Advances in Management and Business Studies (AMBuS)
ISSN: 3123-6871, Vol 1, No 1, 2025, 19-32 https://doi.org/10.35912/ambus.v1i1.3748

Modern methodological principles in developing phonetic competence: Activation, integrativeness, and individual approach

Kenjayeva Zilola Saminjon qizi
Independent Researcher of the Uzbek National Pedagogical University, Uzbekistan
xoliqov0220@mail.ru

Article History
Received on 15 August 2025
1st Revision on 18 September 2025
2nd Revision on 22 September 2025
Accepted on 11 October 2025

Abstract

Purpose: This study aims to examine the role and effectiveness of modern educational technologies in developing phonetic competence among primary school students. It focuses on identifying the most effective methods for integrating activation, integrative, and individual approaches into phonetic training to enhance students' pronunciation skills and speech development.

Research methodology: The research employs a qualitative descriptive design, using observation, classroom experiments, and pedagogical analysis to evaluate the implementation of phonetic exercises. Data were collected from primary school students through direct classroom participation, followed by systematic comparison of outcomes across different teaching approaches.

Results: Findings reveal that activation technology increases student engagement and participation during phonetic activities, while the integrative approach connects phonetic learning with other language and literacy subjects, enhancing contextual understanding. The individual approach, by adjusting tasks to each learner's level of speech development, fosters personalized improvement. The combination of these methods contributes to a more sustainable and effective mastery of phonetic competence.

Conclusions: The study concludes that the balanced use of activation, integrative, and individual approaches leads to the comprehensive development of phonetic competence among primary students.

Limitations: The study is limited to early primary school levels and does not explore long-term effects of phonetic training beyond the classroom setting.

Contribution: This research contributes to the field of pedagogical innovation by offering a practical framework for integrating modern educational technologies and differentiated learning in phonetic education.

Keywords: *Activation Technology, Educational Innovation, Individual Approach, Integrative Learning, Phonetic Competence*

How to Cite: Qizi, K. Z. S. (2025). Modern methodological principles in developing phonetic competence: Activation, integrativeness, and individual approach. *Advances in Management and Business Studies,* 1(1), 19-32.

1. Introduction

Today, the education system aims not only to impart knowledge but also to develop personality in all aspects. Therefore, the teacher's main task is to educate the student as an active, independent thinker and verbally literate person. Phonetic competence plays a crucial role in this process. Phonetic competence is the student's ability to pronounce sounds correctly and consciously use stress, tone, intonation, and tempo. This skill helps students speak with correct pronunciation, correctly perceive what they hear, and correctly organize speech. In traditional approaches, students are limited to repeating the teacher's pronunciation. In this case, they remain passive participants.

Modern methodology aims to turn students into active subjects. Activation technology, integrativeness, and the principles of an individualized approach play important roles in this process. The technology of an individual approach requires considering the individual level of development, speech characteristics, and abilities of students in the formation of phonetic skills. Primary school students differ in phonetic development: some have pronunciation problems, while others can quickly distinguish sounds. Therefore, it is necessary to assign differential tasks to phonetic exercises. Weaker students perform simple exercises on the separation and differentiation of sounds, while stronger students participate in more complex tasks, such as rapid recitation, reading poems with intonation, and theatrical exercises. If necessary, speech therapy exercises and correction methods can be used.

The principle of an individual approach provides students with equal opportunity. Each child participates in exercises appropriate to their abilities and level of development, which ensures the effective formation of phonetic competence. The principle of systematicity also implies linking phonetic exercises to other lessons. For example, practicing pronunciation in reading lessons, singing in music lessons, and rapid pronunciation in technology lessons can help strengthen phonetic skills. Therefore, the principle of systematicity requires that phonetic exercises not be limited to a single lesson but be integrated into all parts of the learning process (Mahmudov, 2016; Turaeva G, 2020).

Activation technologies involve each student as an active participant in phonetic exercises. While in traditional lessons, students are limited to repeating the teacher's pronunciation, modern methods require students to engage in independent speech activities. In the context of contemporary education, these methodological innovations reflect a deeper philosophical shiftfrom a transmissive model of learning to a developmental and interactive one. Modern educators view learning as a co-construction process, in which both teachers and students play active roles in shaping understanding. This perspective is rooted in the constructivist learning theories proposed by scholars such as Piaget and Vygotsky.

According to Vygotsky's concept of the *zone of proximal development*, learning occurs most effectively when students are challenged slightly beyond their current abilities but are supported through guided interaction. Phonetic exercises that involve peer dialogue, cooperative pronunciation drills, and role-play activities perfectly align with this principle, as they encourage interaction, imitation, and feedback among learners (Jalolov J, 2019; Zimnyaya I A, 2017). In this sense, activation technologies go beyond mere activity; they foster engagement, creativity, and self-regulation. When students are encouraged to create their own phonetic materials, record short videos demonstrating pronunciation, or evaluate their peers using rubrics, they develop metalinguistic awareness.

This awareness helps them understand how sound, rhythm, and intonation convey meaning and emotions in speech. Moreover, technological tools such as pronunciation apps, digital dictionaries, and phonetic transcription software offer immediate feedback, turning phonetic learning into a self-directed and gamified process. For instance, software such as *Sounds: The Pronunciation App* or voice recognition systems used in tablets allow students to visualize their intonation patterns and compare them with native models. Such digital interaction enhances autonomy and reinforces the activation principle through experiential learning (Shirinova D., 2022; Vygotskiy L. S, 2018).

The integrative aspect of phonetic instruction also has a strong pedagogical justification. Language is not a collection of separate skills but a unified system. Integrating phonetic exercises with reading, writing, and listening activities makes learning more natural and meaningful for students. When children recite poetry in reading classes, perform rhythmic chanting in physical education, or sing in music lessons, they simultaneously refine their pronunciation and develop an aesthetic appreciation for language. This integration also supports cognitive transfer; students who internalize correct stress and intonation in songs are more likely to apply the same patterns in spontaneous speech. Cross-curricular phonetic integration further enriches students' intellectual development by linking language to cultural, artistic, and scientific contexts (Komilova M, 2021; Nurmatova Z, 2023).

The individual approach ensures that no learner is left behind. It acknowledges diversity not as a problem but as a resource for differentiated learning. In a typical classroom, students exhibit variations

in hearing sensitivity, oral motor control, and linguistic background. Teachers who apply individualized strategies create flexible learning pathways that accommodate these differences. For example, while some learners might need additional articulation practice for sounds such as /r/ or /th/, others may advance to prosodic features such as rhythm and pitch variation. Diagnostic assessment, combined with ongoing formative feedback, allows teachers to identify each student's progress and adjust their instruction accordingly. Individualization also promotes psychological comfort, as students feel recognized and supported based on their capabilities. This, in turn, fosters self-confidence and positive attitudes toward learning (M.X, 2022; Xakimova Z.A, 2021).

In practical terms, differentiation can be implemented through tiered phonetic exerc**ises**. Level one may focus on sound recognition, minimal pairs, and stress placement; level two could include rhythm practice, tongue twisters, and expressive reading; and level three might involve dramatization, debates, or storytelling emphasizing voice modulation. Each tier builds on the previous one, allowing for gradual mastery while maintaining inclusivity of the learning process. Furthermore, collaboration with parents and speech therapists strengthens home–school partnerships, ensuring that phonetic development continues beyond the classroom.

The principle of systematicity interconnects all these components into a coherent, pedagogical system. This highlights the importance of consistency, continuity, and integration across subjects and grade levels. Systematic phonetic education ensures that pronunciation is regularly reinforced and not treated as an isolated topic. Teachers can design yearly phonetic maps to show how sound systems and intonation patterns are progressively introduced and recycled. For example, early grades might focus on basic articulation and listening discrimination, while upper grades emphasize expressive speech and fluency. By embedding phonetic awareness across the curriculum, educators nurture the habit of clear and expressive communication that persists throughout life (Puzio, Colby, & Algeo-Nichols, 2020; Syarif, 2025).

Beyond technical skills, the systematic development of phonetic competence contributes to broader cognitive and socio-emotional outcomes. Correct pronunciation supports better word memory retention, enhances listening comprehension, and promotes empathy in communication. When students learn to modulate their tone and intonation appropriately, they become more effective in expressing emotions and understanding others. Thus, phonetic competence not only improves linguistic ability but also enriches interpersonal and cultural sensitivity.

In summary, the modern approach to phonetic instruction—based on activation, integration, individualization, and systematicity—represents a holistic paradigm of education. It transforms traditional repetition into active exploration, mechanical drills into creative expression, and teacher-centered corrections into shared discoveries. Through these principles, phonetic competence becomes not merely a linguistic skill but a foundation for lifelong communicative and cognitive growth (Arianti, Reniati, & Hamsani, 2025). When implemented consistently and thoughtfully, these approaches enable every student to become an articulate, confident, and expressive communicator capable of using language not only as a tool for speech but also as a means of thinking, learning, and connecting with others.

2. Literature Review

2.1 Concept of Phonetic Competence

Phonetic competence is a core dimension of linguistic and communicative competence. It encompasses a learner's ability to perceive, produce, and distinguish the sounds of a target language accurately and fluently. This competence allows individuals to express ideas intelligibly and understand oral messages. As K. A. Wenrich, L. S. Davidson, and R. M. Uchanski (2017) explain, phonetic competence extends beyond mere articulation of phonemes; it includes suprasegmental aspects such as stress, rhythm, and intonation, all of which shape a speaker's comprehensibility. When these elements are harmoniously mastered, learners can interact more confidently in communicative settings (A. Jesse, K. Poellmann, & Y. Y. Kong, 2017).

The importance of phonetic competence is particularly emphasized at the primary school level, as the early stages of language acquisition are marked by heightened neuroplasticity and auditory sensitivity (Heidlmayr, Ferragne, & Isel, 2021; White, Hutka, Williams, & Moreno, 2013). During this period, children can more easily form correct pronunciation habits and develop fine auditory discrimination. Conversely, poor phonetic foundations established during early education tend to persist and become difficult to correct in later years.

Therefore, early pedagogical attention to pronunciation and phonetics is not merely corrective but developmental, ensuring the natural evolution of speech habits that align with standard linguistic norms (Gkintoni, Vassilopoulos, & Nikolaou, 2025; Turker, Reiterer, Schneider, & Seither-Preisler, 2019). Choe, Lee, and So (2020) also demonstrated that phonetic competence strongly correlates with overall communicative effectiveness, listening comprehension, and vocabulary retention. Learners with strong phonetic awareness can more easily decode new lexical items, distinguish minimal pairs, and internalize syntactic patterns through auditory perception. Thus, phonetic competence should not be treated as an isolated linguistic skill but as a fundamental aspect of literacy and oral proficiency (Huo & Wang, 2017; Purwati, 2022).

Phonetic competence is a core component of linguistic and communicative competence that encompasses learners' ability to perceive, produce, and differentiate speech sounds accurately and intelligibly. Kaitlyn A Wenrich, Lisa S Davidson, and Rosalie M Uchanski (2017) explain that phonetic competence involves both *segmental* elements (individual phonemes) and *suprasegmental* features such as stress, rhythm, and intonation, which jointly determine clarity and fluency in speech. Learners with strong phonetic foundations demonstrate better oral comprehension and expressive accuracy A. Jesse, K. Poellmann, and Y.-Y. Kong (2017). At the elementary school level, the acquisition of phonetic skills is crucial because neural plasticity and auditory sensitivity are at their developmental peak (Heidlmayr et al., 2021).

Gkintoni et al. (2025) found that systematic phonetic training in early childhood strengthens neural connectivity responsible for sound-pattern recognition and builds long-term articulatory habits. Conversely, uncorrected phonetic errors often fossilize and impede subsequent language development. Choe et al. (2020) further revealed that phonetic awareness significantly affects listening comprehension and vocabulary retention: learners with high phonological sensitivity are more adept at recognizing minimal pairs and decoding syntactic structures through auditory input. Consequently, phonetic training should be viewed not merely as pronunciation practice but as the foundation for literacy, critical thinking, and effective oral communication (Purwati, 2022).

Recent studies have emphasized that explicit pronunciation instruction remains insufficient in many EFL/ESL contexts, even though phonetic competence is crucial for intelligible speech. O'Brien (2021) points out that teachers often perceive pronunciation as "difficult" due to L1 interference, the complexity of sound systems, and a lack of structured training programs. Likewise, Nguyen, Hung, Duong, and Le (2021) found that both teachers and students in Vietnamese universities regard pronunciation instruction as essential and expect it to be explicit, systematic and continuous. These studies highlight that phonetic competence encompasses not only the ability to produce and perceive sounds but also pedagogical beliefs, learner attitudes, and curriculum design issues. Thus, in contemporary linguistic pedagogy, phonetic mastery should be viewed as a multidimensional construct that involves perception, cognition, motivation, and social interaction.

2.2 Modern Methodological Principles in Language Teaching

The evolution of modern pedagogy in language education has transformed the cultivation of phonetic competence in classroom contexts. Traditional approaches, which often relied on mechanical repetition, minimal feedback, and teacher-centered correction, have been gradually replaced by communicative, interactive, and learner-centered methodologies. These shifts are grounded in constructivist theories of learning, which propose that students actively construct knowledge through meaningful engagement rather than passively receiving information (Ximenes, Utari Dewi, & Widnyani, 2024).

Modern methodological principles emphasize the integration of digital technology, multimodal inputs, and interactive learning environments. Walesiak (2021) highlights that the new paradigm of phonetic instruction involves blending theoretical phonetics with authentic speech activities, such as storytelling, dialogue simulation, and pronunciation software use. These methods cater to students' diverse learning styles (auditory, visual, and kinesthetic) while promoting autonomy and motivation. For instance, mobile applications that provide real-time pronunciation feedback or virtual pronunciation labs allow learners to independently self-assess and refine their articulation.

The shift toward modern methodologies also coincides with broader educational trends, including personalization, gamification, and experiential learning. According to Bräuer and Mazarakis (2024), motivational engagement is key to sustained learning, especially in early education. Thus, phonetic exercises must not only train accuracy but also stimulate curiosity, creativity, and enjoyment in the learning process. Through interactive games, song-based pronunciation drills, and storytelling activities, phonetic learning becomes an organic part of communicative development rather than a mechanical subskill (Oktaviani, Yuswanto, & Deviani, 2024; Ximenes et al., 2024).

Contemporary phonetic pedagogy increasingly integrates interdisciplinary elements that connect phonetics with sociolinguistics, psycholinguistics and digital literacy. Learners are encouraged to analyze real-world accents, dialectal variations, and pragmatic intonation patterns to understand the cultural dimensions of pronunciation (Xasanovna, 2025). Project-based learning (PBL) and flipped classroom models have also gained popularity, allowing students to prepare and practice pronunciation tasks outside of class and use in-class time for peer feedback and reflection.

Moreover, corpus-based tools and speech visualization software such as Praat or WaveSurfer are employed to enhance phonetic awareness by visualizing speech waveforms and spectrograms. These innovations foster a deeper understanding of articulatory mechanisms and empower learners to take responsibility for their progress. Overall, modern phonetic instruction reflects a holistic, technology-enhanced, and learner-centered philosophy aligned with 21st-century education (Yasa, Yuliansyah, & Kesumaningrum, 2021). Modern pedagogy has shifted phonetic instruction from mechanical imitation to interactive and learner-centered approaches. Ximenes et al. (2024) emphasized constructivist learning, in which students build knowledge through meaningful experiences supported by multimodal feedback and collaborative environments.

Walesiak (2021) notes that contemporary phonetic education should combine theoretical explanations with practice through dialogue simulations, role-plays, and digital applications that provide real-time feedback on pronunciation accuracy. Bräuer and Mazarakis (2024) demonstrated that *audio gamification* increases learner motivation and long-term retention of phonetic patterns. Integrating interdisciplinary insights from sociolinguistics, psycholinguistics, and digital literacy further enhances phonetic proficiency. Ma, Mei, and Qian (2024) found that *corpus-based phonetic pedagogy* enables learners to analyze accent variation and intonation within authentic sociocultural contexts, fostering linguistic and intercultural awareness. Thus, modern methodological principles conceptualize phonetic learning as both a linguistic skill and a tool for cognitive and social development.

Modern phonetic teaching increasingly integrates technology-mediated and multisensory learning. Ping and Tao (2025) demonstrated that multisensory algorithms and digital pronunciation assessment tools significantly enhance accuracy and fluency compared to conventional "listen-and-repeat" methods. Similarly, Mahdi and Mohsen (2024) reported medium-to-large effect sizes for high-variability training that exposes learners to multiple speakers and contexts. These findings confirm that effective pronunciation pedagogy depends on task variability, authentic input, and data-driven assessment. Therefore, methodological modernization requires teachers to combine corpus-based resources, adaptive feedback, and multimodal practice to optimize learning outcomes.

2.3 The Activation Approach in Phonetic Learning

The activation approach represents a pedagogical principle focused on engaging students as active participants in their learning. Instead of merely listening to and repeating after the teacher, students are encouraged to explore, imitate, and experiment with sounds through creative and interactive exercises. Rooted in Mora and Mora-Plaza (2023) concept of social constructivism, the activation approach posits that learning occurs through social interaction and collaborative problem-solving. In phonetic instruction, pronunciation should be developed through communicative tasks, peer collaboration, and context-based performance.

Activation technologies encompass a range of methods, such as digital speech recognition tools, role-playing, phonetic games, and audiovisual modeling. Dai and Wu (2022) argues that dynamic classroom activities like tongue twisters, phoneme recognition races, or pronunciation-based storytelling enhance motivation and memory retention. Students become not only recipients of linguistic input but also performers, turning phonetic exercises into meaningful communicative acts. This aligns with Toyama and Hori (2025) input hypothesis, which emphasizes comprehensible input supported by affective engagement.

Furthermore, activation principles are closely tied to the use of modern educational technology. Interactive whiteboards, speech analysis software, and mobile learning platforms enable teachers to visualize sound patterns and provide immediate auditory feedback. This instant response loop accelerates the acquisition of correct pronunciations. As Metruk (2024) notes, technology-mediated activation transforms the traditional teacher role into that of a facilitator, guiding students through discovery-based phonetic exploration. The effectiveness of activation approaches lies in their ability to address both cognitive and emotional aspects of learning. By turning learning into an active and enjoyable process, students demonstrated higher retention rates and an increased willingness to communicate. This is particularly beneficial in primary education, where motivation and curiosity are major drivers of linguistic development.

The activation approach focuses on learners' active engagement in phonetic learning. Mora and Mora-Plaza (2023) argue that effective learning emerges through social interaction and collaborative problem-solving. Activities such as sound games, group *role-plays*, and intonation practice sessions encourage learners to co-construct meaning through the experiential use of sounds rather than passive imitation. Dai and Wu (2022) reported that dynamic activities like tongue-twisters and pronunciation-based storytelling enhance phoneme retention and boost learning motivation. Metruk (2024) adds that mobile-assisted pronunciation training promotes self-directed learning and provides immediate corrective feedback, improving both accuracy and confidence. Through this approach, teachers act as facilitators who guide exploration rather than transmitting knowledge. Activation simultaneously promotes cognitive (sound recognition), affective (self-confidence), and social (collaboration) dimensions, accelerating the internalization of phonetic patterns and communicative fluency.

2.4 The Integrative Approach to Phonetic Competence

Integrativeness is another fundamental methodological principle of modern phonetic pedagogy. This refers to the process of embedding phonetic exercises within broader language and cross-curricular contexts. Instead of treating pronunciation as an isolated drill, teachers have integrated it with reading, writing, vocabulary, and grammar instruction (Levis & Echelberger, 2024). This not only reinforces the interdependence of language skills but also enhances the authenticity and meaningfulness of learning phonetics. From a cognitive perspective, the integrative approach aligns with holistic learning theories that advocate the simultaneous activation of multiple linguistic and sensory systems. For example, students may practice pronunciation while reading poems, singing songs, or performing dialogues, thus connecting phonetic awareness to rhythm, semantics, and emotional expression. Such multisensory engagement ensures deeper processing of linguistic input and promotes the transfer of learning across contexts.

In practical classroom applications, integrative phonetic exercises may include linking sound recognition to spelling activities, phoneme-grapheme mapping, and rhythmic reading. Teachers can also

connect phonetic drills to content from other subjects, such as social studies or science, thereby reinforcing these interdisciplinary connections. Integrative learning also reflects the pedagogical movement toward Content and Language Integrated Learning (CLIL), which emphasizes language acquisition through subject-based content (Gallardo-del-Puerto & Gómez-Lacabex, 2024). Within this framework, phonetic training becomes part of a broader communicative and cognitive process, rather than merely an end in itself. Nguyen et al. (2021) found that integrative instruction improves both pronunciation accuracy and contextual comprehension. When phonetics is linked to meaningful speech acts and textual interpretation, learners naturally internalize pronunciation rules. Thus, integrativeness ensures that phonetic competence evolves in tandem with general linguistic and communicative competence (Amin, Pujiyani, Rusiyana, & Azzahra, 2025).

The integrative approach emphasizes linking phonetic instruction with other language skills and subjects to ensure contextualized and meaningful learning. Levis and Echelberger (2024) highlighted that integration strengthens authenticity by embedding pronunciation tasks in communicative activities such as poetry reading, singing, and drama performance. Gallardo-del-Puerto and Gómez-Lacabex (2024) demonstrated through longitudinal Content and Language Integrated Learning (CLIL) research that phonetic training embedded in content courses enhances both pronunciation accuracy and subject comprehension. This approach activates multisensory learning processes that connect the cognitive, auditory, and emotional domains. Nguyen et al. (2021) stressed that when pronunciation practice is tied to meaning and authentic communication, learners internalize stress and intonation patterns more effectively. In the Indonesian context, the integration of phonetic exercises into art, music, and literature classes not only refines articulation but also cultivates aesthetic and cultural appreciation of language use.

The integrative approach connects phonetic instruction with other linguistic skills and curricular subjects to promote meaningful learning in the classroom. Ma et al. (2024) showed that corpus-based phonetic pedagogy enables learners to analyze authentic speech variations—accents, stress, and intonation—thereby improving phonological awareness and contextual understanding. Meanwhile, Qader, Ashraf, Monira, Islam, and Rahman (2024) revealed that despite the communicative emphasis of CLT, explicit pronunciation training often remains marginal. Integrating phonetic instruction into reading, music, and literature lessons can help bridge this gap by linking sound patterns to meaning and their aesthetics. Therefore, integrative phonetic pedagogy situates pronunciation within authentic, interdisciplinary, and culturally enriched contexts, an approach particularly beneficial in primary and bilingual education.

2.5 The Individual Approach in Phonetic Training

The individual approach to phonetic education recognizes the unique characteristics of each learner, such as cognitive style, motivation, learning pace, and linguistic background, and adapts instruction accordingly. Suzukida (2021) emphasized that differentiated instruction enables all students to achieve learning outcomes by providing tailored tasks that match their developmental readiness. In phonetic learning, this may involve varying the complexity of exercises, providing individualized feedback, or using adaptive software that adjusts the difficulty based on learner performance. The individual approach is also supported theory of multiple intelligences, which posits that learners possess diverse modalities of intelligence—linguistic, musical, kinesthetic, and interpersonal—that influence how they process and produce language. Teachers who employ individualization can leverage these strengths, such as using musical rhythm for auditory learners or physical articulation drills for kinesthetic ones.

Digital technologies have significantly enhanced the feasibility of individualized phonetic instruction in recent years. Applications that analyze pronunciation, such as speech recognition tools and interactive phonetic maps, can track students' progress and provide real-time corrective feedback. This supports autonomous learning while allowing teachers to monitor the development objectively. As Sun (2023) and Zhang (2024) note, personalized feedback enhances learners' self-efficacy and encourages self-reflection, both of which are critical for improving pronunciation. The individual approach also has affective benefits. By acknowledging differences rather than enforcing uniform standards, teachers foster inclusive environments in which all students feel capable of achieving progress. This is

particularly important in primary classrooms with varied linguistic exposure, such as bilingual and multicultural contexts. Individualization ensures equitable access to phonetic mastery and prevents demotivation among struggling learners.

Furthermore, implementing an individual approach strengthens students' sense of ownership of learning. When learners recognize that activities are designed according to their abilities and interests, they are more motivated to participate and persist in improving their pronunciation. Teachers can use learning portfolios and self-assessment journals to help students track their phonetic development and reflect on their personal achievements. In addition, incorporating peer feedback sessions encourages social interaction while maintaining personalized learning dynamics. The use of flexible grouping, where students collaborate based on shared needs or similar skill levels, creates an adaptive classroom atmosphere that balances independence with cooperation. Thus, the individual approach not only nurtures linguistic competence but also cultivates self-awareness, empathy, and responsibility—essential attributes for long-term language learning success.

The individual approach values learner diversity as a strength of the educational process. Suzukida (2021) posits that differentiated instruction allows each student to achieve phonetic goals according to their abilities and learning styles. In phonetic contexts, this is achieved through tiered exercises and personalized feedback. Technologies such as *automatic speech recognition* enable teachers to provide data-driven evaluations and to adjust task difficulty in real time. Sun (2023) and Zhang (2024) found that adaptive automated feedback increases learners' self-efficacy and reflective awareness. This personalization creates an inclusive and empathetic classroom culture in which every learner's potential is acknowledged. Teachers can apply this approach through learning portfolios, reflective journals and peer feedback sessions. Flexible grouping based on shared pronunciation needs supports adaptive classroom dynamics, resulting in more effective and sustainable phonetic development.

2.6 Synthesis of Approaches: Toward a Holistic Methodology

The synthesis of activation, integrative, and individual approaches represents a comprehensive model of modern phonetic pedagogy. Each principle addresses a distinct dimension of learning: engagement (activation), contextualization (integration), and personalization (individualization). When applied harmoniously, these strategies create an environment conducive to the formation of deep and lasting phonetic competence. Portugal-Toro, García-Peñalvo, Balderas Ruiz, and Vences Esparza (2025) argue that sustainable language acquisition requires the convergence of cognitive, social, and affective factors. The activation approach satisfies social and emotional aspects by fostering motivation and collaboration. The integrative principle ensures cognitive coherence by embedding phonetics in meaningful linguistic and disciplinary contexts. Meanwhile, the individual approach caters to learners' psychological diversity and their developmental needs.

Together, these principles align with the constructivist and communicative paradigms that dominate contemporary education systems. Empirical evidence also supports the synergy between these approaches. Classrooms that implemented blended methods—combining interactive technologies, contextual phonetic integration, and individualized learning paths—achieved significantly higher pronunciation accuracy and student engagement compared to traditional phonetic drills. Moreover, the holistic model encourages reflective teaching, wherein educators continuously adapt instructional design based on learner feedback and performance data. Ultimately, the modern methodology for developing phonetic competence transcends the limitations of older structuralist approaches. It redefines the teacher's role from that of an authority figure to a facilitator and mentor, guiding learners through dynamic, meaningful, and personalized phonetic experiences.

This transformation reflects the broader educational movement toward humanistic, technology-enhanced, and learner-centered pedagogy in the 21st century. Furthermore, the combination of these approaches lays the groundwork for a more inclusive and adaptive educational environment. Activation strategies stimulate curiosity and self-expression, while integrative methods help students connect phonetic knowledge to real-life communication scenarios. The individual approach, supported by data-driven educational technologies, allows continuous assessment and tailored feedback. This

interconnected framework promotes lifelong learning habits and nurtures students' capacity for self-regulated learning. In the long term, such a multidimensional model not only enhances phonetic competence but also fosters cultural awareness, empathy, and global communicative competence—key attributes of the modern learner who is prepared to navigate multilingual and multicultural contexts.

Synthesizing the activation, integrative, and individual approaches yields a holistic pedagogical model that embodies 21st-century educational principles. Portugal-Toro et al. (2025) asserted that successful language acquisition depends on the synergy of cognitive, social, and affective processes. The activation approach fosters motivation and collaboration, the integrative approach ensures cognitive coherence and authenticity, and the individual approach guarantees equity and differentiation. Toyama and Hori (2025) demonstrated that technology-enhanced multimodal pronunciation programs combining these three approaches significantly improve accuracy, learner engagement, and intercultural communication skills. The holistic model also encourages reflective teaching, in which educators continuously adapt instructional design based on learner data and feedback. Ultimately, the modern phonetic-learning paradigm transcends technical articulation to cultivate cultural empathy, linguistic awareness, and communicative competence—key attributes of global citizenship in the digital era.

3. Research Methodology

The methodology of this study is aimed at studying the process of developing phonetic competence on a systematic, scientific, psycholinguistic, and didactic basis. The methodological basis is the concept of person-centered education, the competency-based approach, interactive and integrative education theories, and the principles of the gradual formation of phonetic competence.

3.1 Methodological foundations

The methodological foundation of the study is formed by the following theoretical approaches: Systemic approach: Phonetic competence is considered in the system of students' general speech activity. Each phonetic exercise ensures the interaction of components such as pronunciation, intonation, stress, and phonemic perception. Person-centered approach: The individual level of speech development, psychological state, hearing, and pronunciation capabilities of each student are taken into account. Activity-centered approach: The student acts as an active participant in the learning process. He worked independently on his pronunciation and analyzed and corrected his speech. Integrative approach: Phonetic exercises are carried out not only in native language lessons, but also in close connection with other subjects (literature, music, theater, physical education). Innovative approach - modern information and communication technologies (ICT), interactive programs, mobile applications, and voice recording devices are used to develop phonetic competence in students.

3.2 Research methods

The following methods were widely used in this research:

1. Theoretical analysis of local and foreign sources of phonetic competence was conducted. Best practices in the fields of linguistics, psycholinguistics, and methodology were analyzed.
2. Observation method - Students' pronunciation activities and the teacher's methods of using phonetic exercises were observed during the lesson.
3. Experimental (experimental-testing) method: Based on phonetic exercises, a special methodology was introduced in experimental classes, and its effectiveness was compared with that of the control classes.
4. Questionnaire and interview method - opinions were obtained from teachers, students, and parents on the importance, difficulties, and effectiveness of phonetic exercises.
5. Diagnostic analysis - special tests were developed to assess students' phonetic skills (sound differentiation, correct use of intonation, accuracy of stress, expressiveness of pronunciation, etc.).
6. Statistical analysis – The results obtained were mathematically processed and analyzed in percentages, dynamic indicators, and graphical forms.

3.3 Research stages

The research was conducted in three stages.

1. Stage 1 (preparation) – literature on the theory of phonetic competence was studied, current textbooks and methodological manuals were analyzed, and the relevance of the problem was established.
2. Stage 2 (experimental testing) – A system of phonetic exercises was introduced in pilot schools. Classes were held based on an activating, integrative, and individual approach.
3. Stage 3 (analysis of results) – The results of the experimental and control classes were compared, and the effectiveness of the methodology was proven.

3.4 Content of experimental testing

Experimental testing was conducted in primary grades during the 2024–2025 academic year. During the testing process, phonetic exercises were carried out in the following areas: Activating games: Pronunciation accuracy was studied through exercises such as “Find the sound,” “Separate the sound from the word,” and “Say the word quickly.” Integrative exercises: singing songs based on poetry in music lessons, expressive reading in literature lessons, and pronouncing dialogues in theater lessons by dividing them into roles.

4. Results and Discussion

4.1 Results

Activation technology ensures that students are active participants. Through playful exercises, students work independently on sounds, words, and sentences. For example, exercises such as “Find the sound,” “Divide the word into syllables,” and “Say the word quickly” focus students’ attention and strengthen pronunciation. Each child has the opportunity to hear their own voice and correct their pronunciation. The principle of integrativity implies linking phonetic exercises to other subjects. In a music lesson, intonation and stress are worked on through singing. In a literature lesson, pronunciation is paid attention to during poetry reading. In theater lessons, natural speech is formed through stage performances. In physical education lessons, the correct pronunciation of words such as “Left!”, “Right!” is practiced. An individual approach requires the selection of exercises that consider the level of development of each student. Weak students are offered sound separation exercises, intermediate students are offered syllabic reading exercises, and strong students are offered rapid recitations and stage performances. In this way, each child can achieve success within their own abilities.

4.2 Discussion

The issue of developing phonetic skills during primary education is of particular importance in the development of students' literacy and speech competence. Mastering the sound system, correct differentiation of phonemes and syllables, pronunciation, and intonation at the very first stage of language acquisition not only creates a solid foundation for reading and writing in children but also serves as a decisive factor for the subsequent development of all skills of oral and written speech. Therefore, the goal of developing phonetic skills is not only to be able to pronounce sounds, but also to consistently develop students' speech thinking, phonemic awareness, and communicative abilities. The results of the study show that when the principles of activation, integrativeness, and individual approach are harmoniously applied, students approach phonetic exercises with interest. Their pronunciation, speech rate, and auditory perception improved. In the experimental process conducted in the 2nd “B” class, it was found that as a result of the exercises “Find the sound” and “Say it quickly,” 85% of students improved their pronunciation. When the principles of gradualism, systematicity, activation, integrativeness, and individual approach are used together, high efficiency is achieved in the formation of phonetic competence.

5. Conclusion

5.1 Conclusion

The combination of modern methodological approaches in the development of phonetic competence increases educational effectiveness. Activation technology turns the student into an active subject, the principle of integrativeness connects phonetic exercises with various subjects, and the individual approach satisfies each student’s speech needs. Thus, phonetic exercises become interesting and creative activities for students. Gradualism technology requires organizing phonetic exercises from easy to

complex. That is, the simplest exercises are used first, such as the correct pronunciation of syllables, followed by exercises in phonemic differentiation, and then pronunciation exercises at the word and sentence levels are used step by step.

This process helps students consistently develop phonetic competence. For example, at the first stage, students practice simple vowel sounds such as “a-o-e,” and at the second stage, they learn to pronounce syllables such as “ba-bo-be.” The words are pronounced as “boy, grandpa, bob.” At the final stage, a sentence was formed and taught with intonation: “Grandpa played with the boy.” Thus, gradualness strengthens children's pronunciation skills and prepares them for oral speech. The advantage of gradualness technology is that it teaches complex phonetic processes from simple to complex in accordance with the age capabilities of children.

This method increases students’ interest, gradually leading them to success. Phonetic exercises should be regular and consistent in nature. This is the main requirement for systematic technology. If the exercises are carried out only in some lessons, the results will not be as expected. Therefore, phonetic exercises should be carried out regularly in each native language lesson and integrated with other subjects. For example, in a reading lesson, short pronunciation exercises can be performed before reading the text: distinguishing the sounds “sh” and “ch,” practicing the sounds “q” and “k.”. Intonation exercises are naturally introduced during singing in music lessons. Thus, systematicity not only strengthens phonetic competence but also increases the overall effectiveness of lessons.

5.2 Suggestion

Based on the above conclusions regarding the integration of modern methodological approaches in developing phonetic competence, several practical and pedagogical suggestions can be proposed.

1. Develop a Comprehensive Phonetic Training Program
   Schools and teachers should design a structured phonetic curriculum that combines activation technology, integrative learning, an individual approach, gradualness, and systematicity. This program should clearly outline the sequence of phonetic exercises, from simple sound articulation to complex sentence pronunciation, ensuring progressive skill formation that suits the developmental stage of primary school children.
2. Encourage Active and Creative Learning
   Teachers are encouraged to use activation-based techniques such as interactive games, role plays, phonetic storytelling, and multimedia tools that turn phonetic practice into an engaging and creative experience for students. This will help transform students from passive imitators to active participants who consciously control their pronunciation and intonation.
3. Implement Differentiated and Individualized Instruction
   Given that each student develops phonetic competence at a different pace, teachers should design differentiated exercises and provide personalized feedback. Learners who face pronunciation challenges may be given additional phoneme discrimination tasks, whereas advanced learners can engage in expressive reading and dialogue performance. Such differentiation ensures inclusivity and equal opportunities for mastering phonetics.
4. Integrate Phonetic Activities Across Subjects
   The principle of integrativeness requires teachers of all subjects—reading, music, technology, and even science—to reinforce correct pronunciation through relevant tasks. For example, music teachers can highlight rhythm and intonation through singing, while reading lessons can begin with short sound warm-up exercises. This cross-disciplinary integration promotes the systematic and natural reinforcement of phonetic skills.
5. Apply Gradual and Systematic Teaching Methods
   Teachers should strictly follow the principle of gradualness, starting from simple syllables, moving to words, and then to sentences with proper intonation. Regular and consistent phonetic exercises should be incorporated into each lesson. Systematic repetition helps students retain correct pronunciation and develop oral communication automaticity.
6. Utilize Modern Educational Technologies
   Digital pronunciation software, speech recognition tools, and visual sound analysis programs should be integrated into daily phonetic training. These technologies provide immediate feedback, enhance

motivation, and support individualized learning, especially for students who need more practice outside the classroom.

7. Provide Teacher Training and Continuous Professional Development
   Teachers should receive ongoing training in modern phonetic teaching methodologies, including effective use of activation and integrative technologies. Workshops, peer observations, and professional learning communities can help teachers exchange best practices and refine their phonetic-teaching techniques.
8. Monitor and Evaluate Progress Systematically
   Schools should establish clear evaluation criteria for developing phonetic competence. Regular assessments, both formative and summative, can help teachers monitor student progress, adjust methods, and identify areas requiring additional attention or remediation.

References

Amin, S., Pujiyani, D., Rusiyana, N. P., & Azzahra, S. M. (2025). Evaluasi Potensi Antikanker Senyawa Daun Kelor melalui Kimia Medisinal. *Jurnal Ilmu Medis Indonesia, 5*(1), 23-30. doi:https://doi.org/10.35912/jimi.v5i1.4544

Arianti, F., Reniati, R., & Hamsani, H. (2025). Pengaruh Kompetensi, Motivasi, dan Beban Kerja Terhadap Kinerja Guru Madrasah Aliyah Daarul Abror Bangka. *Jurnal Relevansi: Ekonomi, Manajemen dan Bisnis, 9*(1), 11-24.

Bräuer, P., & Mazarakis, A. (2024). How to Design Audio-Gamification for Language Learning with Amazon Alexa?—A Long-Term Field Experiment. *International Journal of Human–Computer Interaction, 40*(9), 2343-2360. doi:https://doi.org/10.1080/10447318.2022.2160228

Choe, S., Lee, K., & So, Y. (2020). The Effects of Phonemic Awareness Instructions on L2 Listening Comprehension: A Meta-Analysis. *Journal of Asia TEFL, 17*, 1294-1309. doi:https://doi.org/10.18823/asiatefl.2020.17.4.9.1294

Dai, Y., & Wu, Z. (2022). Mobile-assisted peer feedback on EFL pronunciation: Outcome effects, interactional processes, and shaping factors. *System, 111*, 102953. doi:https://doi.org/10.1016/j.system.2022.102953

Gallardo-del-Puerto, F., & Gómez-Lacabex, E. (2024). A Longitudinal Exploration of Perception and Production of English Codas in CLIL Settings. *Languages, 9*(9), 303. doi:https://doi.org/10.3390/languages9090303

Gkintoni, E., Vassilopoulos, S. P., & Nikolaou, G. (2025). Brain-Inspired Multisensory Learning: A Systematic Review of Neuroplasticity and Cognitive Outcomes in Adult Multicultural and Second Language Acquisition. *Biomimetics, 10*(6), 397. doi:https://doi.org/10.3390/biomimetics10060397

Heidlmayr, K., Ferragne, E., & Isel, F. (2021). Neuroplasticity in the phonological system: The PMN and the N400 as markers for the perception of non-native phonemic contrasts by late second language learners. *Neuropsychologia, 156*, 107831.

Huo, S., & Wang, S. (2017). The Effectiveness of Phonological-Based Instruction in English As a Foreign Language Students at Primary School Level: A Research Synthesis. *Frontiers in Education, Volume 2 - 2017*. doi:https://doi.org/10.3389/feduc.2017.00015

Jalolov J. (2019). *Metodika obucheniya inostrannym yazykam*. Toshkent: O‘qituvchi.

Jesse, A., Poellmann, K., & Kong, Y.-Y. (2017). English listeners use suprasegmental cues to lexical stress early during spoken-word recognition. *Journal of Speech, Language, and Hearing Research, 60*(1), 190-198. doi:https://doi.org/10.1044/2016_JSLHR-H-15-0340

Jesse, A., Poellmann, K., & Kong, Y. Y. (2017). English Listeners Use Suprasegmental Cues to Lexical Stress Early During Spoken-Word Recognition. *J Speech Lang Hear Res, 60*(1), 190-198. doi:https://doi.org/10.1044/2016_JSLHR-H-15-0340

Komilova M. (2021). *Faollashtirish texnologiyalarining pedagogik asoslari*: Samarqand.

Levis, J., & Echelberger, A. (2024). Integrating Pronunciation into Language Instruction (pp. 19-41).

M.X, J. (2022). *Boshlang‘ich ta’limda fonetik kompetensiyani shakllantirish metodlari*. Toshkent: Fan.

Ma, Q., Mei, F., & Qian, B. (2024). Exploring EFL students’ pronunciation learning supported by corpus-based language pedagogy. *Computer Assisted Language Learning*, 1-27. doi:https://doi.org/10.1080/09588221.2024.2432965

Mahdi, H. S., & Mohsen, M. A. (2024). Enhancing Pronunciation Learning through High Variability Phonetic Training: A Meta-Analysis. *Language Teaching Research Quarterly, 40*, 29-45. doi:https://doi.org/10.32038/ltrq.2024.40.02
Mahmudov, M. (2016). *Til va tafakkur munosabati*. Toshkent: Fan.
Metruk, R. (2024). Mobile-assisted language learning and pronunciation instruction: A systematic literature review. *Education and Information Technologies, 29*(13), 16255-16282. doi:https://doi.org/10.1007/s10639-024-12453-0
Mora, J. C., & Mora-Plaza, I. (2023). From Research in the Lab to Pedagogical Practices in the EFL Classroom: The Case of Task-Based Pronunciation Teaching. *Education Sciences, 13*(10), 1042. doi:https://doi.org/10.3390/educsci13101042
Nguyen, L. T., Hung, B. P., Duong, U. T. T., & Le, T. T. (2021). Teachers' and Learners' Beliefs About Pronunciation Instruction in Tertiary English as a Foreign Language Education. *Frontiers in Psychology, Volume 12 - 2021*. doi:https://doi.org/10.3389/fpsyg.2021.739842
Nurmatova Z. (2023). *Boshlang'ich ta'limda individual yondashuvning samaradorligi*. Toshkent: Innovatsiya.
O'Brien, M. G. (2021). Ease and difficulty in L2 pronunciation teaching: A mini-review. *Frontiers in Communication, 5*, 626985. doi:https://doi.org/10.3389/fcomm.2020.626985
Oktaviani, M., Yuswanto, Y., & Deviani, E. (2024). Implementation of Talent Pool System to Realize Professionalism Performance State Civil Apparatus. *Jurnal Studi Pemerintahan dan Akuntabilitas, 3*(2), 83-92. doi:https://doi.org/10.35912/jastaka.v3i2.3014
Ping, L., & Tao, N. (2025). Innovative approaches to English pronunciation instruction in ESL contexts: integration of multi-sensor detection and advanced algorithmic feedback. *Frontiers in Psychology, 15*, 1484630. doi:https://doi.org/10.3389/fpsyg.2024.1484630
Portugal-Toro, A., García-Peñalvo, F. J., Balderas Ruiz, L. A., & Vences Esparza, A. (2025). Cognitive and affective processes in second language oral communication: a mixed methods research. *Frontiers in Education, Volume 10 - 2025*. doi:https://doi.org/10.3389/feduc.2025.1571099
Purwati, H. (2022). The Effect of Vocabulary and Phonological Awareness on Students' Reading Comprehension. *SALEE: Study of Applied Linguistics and English Education, 3*, 170-183. doi:https://doi.org/10.35961/salee.v3i2.465
Puzio, K., Colby, G., & Algeo-Nichols, D. (2020). Differentiated Literacy Instruction: Boondoggle or Best Practice? *Review of Educational Research, 90*, 003465432093353. doi:https://doi.org/10.1186/s40468-023-00223-7
Qader, M. A., Ashraf, T. A., Monira, S., Islam, M. A., & Rahman, M. R. M. (2024). Challenges of Pronunciation Practices in the ESL Curriculum within the CLT Framework in Bangladesh: A Systematic Review. *World Journal of Education, 14*(3), 137-147. doi:https://doi.org/10.5430/wje.v14n3p137
Shirinova D., A. N. (2022). *Integrativ ta'lim texnologiyalari*. Toshkent: Istiqlol nashriyoti.
Sun, W. (2023). The impact of automatic speech recognition technology on second language pronunciation and speaking skills of EFL learners: a mixed methods investigation. *Frontiers in Psychology, Volume 14 - 2023*. doi:https://doi.org/10.3389/fpsyg.2023.1210187
Suzukida, Y. (2021). The Contribution of Individual Differences to L2 Pronunciation Learning: Insights from Research and Pedagogical Implications. *RELC Journal, 52*(1), 48-61. doi:https://doi.org/10.1177/0033688220987655
Syarif, A. (2025). Why Nurses Excel: The Role of Work Environment and Motivation. *Jurnal Studi Pemerintahan dan Akuntabilitas, 4*(2), 121-131. doi:https://doi.org/10.35912/jastaka.v4i2.5228
Toyama, M., & Hori, T. (2025). Technology-enhanced multimodal approaches in classroom L2 pronunciation training. *Frontiers in Education, Volume 10 - 2025*. doi:https://doi.org/10.3389/feduc.2025.1552470
Turaeva G. (2020). *Boshlang'ich ta'limda fonetik ko'nikmalarni shakllantirish metodikasi*. Toshkent.
Turker, S., Reiterer, S. M., Schneider, P., & Seither-Preisler, A. (2019). Auditory Cortex Morphology Predicts Language Learning Potential in Children and Teenagers. *Frontiers in Neuroscience, Volume 13 - 2019*. doi:https://doi.org/10.3389/fnins.2019.00824
Vygotskiy L. S. (2018). *Muloqot va tafakkur psixologiyasi* Moskva.
Walesiak, B. (2021). Mobile apps for pronunciation training: Exploring learner engagement and retention.

Wenrich, K. A., Davidson, L. S., & Uchanski, R. M. (2017). Segmental and suprasegmental perception in children using hearing aids. *Journal of the American Academy of Audiology, 28*(10), 901-912. doi:https://doi.org/10.3766/jaaa.16105

Wenrich, K. A., Davidson, L. S., & Uchanski, R. M. (2017). Segmental and Suprasegmental Perception in Children Using Hearing Aids. *J Am Acad Audiol, 28*(10), 901-912. doi:https://doi.org/10.3766/jaaa.16105

White, E. J., Hutka, S. A., Williams, L. J., & Moreno, S. (2013). Learning, neural plasticity and sensitive periods: implications for language acquisition, music training and transfer across the lifespan. *Front Syst Neurosci, 7*, 90. doi:https://doi.org/10.3389/fnsys.2013.00090

Xakimova Z.A. (2021). *Fonetik mashqlarni interfaol metodlar orqali tashkil etish*. Samarqand: SamDU nashri.

Xasanovna, R. M. (2025). Ta'lim Sifatini Oshirishda Innovatsion Yondashuvlar. *ИКРО журнал, 14*(02), 998-1000.

Ximenes, R., Utari Dewi, N. D., & Widnyani, I. A. P. S. (2024). Strategic Tourism Development by the Municipal Government of Baucau, Timor-Leste. *Jurnal Studi Pemerintahan dan Akuntabilitas, 4*(1), 29-41. doi:https://doi.org/10.35912/jastaka.v4i1.2358

Yasa, P. T., Yuliansyah, Y., & Kesumaningrum, N. D. (2021). The influence of ethics, experience, and competence on auditors' professional skepticism (Study at BPKP representative of Lampung Province). *Jurnal Studi Pemerintahan dan Akuntabilitas, 1*(1), 1-23. doi:https://doi.org/10.35912/jastaka.v1i1.34

Zhang, M. (2024). Enhancing self-regulation and learner engagement in L2 speaking: exploring the potential of intelligent personal assistants within a learning-oriented feedback framework. *BMC Psychol, 12*(1), 421. doi:https://doi.org/10.1186/s40359-024-01917-0

Zimnyaya I A. (2017). *Psixologiya obucheniya inostrannym yazykam*. Moskva: Prosveshchenie.