THE PERCEPTION OF ENGLISH EDUCATION STUDENTS ON THE USE OF IPA SYMBOLS IN PHONETICS AND PHONOLOGY COURSE

Luthfia Putri Thiorysa[1], Harum Natasha[2*]

Faculty of Education and Teacher Training,
State Islamic University of Sultan Syarif Kasim Riau,
Pekanbaru, Riau, Indonesia

luthfiaputrithiorysa12@gmail.com [1], harum.natasha@uin-suska.ac.id [2]

ABSTRACT

This research aims to describe the perceptions of English Education students on the use of IPA (International Phonetic Alphabet) symbols in Phonetics and Phonology course at the State Islamic University of Sultan Syarif Kasim Riau. This research uses a quantitative approach with a descriptive quantitative design. The research was conducted in March 2025 at the English Education Department of the State Islamic University of Sultan Syarif Kasim. The population consisted of second-semester English education students from five classes in the academic year 2024/2025, and 38 students were selected through purposive sampling, which focused on those who had taken the course and intended to become English teachers. The data were collected using a questionnaire consisting of 24 statements. The data were analyzed using SPSS version 30. The total score was 2,916 with a mean of 76.74, which falls into the positive perception category. This indicates that students perceive the use of IPA symbols as beneficial in learning phonetics and phonology.

KEYWORDS: *IPA Symbols, Students' Perception, Phonetics and Phonology, Pronunciation*

1 INTRODUCTION

Pronunciation is one of fundamental aspects of language acquisition, particularly for students enrolled in English education programs who are preparing to become educators in the future. Correct pronunciation is crucial for effective communication, as errors in uttering English words can produce misunderstanding. Educators of English have the responsibility to present learners with an accurate model of English pronunciation (Gimson, 1989). However, with the increasing acceptance of diverse accents, dialects, and speaking styles in English, the concept of intelligibility has emerged as a main problem. The complexities of measuring intelligibility and comprehensibility, which are influenced by various factors including the listener's first language (L1), familiarity with non-native English (NNE) accents, attentiveness, mental fatigue, and background knowledge of the topic being discussed (Murphy, 2014).

*Correspondence: harum.natasha@uin-suska.ac.id

To focus on these challenges in pronunciation instruction, phonetic symbols usage mostly the International Phonetic Alphabet (IPA) has been adopted widely. The IPA provides a standardized and systematic approach for representing each speech sound with a distinct symbol, enabling students to identify and reproduce accurate pronunciation. Intensive instruction in phonetic symbols facilitates learner autonomy by supporting the identification of new and difficult words, correcting mispronunciations, and understanding word stress patterns and spelling variations (Brown, 1992). Students who engage with phonetic symbols experience notable improvements in both their pronunciation skills and overall confidence in speaking English (Por and Fong, 2011). The use of IPA thus provides a clear and practical framework for learners to develop more precise and intelligible spoken English.

However, the use of phonetic symbols is not without criticism. Phonetic transcription may lead to confusion among students, particularly when introduced without adequate guidance or explanation (Dansereau, 1995). This divergence of perspectives underscores the need to investigate learners' actual experiences with IPA instruction. Given that English education students are not only language learners but also prospective teachers, their perceptions are especially important. How they perceive the role and effectiveness of IPA symbols will likely influence their future instructional practices. Despite the widespread use of the International Phonetic Alphabet (IPA) in pronunciation instruction, empirical evidence on how EFL undergraduates perceive IPA as a learning tool—especially across dimensions such as autonomy, intelligibility, confidence, perceived burden, instructional support, and perceived benefits—remains limited, especially in the context of university. Previous researches have predominantly focused on IPA's effectiveness for segmental accuracy, on small-scale qualitative accounts, or on contexts outside the university, leaving a gap in understanding students' perceptions through a structured quantitative instrument. Therefore, this study contributes by providing a descriptive quantitative profile of EFL students' perceptions of IPA symbols in the Islamic State University of Sultan Syarif Kasim Riau, which may inform pronunciation pedagogy and materials design. This study aims to explore students' perceptions of IPA symbols in phonetics and phonology courses, examining whether these tools contribute to their pronunciation development and pedagogical readiness. Based on the objectives of the study, the research question is formulated as follows: "How is the perception of English education students on the use of IPA symbols in phonetics and phonology course?".

The International Phonetic Alphabet (IPA) is a universal system used to transcribe speech sounds in phonetics and phonology. This system offers a standardized pronunciation symbols mainly derived from the Latin letters. Different from English orthography, which does not reflect pronunciation accurately, IPA enables each sound to be represented by a single, consistent symbol. IPA is used as an alternative writing system that can represent a wider range of sounds than the conventional English spelling system (McMahon, 2002).

The IPA was developed by the International Phonetic Association in the late nineteenth century to provide a uniform method for transcribing spoken language among different languages. It is a phonetic system, meaning that IPA symbols represent actual speech sounds without reference to their functional role within a particular language. Proper phonetic transcriptions are written in square brackets [ ], while slashes / / are used to indicate phonemes in specific languages or accents, as commonly written in dictionaries.

Even though the IPA is widely used in linguistics and language education, it is not universally adopted. In the United States, for example, some analysts prefer alternative transcription systems such as the American Phonetic Alphabet (Brown, 2013). Nevertheless, IPA remains the most internationally recognized system for representing speech sounds. According to Hanumanthappa (2014), the English IPA consists of 44 sounds, including 24 consonants, 12 vowels, and 8 diphthongs. Some IPA symbols resemble English letters, such as [p] in *pick*, [b] in *bow*, and [v] in *visual*, while others are specially designed to represent sounds not clearly indicated by English spelling, such as [ʃ] in *ship*, [ʧ] in *cheap*, and [θ] in *thumb* (Wells, 2006). Because of this close relationship between symbols and sounds, IPA transcription is considered an effective tool for teaching phonetics and phonology, particularly at the university level.

Accurate pronunciation is essential in language learning, yet it is often difficult due to inconsistencies between spelling and sound. Phonetic transcription discusses this issue by providing a precise representation of spoken language without ambiguity (Safari et al., 2011). IPA as a universal tool provides linguists, teachers, and learners to document pronunciation systematically (Crystal, 2008). IPA allows for objective comparison of speech sounds across languages, making it valuable in both linguistic research and language teaching (Ladefoged, 2001).

The spread of English promotes the importance of IPA. Various accents and patterns in pronunciation is resulted by spoken English by millions of English speakers both native and non-native speakers. Related to that, intelligibility where how easily speech can be understood—creates crucial situation in achieving a native like accent. Teachers must offers models of reliable pronunciation (Gimson, 1989). Further, intelligibility focused on factors about various listener-related like accent familiarity and background knowledge (Murphy, 2014). IPA symbols provide learners enhance their pronunciation accurately and reduce misunderstanding in doing communication.

In pronunciation learning, phonetic symbols support learner autonomy and confidence. Brown (1992) stated that instruction in phonetic symbols helps students correct mispronunciations, understand word stress, and learn new vocabulary independently. The use of IPA developed the pronunciation skills and improves speaking confident (Por and Fong, 2011). However, IPA may be confusing if not taught gradually and interactively, highlighting the importance of effective instructional strategies (Dansereau, 1995). There are six indicators related to students' perceptions of phonetic symbols in pronunciation learning: learner autonomy, intelligibility, confidence, learning burden, instructional effectiveness, and perceived benefits (Putri and Rahmah, 2016). These indicators provide a useful framework for examining how students experience and evaluate the use of IPA in learning English pronunciation.

In the course of phonetics and phonology courses, IPA symbols plays a central role in helping students analyze and produce English sounds. Phonetics focuses on how sounds are produced, while phonology examines sound patterns within a language (Roach, 1987). By knowing IPA symbols, students gain a more understanding of sound systems and are better prepared to teach pronunciation effectively in their future careers.

2 METHODOLOGY

This study employed quantitative approach with a descriptive research design to explore students' perceptions of the use of International Phonetic Alphabet (IPA) symbols in the course of Phonetics and Phonology. The design was used to describe students' perceptions numerically and systematically without manipulating any variables.

The participants of this study were 38 second-semester students of the English Education Department at the State Islamic University of Sultan Syarif Kasim Riau during the 2024/2025 academic year. They were selected via purposive sampling technique, based on specific criteria: students who had taken the Phonetics and Phonology course and intended to become English teachers in the future. This method ensured that the selected respondents had relevant experience with the use of IPA symbols in their studies.

In collecting the data, the instrument used was a structured questionnaire comprising 24 closed-ended statements. The questionnaire items were designed based on six key indicators adapted from Putri and Rahmah (2016), include: student autonomy in learning pronunciation, intelligibility in speaking English, confidence in speaking, learning burden, instructional strategies, and the perceived benefits of IPA symbols. Each item was rated on a five-point Likert scale from "Strongly Disagree" (1) to "Strongly Agree" (5).

To ensure the instrument's validity, a pilot test was conducted with 35 students outside the main research sample. The validity of each item was analysed using the Pearson Product-Moment formula, with a r-table value of 0.334. All 24 items of the questionnaire were found to be valid. Then, reliability testing was done by using Cronbach's Alpha resulted in a coefficient of 0.854, indicating a high level of internal consistency across the questionnaire items.

The collected data were analysed by using statistical techniques of SPSS version 30. The analysis involved calculating the frequency, percentage, and mean score of the responses. To interpret the results, the study applied a perception rating scale adopted from Cohen (2018), which categorizes perception levels into five groups: very positive (80–100%), positive (60–79.9%), neutral (40–59.9%), negative (20–39.9%), and very negative (0–19.9%). These classifications helped determine students' overall perception of the use of IPA symbols in their course.

3   RESULT AND DISCUSSION

A. Results

This section presents the results of the study entitled *"The Perception of English Education Students on the Use of IPA Symbols in Phonetics and Phonology Course at the English Education Department, Faculty of Education and Teacher Training, Sultan Syarif Kasim State Islamic University."* The purpose of this section is to describe and

interpret students' perceptions regarding the use of International Phonetic Alphabet (IPA) symbols in learning phonetics and phonology. The data were obtained from 38 English Education students who had completed the Phonetics and Phonology course. Students' perceptions were collected via a questionnaire comprising 23 closed-ended statements, rated on a Likert scale. The analysis focuses on identifying students' overall perceptions and views across several aspects of IPA use in pronunciation learning. The findings are presented descriptively and discussed in relation to relevant theories and previous studies.

1 Overall Perception Score

This study investigated English Education students' perceptions of the use of IPA symbols in the Phonetics and Phonology course. Based on responses from 38 students, the total perception score was 2,916, with a mean score of 76.74. Using Cohen's interpretation scale, this score falls within the positive category (60%–79.9%), indicating that students generally view IPA symbols as helpful in supporting their learning, particularly in pronunciation development and understanding phonetic concepts.

To strengthen the interpretation, the overall response distribution across 24 questionnaire items (910 total responses) also shows a clear positive tendency. In total, 30% of responses were *strongly agree* (269) and 38% were *agree* (347), meaning 68% of all responses reflected positive perceptions. Neutral responses accounted for 21% (192), while *disagree* and *strongly disagree* made up 9% (79) and 2% (23) respectively. When weighted using Likert scoring, the final percentage score was 76.7%, confirming the classification as positive.

2 Perception by Indicator
a. Autonomy in Learning Pronunciation

Findings from Items 1–3 indicate that IPA symbols are perceived to support learner autonomy. Most students agreed that IPA helps them become more independent in pronunciation learning, especially by enabling self-monitoring and self-correction. For example, for the statement that phonetic symbols increase autonomy, 60.5% responded strongly agreed and 23.7% responded agree. At the same time, students mentioned that IPA reduces their mispronunciation and help their self-correction, with the levels of agreement above 50% for each item.

This situation proposed that IPA is viewd as a classroom tool. It is also as a resource that students can apply it put by the teachers' guidance, particularly when they practice unfamiliar words and check their pronunciation accuracy independently. Yet, the Neutral responses (around 8%–13% across the autonomy items) proved that some students might not fully apply IPA independently yet, which may be the effect of differences in familiarity, practice frequency, or instructional scaffolding.

b. Intelligibility and Pronunciation Accuracy

Students also reported positive perceptions regarding the role of IPA in making them more intelligible speakers. Across Items 4–6, 16, and 21, students largely agreed that IPA supports accurate pronunciation of English sounds, easier word pronunciation, reduction of fossilized errors, and broader improvement in English. For instance, in the item about pronouncing various English sounds correctly,

42.1% strongly agreed and 39.5% agreed. In the item on ease of pronouncing English words, most responses were positive (65.8% agree, 23.7% strongly agree).

Importantly, students also showed awareness that inaccurate or systematic mispronunciation might influence their professional credibility. This indicates that they view pronunciation as not only about requirement in academic but also related to professional skill for them as an English teacher. Overall, these findings suggest that IPA is perceived as practically useful for developing clearer speech and reducing persistent pronunciation problems.

c. Confidence in Speaking and Professional Readiness

Items related to confidence (Items 7 and 23) indicate that IPA contributes positively to students' affective experience in speaking English. Most students agreed that IPA increases confidence in speaking (52.6% agree, 36.8% strongly agree). Additionally, many respondents expressed a strong desire to become teachers who can model native-like pronunciation, with 50% strongly agreeing and 26.3% agreeing.

These findings imply that IPA is perceived as a technical system. This technical system is viwed as the tool for building confidence. If the students thought that they have an accurate guide for pronunciation, they will experience less uncertainty and improve their willingness to speak. Nonetheless, the existence of neutral responses in the "native-like model" item suggests that some students may prioritize intelligibility over native-likeness, or may still be developing confidence in achieving such a model.

d. Learning Burden and Difficulty

Although overall perceptions were positive, results from the "learning burden" indicator show that IPA is not equally easy for all students. Items 8–10 indicate that most students do not strongly experience IPA as confusing or difficult; DISAGREE responses were generally higher than AGREE responses. For instance, for item "IPA symbols are confusing" in questionnaire, most respondents selected DISAGREE or STRONGLY DISAGREE, yet a substantial portion selected neutral (39.5%).

Items 17–18 (ease of reading and writing transcription) further reinforce this pattern. Neutral responses were high (42.1% neutral for reading; 36.8% neutral for writing), suggesting uncertainty or uneven mastery. This is an important finding: even when students evaluate IPA positively overall, many may still experienced lack confidence in applying transcription skills actively, especially in production tasks such as reading and writing IPA accurately.

In practical terms, the "burden" results suggest that the main challenge is not rejection of IPA, but partial mastery and hesitation. This points to the need for more guided practice, gradual progression, and consistent reinforcement.

e. Lecturer Instruction and the Role of IPA in the Program

The indicator related to lecturer instruction and professional relevance (Items 11, 19, 20, 22, 24) shows that students strongly recognise IPA as an important competence in English Education. The majority agreed that students in the program

should master phonetic symbols and that transcription skills are important for teachers and language professionals. Students also strongly agreed that pronunciation and accent may influence professional credibility.

In addition, students were generally satisfied with the amount and quality of instruction they got (44.7% agree, 31.6% strongly agree). Yet, they intend to use transcription in future teaching (Item 19) proved a higher percentage of neutral responses (34.2%), which indicated that while students are worth IPA, some remain doubt about how they will apply it into a real classroom practice. This suggests that pedagogical modelling—indicating practical ways to teach with IPA—may be necessary to strengthen future implementation.

f.   Perceived Benefits of IPA in Pronunciation Learning

Finally, Items 12–15 show that students perceive IPA as beneficial and appropriate for learning and teaching pronunciation. The strongest support appears in the item stating that IPA is an effective way to improve pronunciation, with responses overwhelmingly positive (52.6% agree, 34.2% strongly agree, and no disagreement). Students also largely agreed that IPA is an appropriate system for teaching pronunciation.

However, the item about IPA being "likeable" or enjoyable had more neutral responses than effectiveness items. The students do not always enjoy the IPA learning, despite its benefits for their speaking. They perceive the benefit as strongly positive; meanwhile, the affective preference is moderate comparatively.

B. Discussion

The results of this study indicate that the implementation of Project Based Learning (PBL) is positively related to student motivation and learning attitudes, although the level of significance is not yet fully robust. These findings show that Project Based Learning can encourage students to become more involved in learning, in line with Thomas' (2000) opinion that Project Based Learning is an approach that allows students to learn through in-depth exploration of real-world problems, thereby fostering learning motivation.

Overall, the results of this study indicate that the implementation of PBL is in the high category, while student learning motivation is in the fairly high category. Although the correlation between the two shows a positive direction, no statistically significant relationship was found. Therefore, it can be concluded that PBL plays an important role in the learning process, but it is not the only factor that influences student motivation. Teachers are advised to pay attention to other internal and external factors that contribute to building learning motivation, so that the application of PBL can provide more optimal results.

4   CONCLUSION

This study revealed that English Education students hold a positive perception on the use of IPA symbols in the Phonetics and Phonology course. The mean score of 76.74% indicates that most students of English Department of UIN Suska Riau found the IPA

helpful for improving their pronunciation, increasing learning autonomy, and boosting confidence in speaking English. While some challenges were noted—such as symbol complexity and memorisation—the majority of respondents agreed that IPA plays an essential role in teaching and learning pronunciation.

As the next English teachers, IPA symbols are provided for students as both a tool and an asset that help their improvement. The findings focused on the need for engaging, gradual, and student-centred instruction when introducing IPA symbols in the classroom. The IPA usage is significantly able to develop accurate pronunciation with an appropriate teaching method.

REFFERENCES

Brown, H. D. (1992). *Teaching by principles: An interactive approach to language pedagogy*. Prentice Hall Regents.

Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd ed.). Longman.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

Crystal, D. (2008). *A dictionary of linguistics and phonetics* (6th ed.). Blackwell Publishing.

Dansereau, P. (1995). Phonetics in the beginning and intermediate oral proficiency-oriented French classroom. *The French Review, 68*(4), 638–651.

Gimson, A. C. (1989). *An introduction to the pronunciation of English* (4th ed.). Edward Arnold.

Hanumanthappa, M. (2014). *English phonetics and phonology*. Himalaya Publishing House.

Jonathan. (2023). Students' perceptions toward the use of IPA symbols in pronunciation learning. *Journal of English Language Teaching Studies, 6*(1), 45–56.

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.

Ladefoged, P. (2001). *A course in phonetics* (4th ed.). Heinle & Heinle.

Ladefoged, P., & Johnson, K. (2015). *A course in phonetics* (7th ed.). Cengage Learning.

McMahon, A. (2002). *An introduction to English phonology*. Edinburgh University Press.

Murphy, J. M. (2014). Intelligible, comprehensible, non-native models in ESL/EFL pronunciation teaching. *System, 42*, 258–269. https://doi.org/10.1016/j.system.2013.12.007

Putri, A., & Rahmah, I. P. (2016). Students' perceptions on the use of phonetic symbols to teach pronunciation. In *Proceedings of the 5th ELTLT Conference* (pp. 79–80).

Putri, N. S. E. (2018). *EFL students' perception toward IPA symbols as a pronunciation learning system* [Undergraduate thesis]. IAIN Palangka Raya.

Roach, P. (1987). *English phonetics and phonology: A practical course*. Cambridge University Press.

Roach, P. (2000). *English phonetics and phonology: A practical course* (3rd ed.). Cambridge University Press.

Safari, M., Farvardin, M. T., & Vaezi, S. (2011). The role of phonetic transcription in pronunciation learning. *Journal of Language Teaching and Research, 2*(4), 875–880. https://doi.org/10.4304/jltr.2.4.875-880.

Wells, J. C. (2006). *English intonation: An introduction*. Cambridge University Press.