The Mapping of Language Teaching Materials of Indonesian for Foreign Speakers for Academic Purposes Based on Linguistic Characteristics

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Abstract: The learning of Indonesian for foreign speakers (bahasa Indonesia untuk penutur asing/BIPA) develops very fast. One of them is the People's Republic of China (PRC). In line with this, the government of PRC shows a serious intention to learn Indonesian language by sending their students to learn the Indonesian language in Indonesia through BIPA program. The success of BIPA learning depends on the learners' first language and teaching materials used. Therefore, in-depth studies on the linguistic characteristics of the BIPA learners are necessary to be conducted to acquire suitable teaching materials following the learners' needs. This research was conducted on eight students of BIPA for academic purposes program from China. This research was conducted by applying a qualitative descriptive approach. The findings on the linguistic characteristics of the BIPA students from China show three aspects. First, from the aspect of phonology, Chinese students do not really master the consonant sound pronunciation of Indonesian language, which is apparent from the inability and consistent mispronunciation in pronouncing certain sounds. Second, from the aspect of morphology, the students can construct words with some affixes that form the active form, but can't construct word using affixes that form the passive form. Third, the students have been able to construct a simple and complex sentence with two clauses, yet, they face difficulties in changing an active sentence to passive and vice versa. The three findings were then used to map the BIPA teaching materials, which later will be used for Chinese students in the future.

Keywords: Indonesian for foreign speakers, teaching materials, academic purposes, linguistic characteristics

Introduction

The development of Indonesian learning has increased significantly over time (Saddhono, 2016), including in the People's Republic of China (PRC). In the 1970s, there were only three universities that had Indonesian Departments in China. Thirty years later, there were six universities that opened the Indonesian Department so that there are nine universities in China that have the Indonesian Department (Xiaoqiang, 2014). Indeed, to show the seriousness in learning Indonesian, a number of universities in China have collaborated with universities in Indonesia by sending their students to learn Indonesian through the BIPA program (Indonesian for foreign speakers). In Indonesia, the teaching of Indonesian for foreign speakers began in an organized manner since the organization's declaration was declared on October 12, 1999 at the Indonesian University of Education. Indonesian learning for foreign students is called as BIPA. The participants in this activity are foreign students (not Indonesian speakers). In the learning process, Indonesian for foreign speakers is greatly influenced by the first language. This is in line with the opinion of Ellis (1995) who states that one aspect that affects the successful learning of learning person's second language or foreign language is his first language.

In addition to the first language, another aspect that affects the successful learning of BIPA is teaching materials (Kusmiatun, 2016) since teaching materials can be used for independent and structured learning. That is why the existence of teaching materials becomes essential in the learning process. Based on the objectives and characteristics of the participants, it can be seen that the learning needs of BIPA are different for each program. The differences of backgrounds are in accordance with the difference of characteristics of the students' language. The difference in language characteristics has implications for the difference of needs of teaching materials. The Mapping of Language Teaching Materials of Indonesian for Foreign Speakers for Academic Purposes Based on Linguistic Characteristics. In R. Thripp & I. Sahin (Eds.), Proceedings of IHSES 2020–International Conference on Humanities, Social and Education Sciences (pp. 46-57), Washington, DC, USA. ISTES Organization.
Over the last few years, BIPA for academic purposes is carried out to provide students a proficient Indonesian language for academic purposes. This has implications for learning materials. In fact, BIPA learning enthusiasts are increasing over years. The BIPA learning program at UM also varies with participants' backgrounds, e.g. the participants of Critical Language Scholarship (CLS) Program who come from America, the participants of Darmasiswa Program who come from various countries, the participants of Training Program which come from Yala Rajabhat University of Thailand, the participants of the Developing Countries Partnership (Kemitraan Negara Berkembang/KNB) Program who come from various countries, and the participants of 3 + 1 Program which come from China.

Based on the learning objectives, there are two types of BIPA learning, i.e. BIPA for general purpose and BIPA for academic purpose. BIPA for general purpose is aimed to provide students a proficient Indonesian language that can be used in daily communication. The purpose of BIPA for general purpose is in line with the opinion of Sumardi (1974) which states that the goal to be achieved by someone in learning a foreign language is to be able to use the language learned correctly and fluently and can use the language in communicating. Meanwhile, BIPA for academic purpose is carried out to provide students a proficient Indonesian language for academic purposes.

In learning English for foreign speakers, there are two types of learning, namely English for general purposes (EG) and English for specific purposes (ESP) (Hutchinson & Waters 1987). ESP is divided into two types, namely English for academic purposes (EAP) and English for occupational purposes (EOP). Based on this, BIPA for academic purposes can be equated with EAP. BIPA for academic purposes and EAP has similarities, namely (1) both teach language to foreign speakers, (2) the learning objectives are for academic purposes, (3) participants of both programs are adults.

Universitas Negeri Malang (UM) is one of the tertiary institutions in Indonesia that organizes BIPA program. In fact, BIPA learning enthusiasts are increasing over years. The BIPA learning program at UM also varies with different participants' backgrounds, e.g. the participants of Critical Language Scholarship (CLS) Program who come from America, the participants of Darmasiswa Program who come from various countries, the participants of Training Program which come from Yala Rajabhat University of Thailand, the participants of the Developing Countries Partnership (Kemitraan Negara Berkembang/KNB) Program who come from various countries, and the participants of 3 + 1 Program which come from China.

Besides, the objectives of students of BIPA are also diverse, e.g. to improve Indonesian language proficiency, to teach Indonesian language, and to continue their studies in Indonesia. Based on these objectives, BIPA learning at UM can be divided into two types, i.e. BIPA for general purposes and BIPA for academic purpose. BIPA for general purpose is implemented in the CLS Program and the Darmasiswa Program, whereas BIPA for academic purpose is implemented in the KNB Program, Training Program, and 3 + 1 Program.

All this time, BIPA for academic purposes are not well implemented yet. That is, BIPA for academic purpose only carried out without really considering the program's implementation objectives, e.g. (a) the selection of learning themes that are sporadic and not in accordance with the learning objectives, and (b) the selection of teaching materials that are not in accordance with the learning objectives. Over the last few years, BIPA for academic purpose at UM using the book of Sahabatku Indonesia published by the Ministry of Education and Culture. However, the book is for general BIPA learning so the book cannot equip students with language skills for academic purposes. Besides that, BIPA learning with academic purposes has not received much attention.
because of its relatively new presence in Indonesia, so far the learning and research of BIPA tends to focus on general BIPA learning and research.

The difference in terms of initial behavior, background, and objectives of BIPA students has implications for the differences in teaching materials used because good teaching materials are teaching materials that are in accordance with the student's goals (Karim, 2015), initial behavior, background, and first language. Moreover, in BIPA for academic purpose program, the existing teaching materials have not been developed even though the needs are very urgent.

Based on the assertions above, this research is essential to be conducted. Therefore, in-depth study of the mapping of teaching materials of BIPA based on the language characteristics of students from China needs to be done in order to produce good teaching materials and in accordance with the characteristics of students. Thus, the teaching material that is mapped is teaching material based on students’ goals and students’ language characteristics so that later it can be developed teaching materials that can be utilized maximally by the students. Suyitno (2017) and Soewandi (1994) stated that teaching materials needed by BIPA students consisted of two types, namely language skills and language knowledge materials.

However, in the context of BIPA learning for academic purposes, language knowledge teaching materials need to be immediately mapped because based on initial observations, students have difficulty mastering Indonesian because of their low Indonesian language knowledge. Language knowledge is mandatory for students if they want to master a language. Knowledge of the language includes knowledge of vocabulary and grammar. Related to this, Kusmiatun, et al. (2017) and Mufanti, et al. (2019) stated that vocabulary and grammar are an important material that underlies language activity and are integrally integrated to all existing materials.

Linguistic knowledge is very important possessed by foreign language learners. Based on the learning experience so far, BIPA students often experience difficulties, both in the aspect of understanding and in aspects of production. Misunderstanding, for example, in the form of errors in understanding the meaning of words or the meaning of sentences, while production errors, for example, in the form of errors in pronouncing Indonesian sounds, making form words, and making Indonesian sentences (Susanto, 2007). This misunderstanding or production is caused by their lack of linguistic knowledge. Therefore, linguistic knowledge based on the frequency of linguistic errors needs to be taken into consideration in the mapping and preparation of teaching materials.

The main objective of this research was to identify the language characteristics of BIPA students from China. The results will be used to map the teaching materials that will be developed into BIPA for academic purpose teaching materials for Chinese students.

**Method**

**Participant**

The participants of this study were eight third-year undergraduate students from Guangxi Normal University, China, who were studying Indonesian at Malang State University, Indonesia. The eighth age of these students is 20-22 years and all of them are female. The eight students are native speakers of Chinese and are taking courses in learning Chinese for speakers of other languages. However, when the research was conducted, the eight students took the BIPA for academic purposes program. Their purpose in taking the BIPA for academic purposes program is to teach Chinese to Indonesian speakers or to teach Indonesian to Chinese speakers.

Based on the results of the pretest, it can be seen that the initial ability of the eighth Indonesian language students is almost the same, which are all at the beginner level. However, in the development of learning, each student develops according to the individual abilities of students so that in the lecture process carried out during one semester, there are two students whose abilities increase dramatically to the pre-advanced level, while the other four go up to the intermediate level, and the other two are still at the beginner level. This is caused by intelligence and learning motivation factors of different students.
Data

This research data is in the form of student speech in learning process and sentences written by students in students’ daily journals. Therefore, the data of this research were in the form of oral verbal data and written verbal data. Oral verbal data were in the form of transcriptions of students’ utterances during the learning process. Written verbal data were in the form of written lingual features obtained from students' writing in the form of journals containing a number of essays about their activities, experiences, and feelings. Both types of data are used to identify the language characteristics of students which include linguistic characters from phonological, morphological, and syntactic aspects.

The data was obtained by observing of learning activities, transcriptions of students’ utterances, and students’ daily journals. Observing the learning activities and transcriptions of students' utterances were carried out to identify phonological characteristics, while observing the students’ daily journal were carried out to identify morphological characteristics and syntactic characteristics.

After the students' language characteristics were identified, the next step was to map the teaching material based on phonological, morphological, and syntactic aspects. The mapping was done using the principle of language learning, i.e. from close to far, from easy to difficult, from simple to complex, from few to many, and so on. This mapping will be useful for the development of teaching materials that can be done as further research.

Data Collection

This research was conducted from September 2018 until February 2019. Data collection was carried out by observing and recording learning activities in class. Classroom learning activities are carried out for five days each week, from Monday to Friday. In addition, every Friday, students also collect student daily journals to lecturers. The journal is then duplicated to become a data source. The journals written by these students are natural because when writing the journal, students are not accompanied by a lecturer. Thus, the real ability of students in using Indonesian can be seen from the daily journal.

Results

The results of this study are in the form of findings about linguistic characteristics in oral and written communication of Chinese students. These characteristics are distinguished by characteristics from phonological, morphological, and syntactic aspects. A summary of research results on the characteristics of the three aspects is presented as follows.

<table>
<thead>
<tr>
<th>No</th>
<th>Aspect</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Phonological Aspect</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ability to pronounce vowel sounds [a], [i], [u], [e], [o], [ə] and their variations</td>
<td>80.47%</td>
</tr>
<tr>
<td></td>
<td>The ability to pronounce sounds [r]</td>
<td>39.84%</td>
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<tr>
<td></td>
<td>The ability to distinguish sounds [p] and [b], sounds [t] and [d], and sounds [k] and [g]</td>
<td>46.87%</td>
</tr>
<tr>
<td></td>
<td>The ability to pronounce syllable [ən]</td>
<td>53.15%</td>
</tr>
<tr>
<td>B</td>
<td>Morphological Aspect</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The ability to produce formed words with the affixes meN-, ter-, ber-, dan peN-</td>
<td>86.75%</td>
</tr>
<tr>
<td></td>
<td>The ability to produce formed words with the affixes meN-kan</td>
<td>83.36%</td>
</tr>
<tr>
<td></td>
<td>The ability to produce formed words with basic forms begins with k, p, t, and s with affixes meN-</td>
<td>65.72%</td>
</tr>
<tr>
<td></td>
<td>The ability to produce formed words with the affixes di-</td>
<td>78.14%</td>
</tr>
<tr>
<td></td>
<td>The ability to change formed word with the affixes meN- to the formed word with the affixes di-</td>
<td>47.2%</td>
</tr>
<tr>
<td></td>
<td>The ability to produce full repetition words</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>The ability to produce partial repetition words</td>
<td>1.25%</td>
</tr>
</tbody>
</table>
The ability to produce compound words 1.56%

C Syntactic Aspect
- The ability to produce zero endocentric phrase (contain one words) 100%
- The ability to produce attributive endocentric phrase 100%
- The ability to produce appositive endocentric phrase 0%
- The ability to produce coordinative endocentric phrase 100%
- The ability to produce basic sentences 100%
- The ability to produce passive voice 78%
- The ability to change active sentences to passive voice or vice versa 47.74%

Phonological Characteristics

In the early stages of learning Indonesian, students were introduced to the Indonesian sounds. This was intended so that students could memorize and distinguish Indonesian sounds. Moreover, there are quite striking differences between Indonesian and Chinese. This difference can be seen from (1) the availability of language sounds in Indonesian, but not in Chinese, and (2) there are differences in how to pronounce Indonesian sounds with Chinese even the writing of the symbol is the same. This condition causes students to experience difficulties and even errors in pronouncing Indonesian sounds.

The analysis results of the Chinese students’ pronunciation during learning process in 3 + 1 Program showed that students are able to pronounce vowel sounds even though vowels in Indonesian have more than one phoneme. Students were able to pronounce the sound [a], [i], [I], [u], [U], [e], [E], [ə], [o], [ↄ]. However, students still have difficulty in distinguishing sounds [e], [E], and [ə], e.g. in pronouncing [tempe]. When they were asked to pronounce the word [tempe], they pronounce it as [tempe], not [tempe]. After being introduced to the correct sound, they can pronounce the word tempe relatively correct. However, there are some students who are mistaken in pronouncing the word.

In consonant sounds, the results of the analysis showed that students in general are able to pronounce consonant sounds well. However, students experience errors consistently in producing certain sounds. The consonant sound is the sound [k] and [g], [t] and [d], [p] and [b]. In these consonants sounds, students were often confused in pronouncing them, for example sounds [k] pronounced as [g] and sounds [g] pronounced as [k]. In consonant sounds, the analysis also showed that students are not able to pronounce the sound [r], both the sound [r] are in the onset or in coda position, especially pronounce the sound [r] in the coda position. The error in pronouncing the sound [r] is due to their unfamiliarity because in their language system, this sound does not exist. As a result, they cannot (or are not accustomed to) pronounce the sound [r].

In the sound cluster, the analysis showed that students are not able to pronounce syllables ending in vowels and consonants on. This is because in Chinese, there is no sound cluster [on]. That is why, when they pronounced Indonesian words that end with a sound cluster [on], students were wrong. For instance, the word [pↄhↄn] tends to be pronounced as [pↄhↄŋ] and the word [rawↄn] tends to be pronounced as [rawↄŋ].

From the results of the analysis, the particularity that appears in the phonological aspects of Chinese students is the influence of Indonesian pronunciation of Chinese, especially the uniqueness in pronouncing consonant sounds. This particularity is because the students tend to use their language system (Chinese) in pronouncing the target language (Indonesian) (Susilowati, Chen, & Xie, 2018). This particularity is seen when students pronounce the sounds of voice and voiceless consonants that are in the same articulation area. For instance, in pronouncing sound [d], students tend to pronounce it with sound [t]. This happens because in Chinese system, the sound [d] is pronounced with [t]. This way of pronouncing is the Chinese student's peculiarity in pronouncing the sounds of Indonesian consonants.

Morphological Characteristics

In the morphological aspect, the analysis was conducted on students' written communication as set out in the weekly journal. The characteristics of the morphological aspects were analyzed in the formed words obtained from the morphological process which included affixation, reduplication, and composition (Sumadi, 2013). Affixation is the process of forming words which is done by combining basic forms with affixes. Reduplication
is the process of forming words which is done by combining basic form with R morpheme. Composition is the process of forming words which is done by combining basic forms with other basic forms so as to produce new words whose meanings deviate from their basic form.

Morphological characteristics related to vocabulary used and produced by students which include basic words and word formations. In foreign language learning, vocabulary is an important aspect that determines the mastery of the target language by students. In fact, the results of research by Sujana, et al. (2018) stated that 91% of BIPA teachers who are the subjects of their research agree that vocabulary material is compulsory material that is taught explicitly in BIPA learning.

Research findings on the morphological characteristics of written communication of Chinese students are presented below. From the aspect of affixation, the results of the study showed five things. The following is the explanation.

- First, students have been able to produce words by using affixes, especially prefixes and suffixes correctly. The affixes used by Chinese students are verb-forming affixes, noun-forming affixes, and adjective-forming affixes.
- Secondly, the affixes that are most correctly mastered by Chinese students are the affixes of meN-, ter-, ber-, dan peN-. The affix meN- which is often used by students is the affix meN- forming verbs which states the meaning of doing such actions in the basic form, e.g. membaca ‘reading activity’. The affix of ber- that is often used by students is the verb forming affix which states the meaning of (1) doing the action as mentioned in the basic form, e.g. belajar ‘doing teaching activities’; and (2) ownership, e.g. beradik ‘having a sister’. The affix of ter- that is commonly used by students is the affix ter- (1) verb formers which state the meaning of doing something like in the basic form’, e.g. tersenyum ‘doing smiling activities’, and (2) forming an adjective which states the meaning of most, e.g. tertinggi ‘the highest’.
- Third, students are able to use the conфикс of meN-kan correctly. The conфикс of meN-kan is commonly used by students. The conфикс of meN-kan used by students is the conфикс of verb forming which states the meaning of (1) doing the act in the basic form, e.g. menggunakan ‘doing the act of use’, (2) making in the basic form, for example membosankan ‘make you bored’, and (3) make it in the basic form, for example menyiapkan ‘make ready’.
- Fourth, students tend to experience difficulty in forming the words with basic forms beginning with the consonant sounds k, p, t, and s with the affix meN-. In Indonesian, the basic form begins with consonants k, p, t, and s if they get the affix, they will be assimilated, e.g. meN- meet the basic form of kupas, it will become mengupas (k consonant assimilated). This rule seems not to be understood by students so that they tend to have difficulty when producing words that begin with the consonants k, p, t, and s with the affix of meN-. In fact, if the students are asked to find the basic form of word form which gets an affixes meN- with the basic form beginning with the sound of consonants k, p, t and s, students tend to be mistaken. For example, when they are asked to find the basic form of the word mengupas, students tend to determine the basic form is ngupas or upas.
- Fifth, students have particularity in producing words affixed di-. These peculiarities are in the form of (1) students can produce word formations with affixes of di-, but tend to experience difficulty in using these words in the context of sentences, and (2) students tend to experience errors in changing the active form of the affix of meN- to the passive form of the affix of di-.

From the reduplication aspect, students are able to produce repetition words. The repetition words produced by the students are whole and partial repetition words, while the affixes and changing sound repetition word are not found in the student's writing. The repetition words produced by students are also very limited, i.e. as many as five words for whole repetition words and two words for partial repetition words. Whole repetition words produced by students are whole repetition words that (1) express a lot, e.g. jemanteman ‘many friends’, and (2) express with, e.g. pelan-pelan ‘slowly’. The partial repetition words that is produced by students is a partial repetition words that states to perform the action mentioned in the basic form, e.g. berjalan-jalan “doing the act of walking”.

From the aspect of composition or compounding, students are only able to produce two compound words, i.e. makan-makan ‘eat at night’ and baik hati ‘people who have good character’. Compound words produced by students are limited to compound words consisting of two words.
Syntactic Characteristics

Syntactic characteristics can be viewed from three aspects, i.e. aspects of phrases, clauses, and sentences. The results of research on the syntactic characteristics found in Chinese students' written communication are described as follows:

- From the aspect of phrases, based on data analysis on Chinese students' written communication, three findings were obtained. First, based on the distribution equation with the elements, the phrases produced by students are endocentric zero phrases, attributive endocentric phrases, coordinative endocentric phrases, conjunctive exocentric phrases, and disjunctive exocentric phrases with prepositions as markers. Second, based on the class of words that are the central element or markers, the phrases produced by students are noun phrase, verb phrase, adjective phrase, preposition phrase, and conjunction phrase. Third, phrases not found in students' written communication are appositive endocentric phrases, exocentric phrases disjunctive with articles as markers, and articular phrases. Fourth, based on their numbers, phrases that Chinese students can produce are phrases with a total of one to five words, but the most common are phrases consisting of only one word. The complete data of research findings about phrases produced by Chinese students can be seen in Table 2.

- From the aspect of clauses, the results of this study showed that the clauses found in written communication of Chinese students are complete clauses (clauses consisting of subjects and predicates) and incomplete clauses (clauses that do not have subjects and / or predicates). From the complete clauses found, there are also an orderly arrangement of clauses (clauses whose subject precedes the predicate) and inversion clauses (clauses whose predicate precedes the subject).

- From the aspect of the sentence, the results of the study showed four things. First, students are able to produce basic sentences with one subject and one predicate correctly, whether accompanied by non-clausal information or not. Second, students are able to produce complex sentences with one statement in the form of verbs with affixes of di-. Fourth, students have difficulty in changing active sentences into passive sentences.

Table 2. Phrases Produced by Chinese Students

<table>
<thead>
<tr>
<th>No</th>
<th>Phrase</th>
<th>Yes</th>
<th>No</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The phrase is based on the distribution equation with its element</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Endocentric phrase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Attributive endocentric phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Coordinative endocentric phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3) Apositive endocentric phrase</td>
<td></td>
<td>√</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4) Zero endocentric phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Exocentric phrase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1) Conjunctive exocentric phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) Disjunctive exocentric phrase</td>
<td>√</td>
<td></td>
<td>With prepositions as markers</td>
</tr>
<tr>
<td>2</td>
<td>Phrases based on the class of words that are the central element or markers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Noun phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Verb phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Adjective phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Numeral Phrase</td>
<td></td>
<td>√</td>
<td></td>
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<tr>
<td></td>
<td>e. Prepositional phrase</td>
<td>√</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>f. Conjunction phrase</td>
<td>√</td>
<td></td>
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<tr>
<td></td>
<td>g. Articular phrase</td>
<td></td>
<td>√</td>
<td></td>
</tr>
</tbody>
</table>

Discussion

Linguistic Characteristics of BIPA for Academic Purposes Students from China

The mapping of BIPA teaching materials for Chinese students, especially teaching materials for linguistic aspects, is based on the found characteristics. Teaching materials presentation is done based on the principle of easy to hard, from few to many, from the concrete to abstract, and from close to far. Besides, the mapping of
teaching materials is also done by giving emphasis and repetition on materials that are difficult to master by students or on material that students often experience errors. The mapping of teaching material is presented as follows.

In terms of phonological aspect, it can be seen that students have no difficulty in pronouncing and distinguishing vowel sounds and their allophones. However, students have difficulty in pronouncing consonant sounds, especially consonant sounds [p] and [b], [k] and [g], and [t] and [d]. The difficulty is caused since the students experience errors in producing these consonant sounds. Dawud (2008) argues that language errors can be in the form of errors of understanding or production (Dawud, 2008). Based on this sorting, the mistakes in the pronunciation of sounds made by Chinese students are errors of understanding as well as errors in production. Misunderstanding is caused since students do not understand the Indonesian system, e.g. the grapheme b is pronounced [b], unlike Chinese where the grapheme [b] is pronounced [p].

In the early stage of learning, mistakes in pronouncing the consonants made by Chinese students caused interference with the first language system. However, in its development, errors in pronouncing the consonants sounds made by Chinese students are caused by errors in producing sounds in the target language system. This is in line with the opinion Dullay, Burt, & Krashen (1982) who found that learners' mistakes in learning a second language or a foreign language were caused by first language interference, errors due to language development (use of intermediate languages), and unique errors.

In terms of morphological aspect, students master well the affixes forming verbs in the form of affix meN- and ber- along with their variations and their meanings. This is because the main verb that is often used in Indonesian is the active verb. In Indonesian, the formation of active verbs is done by adding meN- and ber- to the basic form. More than that, the active verb is often used in communication because the basic sentence patterns in Indonesian are active sentences so that automatically, the formation of active verbs is also immediately mastered by students. This is in line with what is stated by Dardjowidjojo (2003) which states that the first affix mastered by Indonesian students is one of them is the affix meN-.

The results of the study also showed that students can produce a repetition word although not all words can be produced by students. The most repetition words produced by students are whole repetition words, e.g. the words of teman-teman. The ability of students to produce this whole word can be understood because this word is the most easily produced word than any other word. The form of the whole word is the same as its basic form so it does not make the students confuse. This is different, e.g. with partial repetition word because to produce it, students still have to think which parts are left off and which parts are retained in the form of the invented word. In terms of syntactic aspects, students master well the basic sentence structure of subject and predicate patterns. This finding showed that students are already good enough in producing simple sentences because students are able to present the P function in their sentences given (Parera, 2009; Alwi, dkk., 2003). The ability to produce simple sentences by students because the sentence patterns are the most basic sentence patterns found in all languages. In addition, basic sentence patterns are the simplest sentence patterns that can be used to express ideas.

The Mapping of BIPA Teaching Materials for Academic Purposes

Based on the discussion of the characteristics of Chinese students, the mapping of BIPA teaching materials is described as follows. The linguistic characteristics found are used to (1) determine selection of criteria and choice of teaching materials presented and (2) determine the order or gradation of BIPA teaching material presentation. In addition, the findings are also used to determine what aspects are needed highlighted and on what aspects are not need to be highlighted (Susanto, 2007).

The mapping of language teaching material is categorized into the mapping of phonological, morphological, and syntactic aspects. The mapping is sorted based on the initial ability mastered to the ability that is difficult / not mastered by students. This is in line with the opinion of Suyitno (2017) which states that BIPA learning, words, formations, sentences, and grammar used are words, formations, sentences, and grammar language that is known by the students.

Ideally, BIPA learning is divided into three levels, i.e. beginner level, intermediate level, and upper level (Suyitno, et al., 2018). However, for BIPA learning for Chinese students, this division is not done because their initial competencies are the same (both beginner level), but the expected outcome is that they can have advanced
competencies. They were asked to practice teaching Chinese for Indonesian speakers and/or teach Indonesian for Chinese speakers. Therefore, teaching materials developed for BIPA students from China are different from teaching materials for other BIPA programs.

In mapping from phonological aspects, the material of vocal sound is taught earlier than the consonant sound because they have no difficulty in pronouncing vowel sounds. After that, consonant sound material is taught. In consonant sound material, the proportion of the presentation of consonant sound material [p] and [b], [k] and [g], and [t] and [d] is reproduced and repeated because this material is difficult for Chinese students to master. After consonant material is presented, the material presented is double vowel material and double consonant material. The double vowel and double consonants materials are also difficult for students to master. However, these materials do not get as much emphasis and repetition as the presentation of consonant material as mentioned earlier.

In the mapping of the morphological aspects, the affixes of meN- and ber- are presented earlier than other affixes because these affixes are mastered by students. The affixes that are then presented are the affixes of ter-, peN- and -an. The confix is the next material given since this material is more difficult to be mastered by students. The affix that is difficult to be mastered by students is the affix di-, both for its formation and its use in sentences. Therefore, affixes are presented later and get more proportions because students need to learn more about these affixes and their use in sentences. For repetition words, the earliest word presented to students is a whole word, followed by a sound changing word, partial word, and affixed repetition word. The vocabulary introduced to students is not only basic vocabulary, but also formed vocabulary which includes (1) vocabulary in the form of scientific field terms, and (2) standardized Indonesian vocabulary.

In mapping of syntactic aspects, the first material presented is the basic sentence material patterned with subject and predicate because this material is mastered by students. After that, the sentence material presented is sentence material with non-clausal adverb. Next, after the structure of the sentence patterned subject, predicate and adverb have been mastered by students, the next material presented is a sentence with adverb in the form of clauses. The most difficult sentence material for students to master is passive sentences, especially passive sentences with predicates in the form of affixed verbs along with their combinations, both the initial formation of passive sentences and the change from active sentences to passive sentences. Therefore, material about passive sentences and their types of forms is presented in the last.

Material syntactic aspects not only contain material about the pattern and structure of Indonesian sentences but also supported by the practice of their use in communicating for academic purposes. Thus, students are expected to not only understand the rules of sentences in Indonesian but also be able to use them appropriately in various contexts. The mapping of teaching materials based on linguistic characteristics for Chinese students is reflected in the Table 3.

<table>
<thead>
<tr>
<th>No</th>
<th>Linguistic Aspects</th>
<th>Target Competence</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Phonological aspect</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Vocal sound</td>
<td>students can pronounce Indonesian sounds correctly, both vowels and their allophones, consonant sounds and their allophones, vocal groups, and double consonant</td>
<td>Get more repetition and highlighted</td>
</tr>
<tr>
<td></td>
<td>b. Consonant sound, mainly /p/ and /b/, /k/ and /g/, also /h/ and /d/</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Vocal cluster and double consonant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Morphological aspect</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Affixes meN- dan ber-</td>
<td>Understanding the affix word in Indonesian</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Affixes ter-, peN-, dan -an</td>
<td>The vocabulary introduced is in the term of scientific field and standard Indonesian vocabulary</td>
<td>Get more repetition and highlighted</td>
</tr>
<tr>
<td></td>
<td>c. Confix</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>d. Affixes di-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>e. A whole repetition word,</td>
<td>Understanding Indonesian</td>
<td></td>
</tr>
</tbody>
</table>
BIPA learning materials are presented in stages based on the level of difficulty, which is from easy to difficult, simple to complex, from few to many, and close to far. This shows that there are gradations in the presentation of BIPA teaching materials. The presentation of BIPA teaching materials is then manifested in learning themes. The determined theme is also a theme with gradations as stated.

As it is for BIPA for academic purpose, the materials no longer raise the theme of themselves and the environment, but rather on themes that support academic interests. However, BIPA for academic purpose for students from China, the themes of themselves and the environment are still presented because the initial ability of students is still at the beginner level. However, the materials that are themed and the environment are presented in small proportions.

From the three language aspects of BIPA learning, there is an order of importance and quality. From those three aspects, the material on morphological aspects is the most important part, especially in terms of vocabulary. This can be understood because vocabulary is an important part of learning a second/foreign language. The vocabulary that is dominated by students will affect their ability in Indonesian. These findings form the basis quality of the linguistic material presented to students, followed by syntactic aspects, and finally phonological aspects. However, the material for phonological aspects is presented at the earliest because the pronunciation of language sounds will affect vocabulary production.

Related to language skills, BIPA for academic purposes prioritizes learning writing skills. However, because the early abilities of students from China are still at the beginner level, learning to speak takes precedence because they need good speaking skills. After speaking, the language skill presented is writing because during further studies, they will be required to write in Indonesian. Furthermore, to produce good writing, students are required to be good readers so that the material presented next is reading the material. Finally, the last material presented is listening. Thus, based on their needs, the order of presentation of language skills material for students from China is speaking, writing, reading, and listening.

The findings of this study are not in line with Troike (2006) who gives priority order of foreign language learning activities for academic purposes. According to Troike (2006), the sequence of learning activities for language skills for foreign students is reading, listening, writing, and speaking. This sequence is slightly different from the priority order of learning activities of students of BIPA for academic purposes from China. Table 4 shows a comparison of the priority order of learning activities according to Troike and the needs of students of BIPA for academic purposes from China.

Table 4. Comparison of Priority Sequence for BIPA for Academic Purposes Activities

<table>
<thead>
<tr>
<th>Priority sequence</th>
<th>Students of BIPA for Academic Purposes from China</th>
<th>Troike</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Speaking</td>
<td>Reading</td>
</tr>
<tr>
<td>2</td>
<td>Writing</td>
<td>Listening</td>
</tr>
<tr>
<td>3</td>
<td>Reading</td>
<td>Writing</td>
</tr>
<tr>
<td>4</td>
<td>Listening</td>
<td>Speaking</td>
</tr>
</tbody>
</table>
Conclusion

The findings on the linguistic characteristics of the BIPA students from China show three aspects. First, from the aspect of phonology, Chinese students do not really master the consonant sound pronunciation of Indonesian language, which is apparent from the inability and consistent mispronunciation in pronouncing certain sounds. Second, from the aspect of morphology, the students can construct words using affixes meN- and ber, but can’t construct word using affixes di-. Third, the students have been able to construct a simple and complex sentence with two clauses, yet, they face difficulties in changing an active sentence to passive and vice versa. The three findings were then used to map the BIPA teaching materials, which later will be used for Chinese students in the future.

The mapping of teaching materials on the linguistic aspects was conducted with a principle of order and emphasis on materials based on the findings of characteristics. The order was conducted based on the principle of easy to difficult by presenting the materials that are already comprehended prior to the materials that are intermediate, not understood, or difficult to comprehend. The emphasis was conducted by giving more portions to the materials that are not understood or difficult to comprehend. The learning materials are in a form of standard Indonesian language.

Recommendations

The development of teaching materials for BIPA learners with academic objectives is very dependent on the learning objectives and the students’ language characteristics. The linguistic characteristics are related to linguistic knowledge and the frequency of linguistic errors that are often done by students. The results of this study indicate that the mistakes made by students can be used to map language learning materials in BIPA programs for academic purposes.

Based on the findings of this study, researchers gave two recommendations. First, the mapping of teaching materials alone is not enough to be used as a reference in learning so that teaching materials based on the mapping are needed. Therefore, it is necessary to develop language teaching materials specifically presented in BIPA learning for academic purposes. Second, although linguistic knowledge is very important to be given to students so that teaching materials need to be developed, it is also important to develop language skills teaching materials because linguistic knowledge will be more quickly mastered if learning is also in line with learning language skills.

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