# Monitoring English Word Pronunciation Cognition Knowledge of Bilingual School Teachers in Central Java

Laras Hayu Satiti

{larashayu@student.uns.ac.id}

Universitas Sebelas Maret, Surakarta

Abstract. The purpose of this study is to determine the knowledge level of cognition in English word pronunciation held by homeroom teachers working in one of Central Java bilingual schools. It is required that teachers provide their students with an authentic model of proper pronunciation while working with Cambridge International Primary Program (CIPP) related subjects. It is possible to demonstrate whether or not teachers engage in metacognition consciousness with regard to pronunciation of English words by monitoring students' knowledge of cognitive in English word pronunciation abilities through the provided training. It is easier for the teachers to avoid misleading their pupils with the material that they present while they are teaching. In order to collect the necessary data and carry out the recorded pronunciation test, a questionnaire with closed-ended questions was administered first. After that, a matrix was utilized to monitor the subject's metacognition consciousness in relation to the pronunciation test being conducted. According to the findings, their level of metacognitive awareness ranges from low to moderate levels.

Keywords: English pronunciation, phonetic transcription, metacognition.

# **1** Introduction

Metacognition is characterized as the capacity to monitor, assess, and plan one's own educational endeavors [1]. According to the research done by Pintrich, Wolters, and Baxter, metacognition may be broken down into three main parts that are equally important [2]. These include understanding of metacognition, the capacity to monitor and manage one's own learning processes, and the ability to monitor one's own learning [3]. To govern learning in a way that is both successful and efficient, it is vital to have all three components of metacognition. The developing mainstream view is that students may increase their overall learning success by using metacognition, which has been demonstrated to be beneficial to pupils.

Homeroom teachers participated in this research when the training on how to better use English in the classrooms was conducted. There was a difficulty with the participant's pronunciation ability when they were going through the training procedure. The training was provided in order to improve the English language skills of the teachers who worked as the homeroom teachers at this school. The exceptional features of this school are that it is a new school and there is a provision of a bilingual education option for the students. It has come to represent the school in its entirety. It is generally accepted that pupils who attend bilingual schools are more likely to achieve higher levels of academic success than those who attend monolingual schools [4]. It has been demonstrated that they offer cognitive benefits. They start to think in more unique ways and demonstrate innovative reasoning [5]. The school as the setting of this research offers a mixed curriculum. The school implements the Government curriculum, school curriculum, and the Cambridge International Primary Program. Dealing with the mixed curriculum applied in this school, some school subjects are delivered in English namely Mathematics, English, and Science. The integrated course load is designed to satisfy the requirement for a high level of educational excellence. In order for the school to successfully implement the integrated curriculum and the bilingual program, the homeroom instructors need to have strong English skills. In light of this reality, there is an expectation placed on the high caliber of the teaching staff. The characteristic may be seen in the individual's command of grammar, vocabulary, and pronunciation, which are the three fundamental pillars upon which a strong speaking ability is built [6]. In light of the fact that proper pronunciation is so frequently disregarded despite its central role in English language competence, the researcher has to pay increased attention to this aspect of English language.

The researcher comes to the conclusion that pronunciation is very important in the classroom, particularly when it comes to the process of introducing new vocabulary that is focused on a particular topic of discussion. As a result, the primary focus of this study is on pronunciation. When teaching disciplines like science and mathematics, teachers should explain many things and introduce new concepts relevant to the subject matter. If teachers consistently get the pronunciation wrong, this lead misconceptions and misunderstanding of the students. It is possible that this will confuse the students. In addition, it has the potential to alter one's understanding of the concepts covered in the contents presented in the classroom. The researcher believed that it was necessary to conduct an immediate assessment of the instructors' linguistic competence in order to forestall the occurrence of this issue. After that, there will be some training on how to properly pronounce particular words. However, the first thing that has to be accomplished is verifying the teacher's metacognition with regard to how they pronounce words. As a result, an investigation of how metacognition consciousness influences pronunciation has emerged as one of the primary focuses of this work. As part of this study, the researcher tackles the research topic of "To what extent do the homeroom teachers in one of the bilingual schools in Central Java have metacognition knowledge regarding their English pronunciation skill?"

## 2 Literature Review

According to Biggs, instructing pupils in the application of metacognitive methods leads to a rise in overall academic success [7]. Students have demonstrated successful performance of their metacognitive skills when they are aware of what they have learnt as well as what they do not know. In general, students who have metacognitive abilities are able to monitor their own

learning, voice their thoughts about particular subjects, keep their knowledge up to date, and create and execute new ways for learning. They have a better understanding of both their capabilities and their limitations, and they want to continue to advance their academic abilities [8]. According to Jones, Farquhar, and Surry's research, the efficacy of students is shown to rise proportionally with the degree to which their knowledge of metacognition is enhanced.

There is a disconnection between the evaluation of metacognition and the level of interest expressed. It has been asserted that one of the things standing in the way of the advancement of research is a deficiency in effective assessment. As a result, there is a requirement for instruments that can quantify metacognition. Schraw notes how challenging it can be to measure metacognition, and he also notes that there is no methods that both enables simultaneous connection to metacognition processes and allows for measurement of the processes on their own. He states that this is because there is no single method that can simultaneously connect to metacognition processes. Tobias and Everson underline this point and indicate that individuals' self-reports, as well as observations and conversations between researchers and participants, are used as a foundation for measuring metacognition [3]. In conclusion, there is no instrument that is capable of measuring metacognition on its own.

It then refers to a process known as Knowledge Monitoring and Assessment (KMA). In order to provide more exact calibrations of learners' abilities to monitor their learning, the KMA was established, with an emphasis on the precision with which learners discern between what they know or issues they can solve and what they do not know or problems they cannot resolve [1], [3].

In English speaking practice, pronunciation is frequently overlooked since it is assumed that it would improve on its own when a person gains proficiency in communication [9]. The study of Grammar (morphosyntactic aspects) and, more recently, vocabulary, in second language (L2) classrooms has received substantial attention in the last two decades. Both theoretical and practical methods to acquiring a second language have ignored the importance of pronunciation [10].

Pronunciation development is sometimes overpassed by learners in order to enhance conversational language instruction. As a result of this, pronunciation has been viewed as inefficient and unnecessary in helping learners develop communicative competence [11]. People think pronunciation does not work well with other language abilities namely reading or writing [12]. In addition, when it comes to L2 acquisition, characteristics such as age of learning, native language (L1) and ability are thought to have a larger influence with pronunciation than with other abilities [13]. When it comes to their total L2 skills, language learners may differ from one another, although their pronunciation may be identical. Pronunciation instruction is a difficulty for learners who are sometimes untrained and who are usually confronted with a wide range of texts that differ greatly in their approach of the subject.

The importance of pronunciation has been well acknowledged, although it has been consistently said that learners feel deficient in this part of the language. Perception is a gatekeeper in speech, according to Hinofotis and Bailey [14]. Confidence in expressing and indicating oneself in communication is boosted by clear pronunciation [15]. Mispronunciation, on the other hand, will lead to misunderstandings among them. As a result, speakers pay close attention to pronunciation, as it gives guidelines for saying things correctly [16]. The fluency of the speaker's

words is critical to the effectiveness of communication. Pronunciation standards must be met in order to be acquired.

## **3 Method**

#### 3.1 Setting

The investigation was conducted in a bilingual school in Central Java. Since it was founded in 2013, this school is regarded to be a new school. It has a multilingual curriculum. This school also has a unique inclusion program. As a result, kids with disabilities can take use of it. Kindergarten, elementary school, and junior high school students can all take lessons here at the same time.

#### **3.2 Participants**

Despite being open for five years, this institution has only hired a small number of faculty members. The researcher has selected eight homeroom instructors from kindergarten, elementary school, and junior high school to participate in this study. Homeroom instructors have a larger role in building students' classroom skills, teaching CIPP subjects (Math, English, and Science), and acting as a role model for their pupils. Most of the teachers are graduates of non-English fields, and some of them have poor English competence, which is surprising. In other words, their command of the English language varies greatly. As a result, teachers' self-awareness of how they pronounce English words is a key emphasis of the course. The data was gathered during the researcher's teacher training session. In total, the researcher held four sessions to complete the study.

#### 3.3 Data Gathering

Elementary Pronunciation in Use by Jonathan Marks, as a source for the pronunciation test, is deemed appropriate because of the benefits that learners receive, such as guidance and immediate feedback from teachers, as well as the ability for teachers to direct students with specific pronunciation difficulties toward specific units that they can complete on their own or in small groups [17]. Twenty-five easy-to-pronounce terms have been selected because they were thought to reflect the complete phonetic transcriptions of both vowels and consonants in typical British pronunciation. The terms were ranked according to the Longman Dictionary as S1 and W1 forms indicating that they are the most frequently spoken and written words.

As part of their participation in the study, participants were asked to fill out a questionnaire to indicate which words they could properly and erroneously pronounce. Afterwards, when they had finished the questionnaire, the researcher administered a pronunciation test which was

recorded. We utilized a recorder to keep track of their pronunciation along the procedure. In order to collect data for this study, the researcher used both a questionnaire and an audio recording of participants' pronunciations.

No.	Words	Phonetic transcription	
1	age	/eɪdʒ/	
2	answer	/ˈɑːnsə /, /ˈænsər/	
3	best	/best/	
4	black	/blæk/	
5	both	/bəʊθ/ /boʊθ/	
6	care	/keə/ /ker/	
7	clear	/klıə/ /klır/	
8	color	/'kʌlə/ /-ər/	
9	day	/deɪ/	
10	easy	/'i:zi/	
11	enjoy	/1n'd301/	
12	first	/f3:st/ /f3:rst/	
13	group	/gruːp/	
14	head	/hed/	
15	high	/haɪ/	
16	hour	/auə/ /aur/	
17	now	/nau/	
18	question	/ˈkwestʃən/	
19	stop	/stpp//sta:p/	
20	sure	/ʃɔː//ʃʊr/	
21	table	/ˈteɪbəl/	
22	television	/ˈteləˌvɪʒən, ˌteləˈvɪʒən/	
23	with	/wið, wiθ/	
24	wrong	/ roŋ \$ roːŋ/	
25	wrong	/ rɒŋ \$ rɒːŋ/	

Table 1. Testing words.

#### 3.4 Data Analysis

The researcher used a 2x2 matrix with binary knowledge estimations (yes or no) as columns and task or test item scores as rows to examine the metacognition consciousness. For each item or task given to the student, four scores were generated, indicating the number of items or tasks estimated as known and subsequently scored as correct (+ +), estimated as unknown yet scored as correct (- +), estimated as known and scored as incorrect (+ -), and estimated as unknown and scored as incorrect (- -). The totals for each KMA component are then calculated. The amount of (+ +) scores and (- -)scores is an additive function of the scores showing the relative accuracy of knowledge monitoring. The validity of the Knowledge Monitoring Assessment (KMA) is dependent on the accuracy of the learners' knowledge monitoring [3].

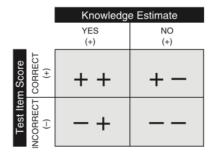


Figure 1. Test item score and knowledge estimate.

### **4 Findings and Discussions**

The words used as a testing instrument are well-known to the general public. However, even if you are familiar with the correct pronunciation of some terms, the teacher may still mispronounce them. The researcher analyzed the 25 words in the testing instrument, which had 19 consonants and 16 vowels, and found that some terms were more likely to be mispronounced than others. Based on the survey, more than half made a grammatical error while pronouncing the words best and both. Some ends, such as /t/, were difficult for them to pronounce, as can be seen in the phrases best and first. There was no ending to their pronunciation of /bes/ and /f:rs/. In addition, they had to accomplish difficult pronunciation in words ending  $\delta$  or  $\theta$  in with. They said it was pronounced /wit /. Their choice of final consonant was the more common /t/sound rather than the more common  $|\delta|$  or  $|\theta|$  sound. Most teachers thought it was difficult to pronounce the word both. However, instead of using /u:/, /o/, /o/, or /o/ diphthongs, they pronounced it as one of the above. Because of this, they found it difficult to pronounce the ending /ts/ or /t/ in the word both. The letters /g/ and /w/ in the words high and incorrect are both silent. As a result, they were completely unaware of this. Questions are commonly mispronounced as /kwesen/ but they should be pronounced as /kwesen/ which is the correct pronunciation for the term. They eliminated the /t/ sound altogether. The /v/ and /f/ differences in the word television were unknown to the majority of teachers. /f/ was commonly used to refer to the sound of a vowel in their speech. In the word table, the teachers did not recognize the diphthong /er/. They pronounced it with a /e/ sound. Last but not least, many people mispronounce the /s/ sound in the word sure.

Table 2. KMA analysis results.

Teacher	Results	
1	16/25	64%
2	20/25	80%
3	19/25	76%
4	19/25	76%
5	18/25	72%
6	14/25	56%
7	16/25	64%
8	17/25	68%

When asked to explain their understanding of their own metacognition, the vast majority of teachers use their metacognition awareness in the words of care, clear, day, enjoy, group, and question. Also, every teacher metacognitively pronounced the words of color and you.

There are three stages of metacognition awareness, according to the research. Awareness of one's own metacognition may be divided into three categories: low, medium, and high. When the result falls between 50% and 70%, they are said to be at a low level. Results between 71% and 85% are considered moderate. To be considered at having metacognitive in pronunciation, the participants need a score that falls between 86 and 100%. There are four instructors in Table 3 who show a low level and four more teachers show a moderate level of awareness of metacognition

## **5** Conclusions

The testing instrument having 25 words (19 consonants and 16 vowels) tested to eight homeroom instructors from kindergarten, elementary school, and junior high school helped draw conclusion related to teachers' pronunciation metacognitive awareness. The result was reached after analyzing the teachers' level of metacognitive awareness regarding the way in which they pronounce words. It comes to the conclusion that their level of metacognition awareness ranges from low to moderate. To be specific, four teachers are considered as having low level of pronunciation metacognition and the other four teachers are considered as having moderate level of pronunciation metacognition.

The researcher found a significant difference when a list of words was given to the participants to read aloud. By seeing the list while reading it aloud, the participants had better understanding of the right pronunciation. It is suggested in the classroom, an introduction of new words and an accurate model of pronunciation are helpful to gain a thorough understanding of the concept of learning pronunciation in its whole. If students work on improving their pronunciation, they will one day be able to participate in meaningful conversations. The words must be spoken correctly in order to meet the demands of communication training in order to increase their ability to teach school subjects in English.

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