on the analysis of sounds and their articulation. Work is also carried out on diction (clear and fluent pronunciation), and speech-therapy activities are organized. Work on sounds is especially integrated with synthesis techniques such as forming words from cut-out letters. Continuously clarifying the relationship between sounds and letters is beneficial both for developing reading skills and for creating the foundation of accurate spelling and literate writing.

Materials and Methods

When a child comes to school for the first time, new words begin to appear in their vocabulary, and their word stock gradually increases. In this process, the teacher's main task is to form correct speech in students and explain the principles of speech culture to them. First of all, it is necessary to understand what speech itself is, how it can be developed, and what requirements are imposed on it.

Speech is a type of human activity that involves the use of language means (words, phrases, and sentences) to activate thinking. Speech performs the functions of communication, delivering information, expressing one's thoughts and emotions, and influencing others. At the same time, speech is divided into two types: oral speech and written speech. Oral speech exists only during the moment of speaking, and once the process ends, the speech also disappears. Oral speech is produced quickly and does not allow opportunities for editing. In terms of vocabulary richness, oral speech is relatively poorer than written speech. Written speech is a complex process that requires considerable time and effort. During this process, a person constantly monitors themselves. In written speech, literacy and content play the main role. Particular attention should also be paid to coherent speech in written communication.

The development of students' speech has its own methodological tools and different types of exercises. Among them, the most important are coherent speech exercises. Consistency in speech development is ensured through four conditions: the sequence of exercises, continuity, diversity, and the ability to subordinate different types of exercises to a common goal. Each new exercise is connected with the previous one and prepares students for the next, while also adding something new within the framework of a common purpose. In schools, the development of students' speech is regarded as one of the main tasks of teaching the mother tongue.

During the literacy teaching period, the ability to purposefully perform reading and writing actions is called reading and writing skills. Such skills require knowledge, because no skill can be formed without knowledge. However, knowledge may not always transform into a skill. For example, a child may know the elements of the letter "v" and how it should be placed between writing lines, yet still be unable to write it properly in a notebook. Likewise, a student may recognize letters but still be unable to read them. In order to develop writing skills, other types of activities are also taught, such as sitting correctly at the desk during writing, holding the pen properly between the fingers, and placing the notebook at the correct angle.

Reading and writing skills are gradually improved and transformed into proficiency. In order for proficiency to develop, the same activity must be repeated many times. In writing proficiency, a student begins to write words and sentences without consciously thinking about how to hold or move the pen. Thus, reading and writing proficiency is the process of performing actions automatically, without deliberate thought. Proficiency is reinforced in the later stages of teaching and brought to the level of automatization.

Reading and writing are types of human speech activity and are considered speech-related skills. Both reading and writing skills are formed in close connection with other types of speech activity, such as oral storytelling, understanding others' speech through listening, and inner speech. The success of teaching at school largely depends on how literacy instruction is organized.

In the process of teaching literacy, while introducing students to elementary reading and writing, it is necessary to create conditions that encourage learners to participate actively and engage in speech activity. Situations should be created that generate a need and motivation for students to express their thoughts orally or in written form.

Reading and writing skills support the successful development of one another. Therefore, teaching reading and teaching writing are conducted simultaneously, and these activities are practiced regularly. Consequently, during the literacy instruction process, the child needs to read and write extensively. New texts are used both for reading and writing because achieving the intended goal by repeatedly reading the same text is difficult. This often leads only to superficial memorization of the text. In repetitive activities, changing the situation and content helps strengthen skills and develop abilities. Before the student stands a long-term goal — learning to read and write — as well as immediate daily goals, such as reading riddles and finding their answers, reading words and sentences, and describing pictures orally.

During literacy instruction, the teacher should take into account the phonetic characteristics of the Uzbek language while introducing students to sounds and letters and while teaching them to synthesize sounds into reading.

Literacy instruction is carried out on the basis of the analytic-synthetic sound method. Words are divided into syllables, the target sound is separated from the syllable, analyzed, synthesized with the letter being studied, and on this basis the process of learning letters and whole-word reading is mastered. In this process, the graphic system of the Uzbek language and the specific features of representing sounds in writing are taken into account. The following features of the Uzbek graphic system are especially important in literacy instruction:

1. In literacy teaching, the introduction of sound-letters begins with vowels. Modern Uzbek has six vowel phonemes: a, o, i, e, u, o‘.

The letter “e” is used at the beginning of words and syllables (ekin, echki, aeroplan), while after consonants it is pronounced as a mid-open unrounded vowel (kel, tez). Therefore, during literacy instruction, students are first introduced to the “e” sound-letter at the beginning of words, and later to the “e” occurring after consonants.

The letter “o” in native and common Turkic words represents a low, rounded vowel sound, whereas in Russian and international loanwords it may be pronounced differently in unstressed syllables: like “a” (botanika), like “o‘” (tonna), or like a short “i” (traktor). For this reason, Russian-international words containing this vowel are introduced after the literacy teaching stage.

The sound “a” is pronounced similarly to “o” in words such as bahor and savol, and close to “i” in words such as muomala and munosabat, though it is still written as “a.”

The sound “u” in words like qovun and sovun may be pronounced close to “i,” but it is still written as “u.”

The sound “i” is preserved in writing even when it is not pronounced in words such as bilan and sira.

2. The Uzbek language has 24 consonant sounds. In writing, they are represented by 23 letters, three of which are digraphs and twenty-one are single letters. These include: b, d,

f, g, h, j (jurnal), j (jo‘ja), k, l, m, n, p, q, r, s, t, v, x, y, z, g‘, sh, ch, ng. Teaching consonants is also based on a specific order and requirements.

Results

Phonemic perception is the ability of a person to distinguish speech sounds from one another through hearing. In this process, a child learns to identify speech sounds, remember them, and use them correctly in speech. Phonemic perception is considered one of the most important psycholinguistic foundations of literacy acquisition at school. Before a child learns to read and write, it establishes the connection between “sound → letter.” If phonemic perception is not sufficiently developed in a child, they confuse sounds, pronounce them incorrectly, and speech deficiencies emerge.

For example, the alveolar consonant sounds “j” and “ch” encounter an obstruction in the oral cavity during pronunciation. These two sounds are among those most frequently confused in children’s speech, such as jo‘ja–cho‘cha and joy–choy. In fact, the difference between these sounds is significant: “j” is a fricative voiced sound, while “ch” is a voiceless affricate sound. One is produced more softly and smoothly, while the other is produced with a stronger burst. In this process, we can clearly observe that students’ ability to distinguish sounds is directly related to phonemic perception. Therefore, the role of phonemic perception in speech activity is extremely important, and learners rely on phonemic perception in understanding speech processes. Phonemic perception is essential at all stages of speech activity, and below we will examine its role in speech activity one by one.

The Stage of Correct Pronunciation of Sounds. At this stage, the learner correctly reproduces the sound they hear and tries to pronounce each sound clearly. This reduces the confusion of words and ensures that speech becomes fluent and understandable. For example: *choy* (tea), *chiroq* (lamp), *chumchuq* (sparrow).

The Stage of Vocabulary Enrichment. At this stage, distinguishing sounds makes it easier for the learner to acquire new words. In practice, the child learns to use words correctly and effectively. When introduced to new words, they are also able to use them in sentences. For example: *Men choy ichdim* (“I drank tea”), *Chiroq yonib turibdi* (“The lamp is shining”). In this process, passive vocabulary becomes active vocabulary. As a result, the child’s speech becomes clearer, more fluent, and more meaningful.

The Stage of Learning Reading and Writing. This stage is an important phase in the formation of reading and writing skills, as it involves understanding the relationship between sounds and letters. During this process, the child comprehends the connection between letters and sounds. They learn and perceive the relationship between the phoneme in speech and the grapheme in writing.

The Stage of Speech Comprehension. At this stage, the learner develops the ability to perceive spoken speech, understand its meaning, and respond appropriately. This stage serves as the main foundation for speech development. A learner who has mastered this stage understands heard words and sentences, distinguishes sounds, comprehends word meanings, and expresses their own attitude or opinion. They can also understand short stories and answer questions. For example, if we take words such as *havo* (air), *ob-havo* (weather), and *tabiat hodisalari* (natural phenomena), the learner has an understanding of these concepts and can provide thoughtful and appropriate responses to related questions.

Discussion

Phonemic perception is considered one of the main psycholinguistic foundations of literacy acquisition at school. Before a child learns to read and write, it establishes the "sound → letter" connection. We can observe several ways in which phonemic perception influences the literacy acquisition process.

During literacy instruction, before memorizing letters, the child learns to divide words into sounds, for example: *kitob → k-i-t-o-b*, and to combine sounds while reading. If phonemic perception is well developed, the child begins reading more quickly, can independently "sound out" new words, and makes fewer mistakes while reading. However, if phonemic perception is weak during the literacy stage, the child may fail to read letters correctly, rely on guessing words, and read slowly and unevenly.

Phonemic perception is also extremely important in the writing process because, in order for a child or learner to write a letter correctly, they must first perceive the sound accurately. The significance of phonemic perception in writing can be observed through several stages.

1. **Understanding the relationship between sound and letter.** T
   he learner should be able to identify the corresponding letter of the sound they hear.
2. **Writing words correctly.**
   At this stage, if phonemic perception is well developed, the child writes words by hearing sounds without omitting any sounds during writing.
3. **Developing analysis and synthesis skills.** A
   t this stage, the child learns to divide words into sounds while writing and to form words from sounds, that is, to construct words through analyzing and understanding each sound individually.
4. **Forming dictation and copying skills.**
   A learner with developed phonemic perception accurately perceives heard sentences or words and can correctly reproduce them in writing. This is highly important in writing dictations, copying texts, and completing independent written tasks.
5. **Helping to master spelling rules.**
   The ability to distinguish sounds correctly helps learners consciously understand spelling rules. In particular, phonemic perception plays an important role in writing voiced and voiceless consonants, vowels, and similarly pronounced sounds.

During this period, the foundation of syllabic reading is formed: learners are taught to read two-letter open syllables (such as *na, ni*), two-letter closed syllables (such as *in, ol*), and three-letter closed syllables (such as *mon, lim, til*). According to the complexity level of the sound-letters and educational material studied during the alphabet-learning period, it can be divided into three stages:

- the stage in which vowel sound-letters, voiced and fricative consonants, and words with structures such as *o-na, a-na, il, in* are studied;
- the stage in which consonants with difficult articulation such as *r, k, v* and words with structures such as *yo'lbars* (tiger), *do'st* (friend), and *rasm* (picture) are studied;
- the stage in which previously learned materials are reviewed and letter combinations such as *ng, sh, ch*, the letter *j* representing two sounds, the apostrophe (’), and words such as *jo'ja* (chick), *jurnal* (journal), *jirafa* (giraffe), *tong* (dawn), *so'ng* (after), *bodring* (cucumber), *choynak* (teapot), and *shudring* (dew) are taught for reading.

In the field of phonetic exercises, activities are conducted to compare voiced and voiceless consonants and to identify their role in distinguishing word meanings (for example: *ziyrak* —

siyrak, dil — til). When studying consonants with difficult articulation, such as *ng* (*tong, rang, keng*), the labiodental consonant *v*, the affricate consonant *ch*, the voiced plosive *j* (*jo'ja*), and the voiced fricative *j* (*jurnal*), articulation-related exercises become more complex.

Conclusion

In conclusion, it should be emphasized that phonemic perception is one of the main psycholinguistic factors that plays an important role in students' speech development, especially in the process of literacy acquisition. Through correctly hearing, distinguishing, and consciously perceiving the speech sounds around them, children successfully master both oral and written speech. Therefore, the development of phonemic perception is considered one of the most important tasks of primary education.

The process of literacy instruction should be built on the sequence of sound–letter–syllable–word. A child must first hear and distinguish a sound, and only then connect it with the corresponding letter. The processes of reading and writing should be taught in close interrelation with one another.

As discussed in the article, speech is the main means through which a person expresses thinking, communication, and cognition, and its proper formation is directly related to phonemic perception. If a learner can clearly distinguish sounds, they pronounce words correctly, acquire new vocabulary more quickly, and make fewer mistakes in reading and writing. On the contrary, insufficient development of phonemic perception leads to confusion of sounds, incorrect pronunciation, and difficulties in reading and writing. This negatively affects the learner's overall literacy.

Furthermore, phonemic perception develops important skills in students, such as understanding the relationship between sounds and letters, dividing words into their sound components, and performing analysis and synthesis. Especially during the literacy acquisition period, children rely on phonemic perception while sounding out words, matching each sound with the corresponding letter, and combining them to form words. Thus, the development of phonemic perception serves as an essential factor in helping learners read fluently, write accurately, and develop coherent speech.

The role of phonemic perception is also highly significant in the writing process. If a learner does not correctly perceive a sound they hear, omissions, substitutions, or incorrect use of letters may occur in writing. In children with well-developed phonemic perception, written activities such as dictation, text copying, and composing texts independently are formed more effectively. This process not only improves spelling literacy but also helps make written speech fluent, clear, and meaningful.

In addition, the development of phonemic perception expands students' vocabulary, forms speech culture, and develops the ability to express ideas freely in communication. As learners correctly hear, understand, and acquire new words, their passive vocabulary gradually transforms into active vocabulary. As a result, their speech becomes richer, and they gain greater ability to express thoughts coherently and understandably.

Therefore, phonemic perception is important not only in teaching reading and writing but also in developing students' overall speech activity, thinking, and literacy. For this reason, it is necessary to effectively use exercises aimed at developing phonemic perception, sound-based activities, pronunciation exercises, didactic games, and interactive methods in primary education. A learner with well-developed phonemic perception will, in the future, become a literate, independently thinking, creative individual with a high level of speech culture.

REFERENCES

1. Davronov, I. (2018). *Speech culture in native language and literature classes*. Tashkent: Ministry of Education of the Republic of Uzbekistan.
2. Karimov, Sh. (2020). *Methods of language teaching in primary education*. Tashkent: Yangi Avlod Publishing House.
3. Rasulova, N. (2017). *Methodological guide for native language teachers*. Samarkand: Samarkand State University Publishing House.
4. Xudoyberganova, M. (2022). *Methods of teaching the native language in primary grades*. Tashkent: Tafakkur.
5. Nurmatova, D. (2023). *Phonemic perception and literacy teaching methodology*. Tashkent: Yangi Asr Avlodi.
6. Ganiyeva, M. (2022). *Methods of developing written speech in students*. Tashkent: Mumtoz So‘z.
7. Polatova, Z. (2023). *Modern methods of literacy teaching*. Tashkent: Turon-Iqbol.
8. Polatova, Z. (2023). *Modern methods of literacy teaching*. Tashkent: Turon-Iqbol.
9. Jakobson, R. (1962). *Selected writings: Phonological studies*. The Hague: Mouton.
10. Vygotsky, L. (1934). *Thought and speech*. Moscow: Pedagogika.
11. Luria, A. (1976). *Cognitive development: Its cultural and social foundations*. Cambridge, MA: Harvard University Press.
12. Kussmaul, A. (1877). *Speech disorders*. Leipzig: Vogel.