



Students' Perceptions Toward Learning Material of Pronunciation A Need Analysis

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Abstract. This research is part of a development research that uses the ADDIE model. There are five stages in ADDIE model development research, *analysis, design, development, implementation, and evaluation*. This study focuses on need analysis of pronunciation learning materials. The basic concept of this needs analysis took three important elements, they are *necessity, lack, and want*. The pronunciation material involves two basic elements of pronunciation, they are segmental and suprasegmental. The segmental aspect consists of *consonants, vowels, and diphthongs*. While the suprasegmental consists of *stress words, intonation, and accent*. These two aspects were combined and resulted in an online instrument to collect data in the form of a needs analysis aimed at 42 students who studying pronunciation learning. The results of this need analysis obtained that segmental pronunciation categorized as necessity (very essential), lack (lack), and want (very needed). The same results are also obtained for suprasegmental aspects categorized as necessity (very essential), lack (lack), and want (very needed).

Keywords: learning material · pronunciation · ADDIE model

1 Introduction

The study of pronunciation gained attention in the late nineteenth to twentieth centuries [1]. The current trend of issues regarding the study of pronunciation has recently attracted the attention of researchers, such as the study of obtaining a better understanding and evaluation of the recognition of the importance of pronunciation in language pedagogy [2]. A person's pronunciation ability in speaking English skills is a priority because appearance reflects his ability to express meaning, absorb and share information. So that the right pronunciation will avoid misunderstandings in communicating (Abbas Pourhosein Gilakjani & Sabouri, 2016; Gudu, 2015; Indra et al., 2016; Leong, 2017). Therefore, pronunciation is essentially the best introduction to foreign language learning [6, 7].

Based on the observations and preliminary research that has been carried out, it was found that several factors caused the weak pronunciation ability at the University. The first is that from the curriculum aspect, the time allocation is still minimal. This is in

line with the findings by Gilakjani & Branch, 2016 that attention to learning English pronunciation is still considered minimal so that pronunciation teaching is given the least attention which raises the assumption that the inability of EFL teachers in teaching pronunciation [2, 8, 9]. In addition, it was found that because learning pronunciation was considered unimportant, it resulted in EFL teachers not allocating special time for learning English pronunciation in class. This situation is made worse by the condition that learning English pronunciation does not get a place in the preparation of the curriculum at most universities [10].

The second thing is related to the weakness of pronunciation skills at the university level that there is still a lack of use of technology-based learning media in the classroom or even none at all. Most lecturers only open learning materials in class with laptops and focus on the learning process monotony. Meanwhile, technology-based learning media has now become a necessity that can help in the learning process. This is in accordance with research conducted in Turkey which emphasizes the age factor and the experience of an English teacher who uses computers as a medium in learning English pronunciation. It was found that 33 out of 100 people or 36% of teachers used technology or computer-based media in teaching English pronunciation and conversely, 67 people or 74% did not use computer-based learning media sources to teach English pronunciation to their students. In addition, it was also found that senior and more experienced English teachers have never used computer-based pronunciation learning media and even internet-based learning at all [11].

The third problem is that the overall low level of English proficiency includes 4 main skills in the components of students' English skills. This can be proven from the ability of students when introducing themselves, which on average are unable to distinguish between seventy and seventeen numbers. Their speech is still stammered and difficult in choosing what vocabulary to convey. Many of them make mistakes in pronunciation, for example they say the word "want" they read /wen/ which was the word 'want' which means "want" to change to "go" because /wen/ is the past tense of "go". This is in accordance with research from Iran which revealed that the factor that causes errors in pronunciation in English speaking skills is the mother tongue which has a considerable influence on sound production in EFL students' English speech (Fathi & Jelani, 2017; Namaziandost, 2017). This research was conducted in Iran where the findings of this study indicate the teacher's weakness in students' knowledge of pronunciation between English and mother tongue. Awareness of these students' difficulties can help teachers to detect phonological problems of Persian EFL learners [14].

A similar study was also found in Jordan which showed that sounds in Arabic are easier to read, while those in English cause confusion for students so that they tend to pronounce the closest sound from an Arabic phoneme to an English phoneme. In other words, they express the utterance according to the writing [15–19].

In addition, factors that cause errors in English pronunciation were also found due to differences in the anatomical structure of the mouth as a tool in producing sounds. This is evidenced in a study in Slovakia. First-year students were asked to speak in English and recorded and then the recordings were analyzed by native speakers in Canada. The results show that dental fricatives in English speaking skill pronunciation cause problems

because EFL students mispronounce voiced and unvoiced dental fricative consonants [20, 21].

The same thing is also explained in research in Iran that the factors that cause EFL students to have weak pronunciation skills in English speaking skills are caused by lack of time, motivation, human resources, learning materials or materials, and educational facilities such as computer technology which causes teachers to ignore attention to learning pronunciation in good and correct English speaking skills [2].

In addition to the lack of use of technology-based learning media for EFL teachers and differences in the anatomical structure of the mouth, research in Nigeria found that environmental factors were the cause of the weak ability of EFL students in English speaking skills pronunciation. The surrounding environment is not so important that the use of grammar and pronunciation in learning English is neglected [22].

In addition, the cause of EFL language teachers neglecting pronunciation in English learning is because they do not have knowledge of phonetics and phonology in English. Moreover, they never listen to BBC, VOA and CNN and other media related to pronunciation knowledge in English speaking skills. Another factor that causes weak pronunciation in English speaking skills in Nigeria is that English teachers come from non-English educational backgrounds, most of them are graduates of Philosophy, Igbo, Linguistics, Yoruba Language, history, religion, and community communication [22].

Richards (2006) explains that material development has many positions in ELT and can serve as resource persons in presenting material; resources for practical student activities and communicative interactions; reference resource for students on grammar, vocabulary and pronunciation; a source of stimulation and ideas for classroom language activities; a syllabus that reflects the learning objectives that have been determined; resources for self-study or self-access work; and as support for inexperienced teachers who have not yet gained confidence. Teaching materials that are said to be effective in language teaching are built by considering several factors such as teachers, students, and contextual variables. Teacher factors include the teacher's language skills, cultural background, teacher training and experience, and the teaching style applied [23].

In addition, learning factors include student learning style preferences, learning needs, interests, and student motivation. Contextual factors include school culture, class size, class conditions, and the adequacy of teaching resources in the situation in which the material will be applied. Because the selection of language teaching materials can determine the quality of teaching and learning procedures, there must be appropriate teaching materials by considering (1) teacher factors, such as the teacher's language skills, training and experience, cultural background, and preferred teaching style; (2) learner factors, such as: learner's learning style preferences, language learning needs, interests, and motivations; and (3) contextual factors, such as: school culture, class conditions, class size, and availability of teaching resources (Sakir, 2018). As part of the materials used in language classes, textbooks, therefore, can often play an important role in a student's success or failure [24].

According to Tomlinson (2010), the material must support learners to use language authentically. This can be done by providing instructions or suggestions that lead to language exposure and by providing spoken and written texts that are included in the material. Giving many opportunities to students will give them a lot of experience to see

and know under what conditions the language is used. The use of language here must be authentic which learners may often find in their daily lives [23].

Material development is something that teachers need to do to achieve learning goals that can be achieved according to the needs of students and the material provided. To have well-developed material, teachers need to know and understand the definition of the material itself, so that the material can assist teachers in conveying any material topics systematically, descriptions of techniques and exercises that will be used in classroom teaching. Materials are used by teachers to complement classroom teaching or to stimulate student interest. Textbooks, workbooks, worksheets, tapes, videos, term papers, journal articles, or something like paragraphs written on a whiteboard can be used as material as long as they present and inform the language being studied.

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Things that need to be considered before developing the material are the principles of material development. The following are the principles proposed by Richards (2001), (1) The material must be based on sound theoretical learning principles. The principle of learning, especially in language learning, which can be understood by the teacher is that there are learning activities that involve the necessary language skills. It should also have a goal to achieve Language learning; (2) The material must arouse and maintain the interest and attention of students. To arouse students' interest in learning the material, relevant material is needed. Relevant material will help students understand the topic easily and of course, providing relevant material will increase students' motivation and provide opportunities for more effective learning; (3) Meeting the needs and backgrounds of students. Materials must pay attention to the needs of students because they are important things that must be considered before development. The needs of students can be obtained by asking the teacher or making observations. It can also be done by looking at the syllabus used. In addition to the background of students, students have different learning styles so it is necessary to have teacher awareness in material development. Learning styles here include visual, audio, kinesthetic, etc. In this case, a student may have a visual learning style in which they prefer to see the material rather than listen to the material (4) Provide examples of language use. Good material should provide many examples of language use. Learners will find it easier to learn a language if they are given more examples of using language that are relevant to their lives. These examples can be in the form of texts and illustrations that are closely related to the lives of students; (5) Provide meaningful activities. Meaningful activities mean that these activities will provide real experience to learners in using language so that they can derive meaning from learning the language. These activities can come from instructions and assignments that require students to do something physically using the context of language use. The

material should not only explain without considering the activities that students can do. 6. Provide opportunities for authentic use of language [23].

The assessment of pronunciation learning materials and media in this study departed from the basic theory of needs analysis. According to Hutchinson & Water (1991) in analyzing the needs of a learning consists of necessities, lacks, and wants. The first is necessities, which are types of needs that are determined from the demands of the students' situation. In other words, necessities are what students must know so that the situation of students' needs is met. The second is lacks, in identifying needs analysis it is not enough to only know what students need but must also analyze what students do not need. Thus, the teacher can decide which things are needed and which are not needed. The third is wants, after knowing what is needed and what is not needed by students; the teacher can analyze what the students want [25].

Tomlinson (2014) explains the criteria for good language learning materials, some of which are that: (1) the material must contain pedagogical aspects; (2) the material must have an impact on the understanding of learning; (3) the material should also help students to develop their self-confidence; (4) the material must also be authentic; (5) and the material must be relevant and useful in real life [26]. In addition to these criteria, language learning materials must also pay attention to the learning outcomes of a lesson. Learning outcomes in a language learning must be clearly stated the purpose of a learning. In addition to learning outcomes, the delivery of learning materials must meet learning standards; learning materials must also be detailed and more interactive [26, 27].

Pronunciation is an aspect that is integrated into communicative competence that can affect the quantity and quality of a person's speaking skills [28]. Pronunciation is also an important key in learning the second speaking skill that can distinguish a person's ability to speak [1, 28]. The ability of pronunciation in speaking skills has a positive effect so that it affects one's self-confidence [29–33]. In addition, pronunciation has a positive effect on second learning and students can acquire the skills they need for effective communication in English [29–31].

Gilakjani (2012; 2016; 2018) explains that pronunciation is the way sounds are made, how and where word stress and sentence stress are placed, and how tone and intonation are used to show the feelings and meanings of words [10]. In addition, pronunciation can be defined as a method of producing sound to construct meaning consisting of consonants and (segments), speech features such as time, rhythm, intonation, phrases (suprasegmental features), and sound quality. All of the elements mentioned can work together with someone speaking so difficulties in one element can affect another and this can make a person's pronunciation easy or difficult to understand [8, 9]. In other words, pronunciation is the process of producing sounds in English that are learned by repeating sounds and correcting them when they are produced incorrectly [10].

Good pronunciation is considered a sign of higher status and quality. Poor pronunciation adversely affects communication comprehension and distracts listeners. As a result, knowledge of correct pronunciation is considered a key component of communicative competence [20, 34]. The purpose of learning pronunciation is not to ask EFL students to pronounce like a native speaker. Rather, pronunciation that can be understood must be the real goal of oral communication [10].

Feature pronunciation consists of two components, namely phonemes/segmental and suprasegmental. The phonemes component consists of two elements, namely consonants and vowels. Meanwhile, the suprasegmental component consists of stress and intonation. Some experts also argue that apart from stress and intonation, rhythm and accent are important factors in the suprasegmental component [35, 36].

Pronunciation consists of phoneme / segmental and suprasegmental. Phonemes consist of consonants and vowels. Vowel consists of voice and unvoiced / voiceless. Voice sounds occur when the vocal nerves in the larynx vibrate. It is very easy to tell whether the sound is voice or voiceless by placing two fingers on the throat. If it produces vibrations, it is classified as voice sound, while if there is no vibration, it is classified as voiceless sound [35, 36]. Phonemes consist of two categories, namely vowels and consonants. While the combination of vowels is called diphthong.

Language is a means of communicating ideas, but at the same time it can be a source of confusion and misunderstanding when language is used without sufficient precision. Inaccuracy in grammar, sentence structure and diction are one of the barriers to understanding language especially in spoken language. Pronunciation is the ability to use stress, rhythm, and correct intonation in spoken language [37, 38]. Schaezel (2009) states that there are important factors that a person must pay attention to in learning pronunciation: *Accent, Stress, Rhythm, Intonation* [39, 40].

Accent is a way of pronouncing a word or a distinctive curve of the tongue that is owned by a person according to his area of origin or ethnicity [39, 41]. Accent can also be defined as a particular form of language spoken by a subgroup of speakers of that language which is determined by phonological features. In other words, accent is a collection of prosodic and segmental features that are distributed over geographic space or social space. Dialect refers to varieties that are distinguished from each other by differences in grammar and vocabulary, which only refers to variations in language pronunciation that tend to be seen in the area of origin. [42, 43]. Although accents rarely affect the clarity of pronunciation, they are usually instantly recognizable. Therefore, the accent also makes it easier to recognize the ethnicity, nationality, and background of the speaker. [44].

Stress syllables are often defined as syllables with longer, louder and higher pitched syllables. Stress syllables is the level of strength with the spoken syllable or word. When a word has more than one syllable, there is always one syllable that has more stress than the other. Stress syllables are an important feature of English pronunciation. Part of the meaning of a word depends on the stress syllables that mark the function of words in spoken English. English pronunciation relies heavily on Stress syllables to be true English communicators [39, 41, 45, 46].

When a word in English has more than one syllable, one of them is made more prominent than the other. This is done by saying the syllables a little louder, holding the vowels a little longer, and saying the consonants very clearly. These features combine to give the syllable an edge or stress. In addition, according to Roach (2000) stress placement in English depends on several factors such as morphology (simple / complex sentences); number of syllables; grammar or word type; and the phonological arrangement of syllables (weak or strong). So that mistakes in the placement of syllable stress can cause misunderstandings in the language [46–48].

The third component is Rhythm. Rhythm is usually produced by making certain notes in succession stand out from the rest by becoming louder or longer or higher. The rhythm is set according to the timing of the stressed syllable. Rhythm is useful in communication and allows students to divide speech into words or other units [39, 41, 47].

English is like music in that it has beats. There are groups of syllables, like music and within each group there are strong and weak beats. English has a stress time rhythm which implies that stressed syllables tend to occur at relatively regular intervals. There is a tendency in English for strong beats to fall on nouns, verbs, adjectives and adverbs (words that carry multiple meanings) and weak beats to fall on prepositions, articles, and pronouns (words with grammatical functions) [41, 47, 49].

The fourth important aspect of pronunciation is intonation. Intonation is the form or wave of language that is obtained when speaking. Intonation also means melody or language music, the sound rises and falls when we speak while pitch is the accuracy of the high and low tone either on a musical instrument or in the human voice [37, 39, 41]. Intonation can be broken down into a series of notes. Each note is considered as an intonation morpheme that contains meaning. In addition, the meaning of intonation contours is associated with the attitudes and beliefs of speakers and listeners [38].

Language is also like music in that it uses pitch change where speakers can change the pitch of their voice as they speak, making it higher or lower as desired. They can jump suddenly on the field like singers do. Thus, speech has a melody called intonation. The two basic melodies are up and down. It can be very sudden, or gradual, and can be put together in various combinations (*rise – fall – rise, fall – rise – fall*) [41, 47].

2 Method

This research is part of a development research entitled Development of Pronunciation Learning Materials and Media assisted based on Automatic Speech Recognition Indah (ASR-i). This study examines the analysis of student needs in pronunciation learning materials. The instrument used as a tool in this research is to use an online questionnaire in the form of a google form which is distributed through the WhatsApp group. This online questionnaire has passed instrument validation from two validators as material experts. After the questionnaires were distributed, 42 students responded to the questionnaire, consisting of 14 male students and 28 female students. After the data was obtained, the data were analysed manually by sorting the response categories in the form of strongly agree, agree, disagree, and strongly disagree. This online questionnaire consists of three important aspects in the analysis of needs (necessity, lack, want) which will be indicators in the preparation of the questionnaire. After determining the indicators, they are reduced to sub-indicators which are compiled based on the basic theory of pronunciation, namely segmental and suprasegmental aspects. From the segmental aspect, it is translated into consonants, vocals and diphthongs, while from the suprasegmental aspect it is translated into stress, intonation, pitch, and accent.

3 Finding and Discussion

3.1 Finding

The data obtained in this study are related to two basic theories in pronunciation learning, namely segmental aspects and suprasegmental aspects. The elements in the segmental aspect consist of consonants, vocals, and diphthongs. Meanwhile, the suprasegmental aspect consists of stress, intonation, and accent. From these two basic theories of pronunciation learning, it is associated with 3 aspects of needs analysis, namely necessity, lack, and want. The data acquisition in this needs analysis is presented in the following Table 1.

Based on the Table 1, it can be explained the needs analysis from the Necessity aspect in terms of segmental consonants, vowels, and diphthongs. The acquisition of needs analysis for the consonant aspect of students stated that 98.81% really needed pronunciation material in the form of consonants, 99.2% really needed pronunciation material in the form of vocals, and 98.5% in the form of diphthongs. The second aspect of necessity from the suprasegmental aspect is stress, intonation, and accent. The acquisition of needs analysis for the stress aspect of students stated that 99.4% really needed pronunciation stress material, 97.7% really needed pronunciation intonation material, and 100% really needed pronunciation accent material.

Needs analysis from the Lack aspect is viewed from a segmental perspective consisting of consonants, vowels, and diphthongs. The acquisition of needs analysis for the consonant aspect of students stated that 70.48% were still very lacking in learning consonants, 70.63% were still very lacking in pronunciation material in the form of vocals, and 68.75% were still very lacking in pronunciation material in the form of diphthong. The second Lack aspect is from the suprasegmental aspect, namely stress, intonation, and accent. The results of the needs analysis for the stress aspect of students stated that 73.8% of students still lacked mastery of pronunciation stress material, 76.2% still lacked mastery of pronunciation intonation material, and 71.4% of students stated that they still lacked mastery of pronunciation accent material.

The needs analysis from the Want aspect is viewed from a segmental perspective consisting of consonants, vowels, and diphthongs. The acquisition of needs analysis for the consonant aspect of students stated that 92.62% really needed material in the form of consonants, 93.43% really needed material in the form of vowels, and 93.13% really needed material in the form of diphthongs. The second aspect of Want is from the

Table 1. Students' Perception Toward Pronunciation Learning Material

The Result of Students' Perception Toward Pronunciation Learning Material						
Need Analysis	SEGMENTAL			SUPRASEGMENTAL		
	C	V	D	S	I	A
Necessity	98.81%	99.2%	98,5%	99,4%	97,7%	100%
Lack	70,48%	70,63%	68,75%	73,8%	76,2%	71,4%
Want	92,62%	93,43%	93,13%	97,61%	95,3%	100%

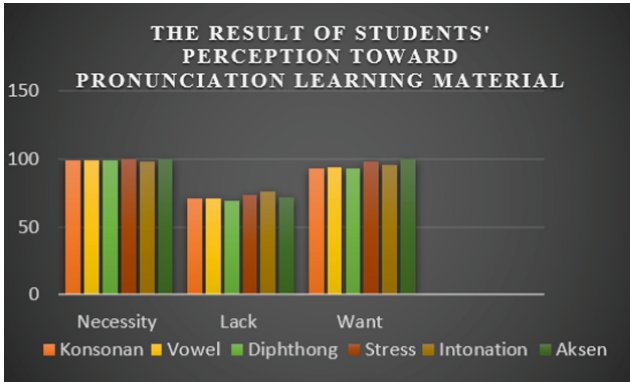


Fig. 1. The result of Students' Perception toward Pronunciation Learning Material

suprasegmental aspect, namely stress, intonation, and accent. The results of the needs analysis for the stress aspect of students stated that 97.61% of students really needed pronunciation stress material, 95.3% of students really needed pronunciation intonation material, and 100% of students really needed pronunciation accent material. To be able to read the data more easily, the following data is presented in the form of a graph that shows the level of analysis of student needs in learning pronunciation (Fig. 1).

3.2 Discussion

The basic objective of the research is to find out the pronunciation of vocabulary that often occurs incorrectly, for example, consonants containing the consonant “ch” are sometimes pronounced with /k/ and other times are pronounced with /tʃ/, for example in **consonant** the plosives /k/ vs the affricates /tʃ/ examples of chemistry chemistry/ vs channel /tʃenel/; **consonant** the plosives /g/ /finger/ vs /dʒ/ e.g., ranger /renjer/; **consonants** the plosives /θ/ vs /ð/ e.g. death /deθ/ vs then /ðen/; **consonant** the fricatives /s/ vs /z/ e.g., rice /rais/, rise /raiz/ **consonant** the fricatives /ʃ/ e.g., sheep /ʃi:p/, shoulder /ʃəʊldə(r)/.

The findings of the data presented in the table proves the high level of student confusion in pronouncing the examples of consonants above. This happens due to several factors. One of them is that there are some differences in consonants in Indonesian and English. When it is associated with needs analysis, 98.81% shows the importance of studying consonant segmental pronunciation, 70.48% shows that students still have a high level of error in consonant segmental pronunciation, and 92.62% shows students' enthusiasm and need for consonant segmental pronunciation.

This also occurs in segmental vowels; many vocabulary words change meaning if the vowels are pronounced incorrectly. Some of them **vowel** /ɪ:/ for example Week /wi:k/, Weak /wi:k/, Break /breik/, great /greit/, Feel /fi:l/, fill /fil/, least /li:st/, list /list/, Wheel /wi:l/, will /wil/; **vowel** /ɪ/ e.g. Sit /sit/, seat /si:t/, it /ɪt/, eat /i:t/; **vowel** /ʊ/ e.g. book /bʊk/, wood /wʊd/ look /lʊk/, luck /lʌk/; **vowel** /u:/ misalnya too /tu:/, took /tʊk/; **vowel** /e/ e.g. send /send/, sand /sænd/, man /mæn/, men /men/; **vowel** /ə/ e.g. eight /eɪt/, age /eɪdʒ/; **vowel** /ɜ:/ e.g. Word /wɜ:(r)d/, world /wɜ:(r)ld/, work /wɜ:(r)k/; **vowel** /ɔ:/ e.g. war /wɔ:(r)/, toward /tɔ:(r)d/; **vowel** /æ/ e.g. Had /hæd/, hat /hæt/; **vowel** /ʌ/ e.g., sun

/sʌn/, son sʌn/ (*Sun – Son*), heart /hɑ:(r)t/, hard /hɑ:(r)d/; **vowel** /ɑ:/ e.g. part /pɑ:(r)t/, far /fɑ:(r)/bear /beə(r)/ bar /bɑ:(r)/; **vowel** /ɒ/ e.g. not /nɒt/, from /frɒm/, want /wɒnt/, what /wɒt/.

When it is associated with needs analysis, as much as 99.2% indicate the importance of learning segmental vowel pronunciation, 70.63% indicate that students still have a high level of error in segmental vowel pronunciation, and 93.43% indicate student enthusiasm and need for segmental vowel pronunciation.

In addition to consonants and vowels, diphthongs also make a high contribution to the pronunciation of English vocabulary. The difference between English and Indonesian lies in the diphthong element. In Indonesian, there are only consonants and vowels, while in English, diphthongs are studied, which are two combinations of vowels in one word. As for some examples of diphthongs in English **diphthong** /ɪə/ e.g. *here* /hɪə(r)/, *appear* /ə'pɪə(r)/, *clear* /kɪə(r)/; **diphthong** /eɪ/ misalnya *made* /meɪd/, *late* /leɪt/, *date* /deɪt/; **diphthong** /ʊə/, e.g. *tour* /tʊə(r)/, *power* /paʊə(r)/, *usually* /'ju:ʒuəli/; **diphthong** /ɔɪ/ e.g. *oil* /ɔɪl/, *boy* /bɔɪ/, *choice* /tʃɔɪs/, *toy* /tɔɪ/; **diphthong** /əʊ/ e.g. *go* /gəʊ/, *road* /rəʊd/, *cost* /kɒst/- *coast* /kəʊst/; **diphthong** /eə/ e.g. *wear* /weə(r)/, *bear* /beə(r)/, *tear* /teə(r)/; **diphthong** /ɑʊ/ e.g. *town* /taʊn/, *down* /daʊn/, *round* /raʊnd/; **diphthong** /aɪ/ e.g. *buy* /baɪ/, *bye* /baɪ/, *right* /raɪt/, *write* /raɪt/.

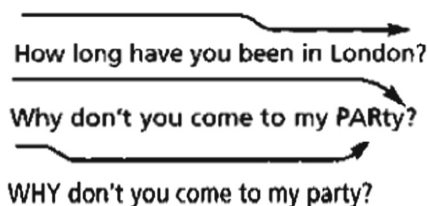
If it is related to the needs analysis, 98.5% shows the importance of studying the segmental diphthong pronunciation, 68.75% shows the high level of student error in the segmental diphthong pronunciation, and 93.13% shows the students' enthusiasm and need for the diphthong segmental pronunciation.

This study not only examines the segmental pronunciation aspect, but also examines the suprasegmental aspect consisting of stress, intonation, and accent. The first is the suprasegmental aspect of pronunciation stress. The uniqueness contained in the pronunciation of suprasegmental stress words is that there can be changes in the type of word in English known as part of speech. Thus, the pronunciation aspect of the suprasegmental stress word is very interesting to study. As for some examples that were questioned in the questionnaire given to students, such as stress words **Stress in two syllable word** e.g. **RE**cord – re**C**ORD; **Stress on the first syllable** e.g. **ART**ist (N), **DRI**ver (N), **FRIEN**Dly (ADJ), **FAM**ous (ADJ); **Stress on the second syllable** e.g. re**MO**VE (V), dis**LI**KE (V); stress words **Syllables: adding past tense ending** e.g. **NEE**DeD, **RES**TeD, **COUN**Ted, **WA**ITed; **Stress in compound words** e.g. **BOOK**shop, **AIR**port; **Stress in longer words** e.g. un**for**GET**T**able, **E**ducate, **edu**CATION, **co**MMUn**i**cate, **comu**ni**C**ATION; **Sentence with all the word stress** e.g. **HELP**, **QUICK**, **DON'T LOOK NOW**; stress words **Pronounce and contraction** e.g. I **MET** him, you **KNOW** him, I **MET** his **WIFE**, I'll, **he'll**, **we've** and others.

When it is associated with needs analysis, 99.4% indicate the importance of learning the pronunciation of suprasegmental stress words; 73.8% showed that the students' error rate was still high on the pronunciation of suprasegmental stress words; and 97.61% showed students' enthusiasm and needs for the pronunciation of suprasegmental stress words.

The second suprasegmental aspect is intonation. Intonation is related to the rise and fall of pitch in speech. Intonation is also related to the expression of one's feelings in communicating. For example, angry intonation, sad intonation, intonation asking

for help and others. Sometimes the placement of intonation can affect the meaning in communicating. As for examples of intonation material such as



When related to the needs analysis, 97.7% showed the importance of studying suprasegmental pronunciation intonation, 76.2% showed a high level of student error in suprasegmental intonation pronunciation, and 95.3% showed students' enthusiasm and need for suprasegmental pronunciation intonation.

The third suprasegmental aspect is accent. Accents become the identity of a person's origin. By paying attention to someone's accent, it can be known where they come from. When it is associated with a needs analysis, 100% shows the importance of learning the pronunciation suprasegmental accent, 71.4% indicates the high level of students' lack of knowledge in recognizing the pronunciation suprasegmental accent, and 100% shows the enthusiasm and needs of students for the pronunciation suprasegmental accent.

4 Conclusion

This paper has presented the result of study on students' perception toward pronunciation learning material. There are two aspects that have been discussed they are segmental and suprasegmental. Segmental consists of consonant, vowel, and diphthong. Meanwhile, suprasegmental consists of stress, intonation, and accent. This research is a part of development research. The main research is *The Development of Automatic Speech Recognition Indah Assisted Pronunciation Learning Materials and Media (ASR-I)*. The research is using ADDIE model. There are five steps that has been conducting, they are **analysis, design, development, implementation, and evaluation**. This is the first step of the ADDIE model, it is analysis. Therefore, this paper focuses on a need analysis toward students' perception toward learning material.

The result of this research focus on need analysis of students' perception toward learning material of pronunciation. The basic theory of need analysis was taken from Hutchinson and Waters 1991; Nation and Macalister 2010. There are three basic aspect of need analysis they are necessity, lack, and want. These three aspects of need analysis are connected with the basic theory of pronunciation they are segmental and suprasegmental. The combination of this theory produces an instrumentation of need analysis. Before the instrumentation of need analysis distributed to the students, it was validated by two experts of material pronunciation.

The conclusion of need analysis as follow: (1) students' necessity about segmental for consonant aspect is categorized **very essential** (98,81%); (2) students' necessity about segmental for vowel aspect is categorized **very essential** (99,2%); (3) students' necessity about segmental for diphthong aspect is categorized **very essential**

(98,5%); (4) students' incorrect about segmental for consonant aspect is categorized **lack** (70,48%); (5) students' incorrect about segmental for vowel aspect is categorized **lack** (70,63%); (6) students' incorrect about segmental for diphthong aspect is categorized **lack** (68,75%); (7) students' need about segmental for consonant aspect is categorized **very needed** (92,62%); (8) students' need about segmental for vowel aspect is categorized **very needed** (93,43%); (9) students' need about segmental for diphthong aspect is categorized **very needed** (93,13%).

Meanwhile, the conclusion for suprasegmental pronunciation is as follow: (1) students' necessity about suprasegmental for stress aspect is categorized **very essential** (99,4%); (2) students' necessity about suprasegmental for intonation aspect is categorized **very essential** (97,7%); (3) students' necessity about suprasegmental for accent aspect is categorized **very essential** (100%); (4) students' incorrect about suprasegmental for stress aspect is categorized **lack** (73,8%); (5) students' incorrect about suprasegmental for intonation aspect is categorized **lack** (76,2%); (6) students' incorrect about suprasegmental for accent aspect is categorized **lack** (71,4%); (7) students' need about suprasegmental for stress aspect is categorized **very needed** (97,61%); (8) students' need about suprasegmental for intonation aspect is categorized **very needed** (95,3%); (9) students' need about suprasegmental for accent aspect is categorized **very needed** (100%).

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