ARABIC PHONETICS AND PHONEMICS INSTRUCTION IN ISLAMIC BOARDING SCHOOL FOR CHILDREN

Akla[1]*, Muyassaroh[2]
[1] Institut Agama Islam Negeri Metro
[2] Ponpes Al-Imam Metro Kibang, Lampung Timur

Article Info

*Corresponding Author:

Name:
Akla
Email:
akla@metrouniv.ac.id

Abstract

This study examines the learning process of Arabic phonetics and phonemics, focusing on how teachers create effective learning environments and their impact on students' skills in an Islamic boarding school. The research used a mixed-method approach and involved young santri at Pondok Pesantren Al Imam Metro Kibang, East Lampung. Data were collected through observation, questionnaires, and tests, all validated for content. Findings reveal that students utilize strategies such as imitation, repetition with rhythmic beats, and differentiation in learning. Teachers play a crucial role by making lessons relevant, fostering commitment, and creating a cheerful, engaging classroom atmosphere. Statistical analysis confirms the significant influence of the teacher's approach on improving students' Arabic phonetic and phonemic abilities, with a sig value (2-tailed) of 0.000, indicating H1 acceptance. This underscores the effectiveness of teacher-guided learning in enhancing language acquisition among santri.

Keywords: Arabic Phonetics and Phonemics; Learning Process; Teacher's Role.

مستخلص البحث

تهدف الدراسة إلى تحليل عملية تعلم فونتيك و فونيميك اللغة العربية، مع التركيز على كيفية قيام المعلم بخلق بيئة تعليمية فعالة وتأثيرها على مهارات التلاميذ في معهد الإسلامي للأطفال. لتحقيق هذا الهدف، فإن نموذج البحث المختار هو البحث بالطريقة المختلطة. تم تنفيذ هذا النهج البحثي المشترك في وحدة عملية البحث من جمع البيانات وتحليلها حتي الاستنتاج. المشاركون في هذه الدراسة هم تلاميذ بمعهد الإمام الإسلامي للأطفال بمترو كيبانغ لامبونج الشرقية. لجمع البيانات اللازمة باستخدام أدوات جمع البيانات في شكل الملاحظة والاستبيان والاختبار. تم اختبار جميع أدوات جمع البيانات المستخدمة في هذه الدراسة باستخدام اختبار صحة المحتوى. وأظهرت نتائج الدراسة أن عملية تعلم فونتيك و فونيميك اللغة العربية قد تمت على التلاميذ بعدة استراتيجيات وهي استراتيجية إعطاء الأمثلة والتقليد، واستراتيجية التكرار باستخدام طريقة الإيقاع، واستراتيجية التمايز. تظهر نتائج هذه الدراسة أيضا أنشطة المعلم في بناء مواقف التعلم بعدة خطوات، وهي جعل التعلم ملائما، وبناء الالتزام بالتعلم وخلق جو صفي خال من الهموم وودود وممتع. ذكرت نتائج هذه الدراسة أيضا أن قيمة سيج (٢ الذيل) تم حسابها عند ٠٠٠٠، مع نتيجة اختبار قيمة سيج المحسوبة < α بحيث تم رفض هـ ٠ وتم قبول هـ ١. تعني هذه النتيجة أن عملية التعلم التي يقوم بها المعلم قد تأثر على مهارات فونتيك و فونيميك اللغة العربية لدي التلاميذ.

كلمات أساسية: فونتيك و فونيميك العربية؛ عملية التعلم؛ دور المعلم.

Introduction

Arabic language learning for children in Islamic boarding schools still experiences various difficulties. The challenges faced by young students in Islamic boarding schools include difficulties in pronouncing Arabic sounds that differ from Indonesian phonetics. They often confuse similar or adjacent sounds and struggle with accurately distinguishing between long and short vowel sounds in Arabic pronunciation.[1] Errors in pronunciation of these sounds result in mistakes in meaning when the sounds are arranged in words and sentences.[2] Young santri also has difficulty identifying the meaning of words based on language sounds.[3] Young santri also feels the difficulty of learning Arabic from the learning process aspect. Uninteresting teaching methods and learning environments trigger problems in the learning process.[4] The method of teaching language sounds without giving examples of sound pronunciation makes it difficult for children to pronounce language sounds fluently and smoothly. The teacher only dominates the learning process and does not provide active learning space for children, resulting in passive and boring learning. An unpleasant learning environment triggers boredom and laziness in learning.

So far, previous studies on Arabic phonetics and phonemic learning tend to examine three main things. First, studies discuss the urgency of phonetics and phonemics in improving reading and writing skills. Understanding word structure and mastering intonation will facilitate reading skills. Understanding the relationship between letters and sounds is very helpful in recognizing sounds in words and helps improve writing skills.[5] Second, studies examine the urgency of learning methods in learning Arabic sounds. Teaching Arabic sounds that are not the same as the learner's mother tongue requires proper methods and approaches

---

[1] Nasikhatul Mabruroh and Khizanatul Hikmah, "Analisis Kesalahan Fonologi Dalam Keterampilan Berbicara Bahasa Arab Di Pondok Pesantren Putri Daarul Fikri Malang," *Jurnal Dedikasi Pendidikan* 8, no. 2 (2024), https://doi.org/10.30601/dedikasi.v8i2.4956.

[2] Heba Farouk et al., "Forecasting an Urban Sound Model Using Space Syntax Theory in Three Different Urban Patterns in Egypt," *Alexandria Engineering Journal* 101 (2024): 125, https://doi.org/10.1016/j.aej.2024.05.046.

[3] Joko Andi Koiruman et al., "Identifikasi Kesulitan Pembelajaran Mufrodat Pada Santri," *Journal of Education and Instruction (JOEAI)* 7, no. 1 (2024): 48–56, https://doi.org/10.31539/joeai.v7i1.9477.

[4] Faizal Pikri, "The Role of the Language Environment in Improving Arabic Learning Abilities," *International Journal of Science and Society* 4, no. 2 (2022): 346, https://doi.org/10.54783/ijsoc.v4i2.478.

[5] Nur Audina, Siti Ma'muroh, and Rima Novia Ulfa, "The Advantages of the Phonics Method for Early Childhood Reading Skills," *JEdu: Journal of English Education* 2, no. 2 (2022): 130, https://doi.org/10.30998/jedu.v2i2.6666; Sheila Nkurunziza, "The Role of Phonological Awareness in Early Reading Development," *European Journal of Linguistics* 3, no. 3 (2024): 15–26, https://doi.org/10.47941/ejl.2051; Atika Salman Paris, "Phonics Approach in Teaching Reading," *International Journal of Multicultural and Multireligious Understanding* 6, no. 3 (2019): 204, https://doi.org/10.18415/ijmmu.v6i3.739.

to achieve the learning objectives.[6] Third, studies examine the urgency of an attractive environment in second language learning. A conducive and pleasant environment makes it easier for children to understand the teaching material presented and, of course, makes it easier to achieve learning goals.[7]

From the three previous research trends, phonetic and phonemic learning for children has not been studied in depth. Existing studies focus more on the teacher's methods and the learning environment to achieve the set goals. Phonetic and phonemic learning is conducted to improve specific language skills. Existing studies have not examined the learning process of Arabic phonetics and phonemics and how Arabic sound pronunciation skills are acquired and used in language. This study complements existing studies on Arabic phonetic and phonemic learning, which tend to be on achieving Arabic language skills. In addition, this study focuses on phonetic and phonemic learning in Young Santri in boarding schools.

One crucial aspect of mastering Arabic language skills is knowing the sounds of the language, both the sounds that stand alone and the sounds that are assembled and form an understood meaning.[8] Learning language skills, such as listening, speaking, reading, and writing, can be understood easily if it begins with mastering the sounds of the language.[9] The science of phonology studies the sounds of this language. There are two central studies: phonetics and phonemics.

The study of phonetics examines how the speech device produces sounds, how the speech device produces sounds, conveys sounds, and receives sounds. From here, the study of phonetics is divided into acoustic phonetics, articulatory phonetics, and auditory phonetics.[10] Acoustic phonetics studies the sounds of language as a natural phenomenon by investigating the frequency of sound vibrations, the intensity of vibrations when the sound is produced, and the rhythm of the sound produced. Articulatory phonetics studies how the speech organs

---

[6] Linnea C. Ehri et al., "Systematic Phonics Instruction Helps Students Learn to Read: Evidence from the National Reading Panel's Meta-Analysis," *Review of Educational Research* 71, no. 3 (2001): 393–447, https://doi.org/10.3102/00346543071003393; Nurmahyuni Asrul and Azizah Husda, "Enhancing Pronunciation Skills Through Phonetic Method," *AL-ISHLAH: Jurnal Pendidikan* 14, no. 3 (2022): 4167, https://doi.org/10.35445/alishlah.v14i3.394; Indriana W.W and Suparno Suparno, "Using Phonetic Methods for Children's Reading Ability Development in Kindergarten," in *Proceedings of the International Conference on Special and Inclusive Education (ICSIE 2018)* (Proceedings of the International Conference on Special and Inclusive Education (ICSIE 2018), Yogyakarta, Indonesia: Atlantis Press, 2019), https://doi.org/10.2991/icsie-18.2019.47.

[7] Pikri, "The Role of the Language Environment in Improving Arabic Learning Abilities."

[8] Awaad Alqarhi, "Arabic Phonology," *English Linguistics Research* 8, no. 4 (2019): 9, https://doi.org/10.5430/elr.v8n4p9.

[9] Mohammad Yahya Ali Bani Salameh, "Phonemic Consonant Sounds in Modern Standard Arabic," *Linguistics and Culture Review* 5, no. S2 (2021): 1643, https://doi.org/10.21744/lingcure.v5nS2.2257.

[10] Salamah Salamah and Eti Setiawati, "Articulatory Phonetic Errors and Patterns in Thai BIPA Speakers: A Study at SWM School Thailand," *Indonesian Journal of Applied Linguistics* 13, no. 3 (2024): 573, https://doi.org/10.17509/ijal.v13i3.66948.

produce sounds that give an impression on the sound receiver's hearing device.[11] Auditory phonetics is phonetics that examines how the hearing system responds to sounds.[12]

The phonemic study studies the smallest unit of sound that can distinguish meaning. This study also discusses the functional differences between sounds in terms of meaning. In Arabic, there is a group of sounds whose pronunciation is classified into the smallest unit called phoneme.[13]

Learning Arabic, phonetics, and phonemics is essential for non-native speakers to master language skills. In Arabic, consonant sounds (shawamit) and vocal sounds (shawait) are known. These sounds must be mastered as early as possible before learning language skills.[14] Learning phonetics and phonemics trains the speech organs to produce language sounds, improves pronunciation, and explains the rules of the sound system.[15] These goals show that understanding phonetics and phonemics is very important. A non-native speaker who learns Arabic and does not understand the sound elements of the language will undoubtedly have difficulty learning the language. From this explanation, it can be understood that the mastery of phonetics and phonemics in Arabic is essential in helping children learn language skills.

The problem of mastering Arabic phonetics and phonemics comes from three primary sources. First, the issues stem from the learning process that runs passively without involving children actively in learning. Passive learning is the leading cause of children's unpreparedness in learning. The lack of children's activity in the learning process impacts the emergence of difficulties in mastering Arabic phonetics and phonemics in children. Secondly, problems originating from the teacher in teacher-centered teaching methods give birth to children's difficulties in understanding the sounds of the language being taught. Thirdly, problems emanating from an unpleasant learning environment trigger boredom in learning and impact not achieving learning goals.

---

[11] Louis Goldstein and Carol A. Fowler, "Articulatory Phonology: A Phonology for Public Language Use," in *Phonetics and Phonology in Language Comprehension and Production*, ed. Niels O. Schiller and Antje S. Meyer (De Gruyter Mouton, 2003), 159, https://doi.org/10.1515/9783110895094.159.

[12] Siti Asiyah and Ana Maghfiroh, "Phonology and Pronunciation Improvement (Students' Perspective)" (1st International Conference Of Education, Social And Humanities (INCESH 2021), Atlantis Press, 2021), https://www.atlantis-press.com/proceedings/incesh-21/125962144.

[13] Madah Rahmatan et al., "Role And Function Of Phonemes In Phonology For Arabic Communication," *International Journal of Education and Teaching Zone* 2, no. 2 (2023): 179, https://doi.org/10.57092/ijetz.v2i2.52.

[14] Fadi Sindran et al., "Rule-Based Standard Arabic Phonetization at Phoneme, Allophone, and Syllable Level," *International Journal of Computational Linguistics* 7, no. 2 (2016), https://www.cscjournals.org/library/manuscriptinfo.php?mc=IJCL-76.

[15] Yuslina Mohamed et al., "A Systematic Review Of Arabic Phonetic: Hijaiyyah's Pronunciation Among New Learners," *Ijaz Arabi Journal of Arabic Learning* 7, no. 2 (2024), https://doi.org/10.18860/ijazarabi.v7i2.24173.

This study implicitly describes the condition of phonetic and phonemic learning in Young santri in Islamic Boarding Schools. In line with this objective, three questions can be formulated: 1) How is the learning process of Arabic phonetics and phonemics among young learners in Islamic boarding schools? 2) How does the teacher build a learning situation in the learning process of Arabic phonetics and phonemics for children in Islamic boarding schools? 3) How is the learning process carried out by the teacher affected by the level of Arabic phonetic and phonemic skills of the Islamic boarding school students? The answers to these questions form the basis of a discussion that highlights the significance of understanding the phonetic and phonemic learning process in addressing the challenges children face while learning Arabic.

Method

This research examines the phonetic and phonemic learning process for boarding school children. This process research is conducted qualitatively by observing every process by teachers and children's activities during the learning process. This study also investigates the impact of the teacher's instructional methods on the development of Arabic phonetic and phonemic skills among children in Islamic boarding schools.

A quantitative approach was employed to analyze this influence. While a qualitative approach provides valuable insights, it alone is insufficient for a comprehensive analysis; thus, a quantitative approach was integrated to enhance the depth of the study. This research adopts a Mixed Methods approach, combining qualitative and quantitative methodologies to achieve a holistic understanding of the subject. This combined research approach is carried out in a unified process from collection and data analysis to conclusions.

This study involved 42 Pondok Pesantren Al Imam Metro Kibang East Lampung children, divided into two learning classes. The participants' average age ranged from 7 to 10. Most came from rural areas and completed the basic Qur'anic learning level. In addition, the data needed is also related to the effect of the learning process on the phonetic and phonemic abilities of Young santri.

Data were collected using observation, questionnaires, and tests to achieve this. All data collection instruments used in this study were validated through a content validity test. The content validity test was conducted using expert judgment and met the valid criteria. The reliability test was carried out using Alpha Cronbach, which obtained a value of on the questionnaire instrument 0.842 and on the test instrument 0.828, which means that both instruments are valid and suitable for use as a measurement tool.

Result and Discussion

The Learning Process of Arabic Phonetics and Phonemics

The research findings show that Arabic teachers can teach Arabic well; the teacher's work experience has been over five years. Students learn Arabic phonetics and phonemics using several strategies. The first strategy is to give examples of sound pronunciation. Sound pronunciation begins with the sound of letters one by one, followed by the sound of letters in each word. In the next phase, the teacher gives examples of sound sentence pronunciation. In reciting the sounds in each word, the teacher emphasizes each sound to distinguish the meaning of each word from a different sound. The teacher gives examples of pronouncing sounds that are close together, long and short, and explains the sounds that distinguish meaning. In providing examples of sound pronunciation, the teacher becomes a native by demonstrating the speech tools, starting from producing letter-by-letter sounds followed by word-by-word and sentence sounds.

Second, the teacher uses repetition strategies. In the learning process, the teacher repeats three times by giving examples of sound pronunciation. After the teacher repeats the taught sound, ensure that all children receive the sound message. In the next stage, the teacher asks the children to imitate the pronunciation modeled by the teacher five times classically. The teacher uses the beat sound as a medium in the repetition process. In the repetition process, the teacher pays attention to every movement of the child's speech tool to ensure that the child pronounces fluently and correctly. The teacher continues to ask the children to repeat classically the sounds spoken by the teacher, both separate letter sounds, word sounds, and sentences. There is a uniqueness in the process of repeating these sounds, namely that the teacher uses the tapping method to provide uniform codes for pronunciation. This tapping method makes children sound simultaneously, making it easy to determine if mispronunciation exists.

Third, teachers use differentiation strategies. In the learning process, the teacher recites Arabic sounds close to each other and asks the children to imitate. In the first stage, the teacher gives examples of the differences in sounds on separate letters. Then, the teacher recites the different sounds contained in the word and asks the children to imitate. The teacher also recites the various sounds in sentences and asks the children to imitate. In addition to giving examples of reciting the differences in Arabic sounds, the teacher also explains the relationship of the differences in sound to the meaning of the word or the sentence.

Teacher's Activities in Building Arabic Phonetic and Phonemic Learning Situations in Young santri of Islamic Boarding Schools

The research findings show that teachers carry out various activities to build learning situations and provide a conducive and pleasant learning atmosphere. First, the relevance of learning. In learning Arabic phonetics and phonemics, teachers are not only bound by written teaching materials but also develop sound

language materials related to words or sentences that are appropriate to the life and age of children. Although the learning focuses primarily on Arabic sounds, regardless of their meaning, teachers ensure that the material remains connected to the children's world and experiences. Some of the learning materials are delivered by singing while moving. This relevance creates a sense of excitement and interest in learning.

Second, teachers build an agreed commitment to the learning process. Teachers give children an understanding of positive behaviors that can be done and negative behaviors that should not be done during the learning process and agree on positive behaviors, such as being actively involved in learning, following the teacher's instructions, and doing the assigned tasks. Avoiding negative behaviors includes making noise, leaving the classroom without permission during the learning process, and not following the teacher's instructions. Commitments are agreed upon and implemented by the teacher and children. Some children violate their commitment during the learning process, and the teacher reminds them by motivating and encouraging them to learn.

Third, the teacher creates a cheerful, friendly, and fun classroom atmosphere. This situation is built by giving rewards to children who achieve learning targets. Rewards are in the form of assessment points and often in the form of small gifts that trigger children's enthusiasm for learning. The teacher also pays attention to children who do not respond to learning and approaches them to discover the source of their learning problems. The learning atmosphere becomes cheerful so that learning time seems to pass quickly and the teacher succeeds in learning smoothly.

The Effect of the Teacher's Learning Process on the Level of Arabic Phonetic and Phonemic Ability of Children in Islamic Boarding Schools

The Arabic phonetic and phonemic learning process carried out by the teacher has transformed children's phonetic and phonemic abilities, in addition to increasing positive trends in learning. Children's phonetic and phonemic abilities were previously limited. From the data of Arabic phonetic and phonemic ability scores, there is an average score of 5.7 below the standard of learning completeness of 6.5. The teacher has built the learning process by creating an active and fun environment that has made it easier for children to master Arabic phonetics and phonemics. The teacher's learning process has stimulated the ability to distinguish sounds based on differences in meaning and pronounce adjacent sounds fluently and smoothly, both in separate letters and words and sentences. Children have also been able to mention complex sounds that do not exist in the mother tongue.

The results of the test data analysis on children show a significant increase in children's Arabic phonetic and phonemic abilities. A t-test was conducted to determine whether the teacher's learning process could transform children's

Arabic phonetic and phonemic skills. Before the t-test, the collected data were subjected to prerequisite tests, namely normality test and homogeneity test. The normality test results with Kolmogorov-Smirnov test statistics at a significant level α = 5% = 0.05. It is known that the calculated sig value of each class comes from a normally distributed population. Furthermore, the homogeneity test was carried out with the Levene test statistic with a significance level: α = 5 % = 0.05. It is known that the calculated sig value is 0.872> α, so H0 is accepted, which means that the population variance is homogeneous. Based on the prerequisite test conducted, the sample comes from a normally distributed population, and the population variance is homogeneous. The t-test results at the significance level: α = 5% = 0.05 with test result criteria: if sig count > α, then H0 is accepted.

Table 1. Results of the t-test on the effect of the learning process

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Nilai	Equal variances assumed	.173	.703	-6.088	156	.000	-5.73620	1.21551	-10.46231	-4.64676
	Equal variances are not assumed.			-6.088	155.732	.000	-5.73620	1.21551	-10.46231	-4.46476

Table 1 shows that the calculated sig (2-tailed) value is 0.000 with the test decision of the calculated sig value < α so that H0 is rejected and accepts H1. This result means the teacher's learning process can influence children's Arabic phonetic and phonemic skills.

Discussion

The findings of this study show that learning Arabic phonetics and phonemics by modeling the pronunciation of sounds and children imitating the sounds spoken by the teacher has an effect on children's fluency and fluency in pronunciation. In addition to imitation, the research findings also show that repeating sounds accompanied by beats affects children's fluency in reciting, identifying, and distinguishing the meaning of adjacent sounds. This study is essential and significantly contributes to the study of Arabic language learning because it contributes significantly to children's phonetic and phonemic abilities. The findings of this study also provide opportunities for other researchers to expand the conclusions of the unique point of view of learning interactions with the learning environment built by the teacher.

First, related to children's imitation of the sounds that the teacher pronounces, the results of this study are in line with what Albert Bandura

proposed about social learning theory, which states that the success of learning can be determined by children's ability to observe and imitate the behavior and attitudes of others. Bandura's concept states that learning and imitating others plays a cognitive, understanding, and evaluation role that emphasizes attention, memory, and motivation.[16] Therefore, in this case, the teacher observes most of the child's behavior from the modeling observed by others. The result of observation is imitation behavior. A new concept believed to be a way to behave appropriately will emerge through modeling or imitation. Therefore, every child who can see and observe can still learn new things even though they do not do it directly. Social learning theory also considers how the learning environment plays a role and affects learning outcomes.[17] The provided narrative effectively demonstrates the application of Bandura's social learning theory to children's language acquisition. By highlighting the importance of observation and imitation, the text accurately captures the core principles of this theory. The emphasis on cognitive processes such as attention, memory, and motivation further enriches the understanding of how children learn from their environment.

Second, the findings of this study also show that teachers who have a high commitment to teaching have been able to create a conducive, cheerful, and fun learning atmosphere. Teachers who have a high commitment to teaching have been able to provide learning stimuli to children to produce positive learning behavior. Teachers' teaching readiness has been able to generate positive responses to learning. This aligns with the theory of connectionism learning proposed by Edward Thorndike. The theory of connectionism explains that when children are faced with new learning stimuli, they give birth to various learning behavior responses.[18] The multiple reactions will differ for each child even though they are in the same environment and situation.[19] This theory further confirms that learning is a process of forming a connection between messages received by

---

[16] Sondang Manik et al., "Theory of Bandura's Social Learning in The Process Of Teaching at SMA Methodist Berastagi Kabupaten Karo," *Jurnal Visi Pengabdian Kepada Masyarakat* 3, no. 2 (2022): 85–96, https://doi.org/10.51622/pengabdian.v3i2.729.

[17] Virginia Koutroubas and Michael Galanakis, "Bandura's Social Learning Theory and Its Importance in the Organizational Psychology Context," *Journal of Psychology Research* 12, no. 6 (2022), https://doi.org/10.17265/2159-5542/2022.06.001.

[18] Muhammad Ihsan Dacholfany, Imran Latif Saifi, and Sabariah Sulaiman, "Connectivism And Constructivism Approaches To Social Learning Theory," *International Journal of Education, Vocational and Social Science* 1, no. 01 (2022), https://e-journal.citakonsultindo.or.id/index.php/IJEVSS/article/view/1.

[19] Rustam Shadiev, Xueying Wang, and Yueh-Min Huang, "Cross-Cultural Learning in Virtual Reality Environment: Facilitating Cross-Cultural Understanding, Trait Emotional Intelligence, and Sense of Presence," *Educational Technology Research and Development* 69, no. 5 (2021): 2917, https://doi.org/10.1007/s11423-021-10044-1.

the five senses with a tendency to behave.[20] Messages received by the five senses are pleasant, causing a tendency to respond with positive behavior.[21] This theory also explains that the connection will be stronger as often as behavioral stimuli are repeated. The more often repetitions are made, the stronger the behavior will appear.[22]

Conclusion

The learning process of Arabic phonetics and phonemics is done by giving examples of pronunciation, repetition, and differentiation strategies. Teachers create an active and engaging learning environment to facilitate students' mastery of Arabic phonetics and phonemics. Teachers make learning relevant by developing teaching materials based on children's lives and ages. Teachers build learning commitment and create a cheerful, friendly, and fun classroom atmosphere. This result means that the teacher's learning process can influence the children's phonetic and phonemic abilities in Arabic.

References

Alam, Afroz. "Connectivism Learning Theory and Connectivist Approach in Teaching and Learning: A Review of Literature." *Bhartiyam International Journal of Education & Research* 12, no. 2 (2023). http://www.gangainstituteofeducation.com/research-paper-march-2023-1.pdf.

Alqarhi, Awaad. "Arabic Phonology." *English Linguistics Research* 8, no. 4 (2019): 9. https://doi.org/10.5430/elr.v8n4p9.

Asiyah, Siti, and Ana Maghfiroh. "Phonology and Pronunciation Improvement (Students' Perspective)." Atlantis Press, 2021. https://www.atlantis-press.com/proceedings/incesh-21/125962144.

Asrul, Nurmahyuni, and Azizah Husda. "Enhancing Pronunciation Skills Through Phonetic Method." *AL-ISHLAH: Jurnal Pendidikan* 14, no. 3 (2022): 4167. https://doi.org/10.35445/alishlah.v14i3.394.

Audina, Nur, Siti Ma'muroh, and Rima Novia Ulfa. "The Advantages of the Phonics Method for Early Childhood Reading Skills." *JEdu: Journal of English Education* 2, no. 2 (2022): 130. https://doi.org/10.30998/jedu.v2i2.6666.

---

[20] George Siemens, "Connectivism: A Learning Theory for the Digital Age," *International Journal of Instructional Technology and Distance Learning* 2, no. 1 (2005), https://itdl.org/Journal/Jan_05/article01.htm.

[21] Afroz Alam, "Connectivism Learning Theory and Connectivist Approach in Teaching and Learning: A Review of Literature," *Bhartiyam International Journal of Education & Research* 12, no. 2 (2023), http://www.gangainstituteofeducation.com/research-paper-march-2023-1.pdf.

[22] Gavin Peter Hendricks, "Connectivism as a Learning Theory and Its Relation to Open Distance Education," *Progressio* 41, no. 1 (2019), https://doi.org/10.25159/2663-5895/4773.

Dacholfany, Muhammad Ihsan, Imran Latif Saifi, and Sabariah Sulaiman. "Connectivism And Constructivism Approaches To Social Learning Theory." *International Journal of Education, Vocational and Social Science* 1, no. 01 (2022). https://e-journal.citakonsultindo.or.id/index.php/IJEVSS/article/view/1.

Ehri, Linnea C., Simone R. Nunes, Steven A. Stahl, and Dale M. Willows. "Systematic Phonics Instruction Helps Students Learn to Read: Evidence from the National Reading Panel's Meta-Analysis." *Review of Educational Research* 71, no. 3 (2001): 393–447. https://doi.org/10.3102/00346543071003393.

Farouk, Heba, Abdullah Alzahrani, Reda Aly, and Ebtehal Ibrahim. "Forecasting an Urban Sound Model Using Space Syntax Theory in Three Different Urban Patterns in Egypt." *Alexandria Engineering Journal* 101 (2024): 125. https://doi.org/10.1016/j.aej.2024.05.046.

Goldstein, Louis, and Carol A. Fowler. "Articulatory Phonology: A Phonology for Public Language Use." In *Phonetics and Phonology in Language Comprehension and Production*, edited by Niels O. Schiller and Antje S. Meyer, 159. De Gruyter Mouton, 2003. https://doi.org/10.1515/9783110895094.159.

Hendricks, Gavin Peter. "Connectivism as a Learning Theory and Its Relation to Open Distance Education." *Progressio* 41, no. 1 (2019). https://doi.org/10.25159/2663-5895/4773.

Koiruman, Joko Andi, Nurus Amzana, Zuhri Zuhri, Ariyanto Ariyanto, and Elce Purwandari. "Identifikasi Kesulitan Pembelajaran Mufrodat Pada Santri." *Journal of Education and Instruction (JOEAI)* 7, no. 1 (2024): 48–56. https://doi.org/10.31539/joeai.v7i1.9477.

Mabruroh, Nasikhatul, and Khizanatul Hikmah. "Analisis Kesalahan Fonologi Dalam Keterampilan Berbicara Bahasa Arab Di Pondok Pesantren Putri Daarul Fikri Malang." *Jurnal Dedikasi Pendidikan* 8, no. 2 (2024). https://doi.org/10.30601/dedikasi.v8i2.4956.

Madah Rahmatan, Depaty Alvio Jh, Nurhikmah Sani, Diki Ramadhan Alfarisi, and Vikky Alziqry Jh. "Role And Function Of Phonemes In Phonology For Arabic Communication." *International Journal of Education and Teaching Zone* 2, no. 2 (2023): 179. https://doi.org/10.57092/ijetz.v2i2.52.

Manik, Sondang, Milisi Sembiring, Immanuel Padang, and Lastri Manurung. "Theory of Bandura's Social Learning in The Process Of Teaching at SMA Methodist Berastagi Kabupaten Karo." *Jurnal Visi Pengabdian Kepada Masyarakat* 3, no. 2 (2022): 85–96. https://doi.org/10.51622/pengabdian.v3i2.729.

Mohamed, Yuslina, Zainurrijal Abd Razak, Tuan Haji Sulaiman Ismail, Nada Ibrahim Alribdi, and Mesbahul Hoque. "A Systematic Review Of Arabic Phonetic:

Hijaiyyah's Pronunciation Among New Learners." *Ijaz Arabi Journal of Arabic Learning* 7, no. 2 (2024). https://doi.org/10.18860/ijazarabi.v7i2.24173.

Nkurunziza, Sheila. "The Role of Phonological Awareness in Early Reading Development." *European Journal of Linguistics* 3, no. 3 (2024): 15–26. https://doi.org/10.47941/ejl.2051.

Paris, Atika Salman. "Phonics Approach in Teaching Reading." *International Journal of Multicultural and Multireligious Understanding* 6, no. 3 (2019): 204. https://doi.org/10.18415/ijmmu.v6i3.739.

Pikri, Faizal. "The Role of the Language Environment in Improving Arabic Learning Abilities." *International Journal of Science and Society* 4, no. 2 (2022): 346. https://doi.org/10.54783/ijsoc.v4i2.478.

Salamah, Salamah, and Eti Setiawati. "Articulatory Phonetic Errors and Patterns in Thai BIPA Speakers: A Study at SWM School Thailand." *Indonesian Journal of Applied Linguistics* 13, no. 3 (2024): 573. https://doi.org/10.17509/ijal.v13i3.66948.

Salameh, Mohammad Yahya Ali Bani. "Phonemic Consonant Sounds in Modern Standard Arabic." *Linguistics and Culture Review* 5, no. S2 (2021): 1643. https://doi.org/10.21744/lingcure.v5nS2.2257.

Shadiev, Rustam, Xueying Wang, and Yueh-Min Huang. "Cross-Cultural Learning in Virtual Reality Environment: Facilitating Cross-Cultural Understanding, Trait Emotional Intelligence, and Sense of Presence." *Educational Technology Research and Development* 69, no. 5 (2021): 2917. https://doi.org/10.1007/s11423-021-10044-1.

Siemens, George. "Connectivism: A Learning Theory for the Digital Age." *International Journal of Instructional Technology and Distance Learning* 2, no. 1 (2005). https://itdl.org/Journal/Jan_05/article01.htm.

Sindran, Fadi, Firas Mualla, Tino Haderlein, Tino Haderlein, Khaled Daqrouq, and Elmar Nöth. "Rule-Based Standard Arabic Phonetization at Phoneme, Allophone, and Syllable Level." *International Journal of Computational Linguistics* 7, no. 2 (2016). https://www.cscjournals.org/library/manuscriptinfo.php?mc=IJCL-76.

Virginia Koutroubas and Michael Galanakis. "Bandura's Social Learning Theory and Its Importance in the Organizational Psychology Context." *Journal of Psychology Research* 12, no. 6 (2022). https://doi.org/10.17265/2159-5542/2022.06.001.

W.W, Indriana, and Suparno Suparno. "Using Phonetic Methods for Children's Reading Ability Development in Kindergarten." In *Proceedings of the International Conference on Special and Inclusive Education (ICSIE 2018)*. Yogyakarta, Indonesia: Atlantis Press, 2019. https://doi.org/10.2991/icsie-18.2019.47.