

NEED ANALYSIS TO DEVELOP TEACHING MATERIALS AT VOCATIONAL COLLEGE UGM

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Abstract


Needs analysis as an initial process in a course becomes crucial before deciding learning objectives, setting the assessment, creating course design, as well as developing materials. This study aims to describe the English competence and skills needed by the stakeholders and students' perceptions of good teaching materials from various study programs at Vocational College UGM. The methods used in collecting data are questionnaires and interviews. The questionnaire is distributed to the first semester students from all applied bachelor programs in Vocational College UGM using a stratified random sampling method. In addition, the interview is done with all heads of applied bachelor programs in Vocational College UGM for triangulation. The results show that the students are in the beginner level or basic users (A2 level in Common European Framework of Reference for Languages or CEFR). Moreover, the competencies stated in the A2 level are considered needed by the students to master in academic and work-life contexts. Besides, the skill considered as the most important is speaking, followed by writing. The students also propose some criteria of good teaching materials that include the content, sequence, exercise, language features, technology, layout, and price.

Keywords: *needs analysis, English teaching materials, vocational college*

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INTRODUCTION

Needs analysis - a process of analyzing learners' needs in a course used since 1960s during the emergence of English for Specific Purposes (ESP) - has a pivotal role in curriculum and material development to create more meaningful and motivating programs (Dooey, 2010; Richards, 2001; Stoller et al., 2006). Needs analysis (NA) becomes not only a fundamental instrument in ESP course design (West (1994) in Huang, 2010, p. 517), but also fundamental in English for Academic Purposes (EAP) (Hamp-Lyons (2001) in Huang, 2010, p. 518). NA can provide valuable information to help educators make decisions for the courses, and to match the course objectives with the needs of external stakeholder, such as company owners or prospective employers where the students might work after their graduation (Poedjiastutie & Oliver, 2017, pp. 2–3). In other words, a comprehensive NA can fill the gap between what is taught in educational institution and what is really needed in the real world. Moreover, the information obtained from a thorough NA can also be used as the basis to select or design appropriate materials or textbooks as resources to achieve learning goals (Litz, 2001).

Unfortunately, in practice, as a study program that is often proposed to send the lecturers to teach English language courses at Vocational College of Universitas Gadjah Mada (UGM), English program often finds difficulties in determining the teaching materials that fit the users' needs. In fact, the material used has not been completely tailored to the needs of the users in terms of the competencies and skills expected. On the other hand, the English Program is not capable to accommodate all different requests of 13 Applied Bachelor Programs in the academic year of 2019-2020. Therefore, English Program needs to map the teaching material needs for the English language courses, especially for *Bahasa Inggris I* as one of the compulsory courses at Vocational College, UGM, in order to be more focused and outcome-oriented.

This study aims to (1) map the needs of Bahasa Inggris I teaching materials according to the needs of each study program at the Vocational College UGM and (2) look for the similarities of those teaching materials. Therefore, this study focuses on the analysis of teaching material needs for *Bahasa Inggris I* at Vocational College UGM because *Bahasa Inggris I* is the basis for further English language learning in that college. Hopefully, the dominant similarities can be obtained to reveal the tendency of the learning material needs that are suitable for all study programs.

There are several similar studies that have been done in the past, such as two studies titled conducted by Zohoorian (2015) and Li (2014). The first research was conducted by Zohoorian (2015) from the Department of Languages, Islamic Azad University, Mashhad Branch, Mashhad, Iran. The research conducted on the students of Computer Engineering and Information Technology in Iran aims to find the intersection of the skills taught using their module with the needs of the students. The research was conducted by doing interviews. The second study was conducted by Li (2014) from School of Foreign Language Studies, Shandong Jiaotong University, Jinan, China. The study discusses whether and how the needs analysis can be applied in the curriculum development of Business English for improvement of Business English teaching in China.

This research is different from the two aforementioned studies as it leads to the analysis of teaching material needs for Basic English/English for General Purposes not on English for Academic Purposes (EAP) or English for Specific Purposes (ESP). Besides, this study is neither comparing between the needs and use of teaching materials nor describing the implementation process of needs analysis results in a curriculum development. Thus, the study is different from the existing studies and from the studies listed in the references. This study is based on several theories, namely needs analysis, language learning for adults, language competency and outcome-based education.

Needs Analysis (NA)

NA plays an important role as an underlying and initial point for identifying learners' needs as well as for curriculum design, text selection, tasks design, and material development (Huang, 2010, p. 518). Beside the learner's needs, "information about the language itself, the background of the learners and the teachers, and the constraints and resources of the program" are also necessary to be considered since those factors may affect a course or program (Lambert, 2010, p. 99).

Long (2005, pp. 25–30) mentions that there are several sources of information for needs analysis, namely: published and unpublished literature, learners, teachers and applied linguists, specific field experts, and triangulation sources. Referring to both published and unpublished sources of written information, course designers/researchers do not need to research the things that previous researchers have discovered. Thus, the course designer can utilize the existing written source. Besides, learners have the right to determine what they need or what they want to learn. Discussions between teachers and learners can raise awareness of both parties on the reason they are doing learning activities as well as media and learning objectives. Applied linguists and field experts can also provide feedback on the needs of learning because they often do research or experience in a particular field. In addition, the triangulation sources are often used to increase the credibility of the data iterating. Triangulation can be done by comparing two or more different sources, methods, or theories and sometimes also combining them (Licoln & Guba in Long, 2005, p. 28). The triangulation method may involve the use of different data collection procedures, such as recording, non-participant observation, interviews, questionnaires, and tests, or may also be with case studies and quasi-experimental research methods. Long (2005, p. 29) adds that there are many need analysis for the ESP program that involves data from various sources and/or data collected through different methods.

There are many data collection procedures in needs analysis according to Long (2005, pp. 31–32): non-expert intuition, expert practitioner intuition, unstructured interviews, structured interviews, scheduled interviews, surveys and questionnaires, language audits, ethnographic methods, participant observation, non-participant observation, class observation, diary, journal, and notes, role playing and simulation, content analysis, discourse analysis, rhetorical analysis, corpus analysis with computer, genre analysis, performance test based on criteria, and triangulation methods.

Language Learning for Adults

According to Broughton et al. (2003, pp. 190–191), in some countries where English is a foreign language, it is very common that English lecturers at a university are faced with a group of non-English Program students who need to learn general English skills. General English can be adapted for the purpose of a group of students who need English for special purpose.

Students as adult learners generally have a range of innate experiences and abilities they bring to learning, and they also have different motivations for learning. Diagnostic assessments can be performed to help identify the competency and needs of learners, including the obstacles in learning, as well as resources that may be needed to address the learning obstacles (Looney, 2008, p. 106). This kind of test is intended to seek the gap between learners and the objectives/learning outcomes. Meanwhile, informal interviews can be done to avoid the anxiety of learners. Informal questions are very effective at establishing collaborations between learners and teachers and providing useful preliminary information during the interview, even informal observation and conversation enable the researchers/teachers to make accurate diagnosis of the learner's profile. In addition, learners can also conduct personal assessment of their level of ability based on a specific scale (Looney, 2008, p. 107).

Language Competency

The concept of language competency has been developed over time, but the most influential is the concept introduced by Noam Chomsky about transformational grammar and language components that include competence and performance (Llurda, 2000, p. 85). Chomsky's theory emphasizes that linguistic competence can make a person produce a proper sentence in terms of its grammar. Along with the development of science, Hymes (1972) introduces a communicative competence theory stating that in order to use language, someone requires not only linguistic competence, but also sociolinguistic competencies. The theory implies integration between competence and performance. After that, Canale and Swain (1980) develop a language skills framework that includes three competences, namely grammar competence, sociocultural competence, and strategic competence in which is then supplemented with discourse competence (Canale, 1983).

With the development of the concept of language competency, that definition also undergoes several changes. Bachman (1990, p. 6) defines language skills as a unity of competence, knowledge, or ability to use language. Nunan (2001) describes language competency as the ability to use a second language for communication purposes. Moreover, based on the article of Renandya et al. (2018), in general the meaning of language skills is the ability to use language for a wide range of communication. Therefore, it is safe to say that language competency covers the knowledge about the language and the ability of using the language for communication, or what is called communicative competencies.

Communicative competencies can be categorized into various levels of proficiency, for example: elementary, intermediate or advanced. An international reference commonly used is the Common European Framework of Reference for Languages (CEFR) issued by the Council of Europe (2001). CEFR consists of six level divisions (A1-C2) where at each level there is a description of the skills and expertise of a person in using the language with A1 as the basic level and C2 as the highest level.

The level of proficiency of a person in language can be measured by assessments, one of which is by carrying out tests. Determination of the proficiency level is also one of the needs analysis activities as the basis of determining the difficulty level of the teaching materials to match the desired learning outcomes. The teaching materials should be one level above the learners' proficiency (i+1), which are often referred to as comprehensible inputs (Lightbown & Spada, 2006, p. 39). That way, the teaching materials will be understood by the learners, while enhancing the learning skills.

Outcome-Based Education

The main component in the Outcome Based Education (OBE) is learning outcome. Learning outcome is a statement of expectation about what the learners will learn and how it is measured (Driscoll & Wood, 2007, p. 5). The achievement of learning can be arranged based on the existing design from external parties and within the institution (internal). The design from external parties can be from the existing policy made by competent institution or government institution. For example, in Indonesia, higher education learning outcomes are stated Indonesian National Qualification Framework (*Kerangka Kualifikasi Nasional Indonesia* or KKNI). Meanwhile, the design of learning access from the internal institution can be compiled by the institution itself based on the input from stakeholders, users, graduates, learners, or teachers.

Study programs/faculties and students are the sources of learning outcomes that are often overlooked. The study program or faculty is actually the most appropriate party in interpreting the vision, mission, as well as values of the institution into the learning outcomes. It is because they understand the content of a particular discipline, understand the character of the learners or students, and also know the expectations of the graduates in their field (Driscoll & Wood, 2007, p. 58).

RESEARCH METHOD

The study was held at a Vocational College in April – October 2019, using a qualitative approach. Data were collected by distributing questionnaire and doing interview. The respondents consists of two groups, namely study program managers/heads and students of all the Applied Bachelor (Diploma IV) of the Vocational College.

Questionnaire in the form of Google Form surveys contains questions about English competencies and skills needed are distributed to students in semester 1 of Applied Bachelor in that Vocational College. The sampling system used is stratified random sampling to classify students based on their study program which is then continued by using random sampling system from each study program. In addition, the interview method is also implemented to find out the expected learning objectives of *Bahasa Inggris I* in accordance with the curriculum applied in each study program, to know more about English communication skills expected by the study program managers, and to know the learning process implemented so far.

The instruments used in this study are questionnaire using closed and open questions and also a list of interview questions. The questionnaire consists of five sections: the respondent's identity, self-evaluation, English skills needed, English language competence needed, and perception about effective teaching material. The respondent identity section consists of open-ended questions that include the respondent's name, study program and batch, address, and English learning time range. The second part is self-evaluation. Respondents were asked to assess their English proficiency level through closed-questions using Likert scale. In addition, there are also open-ended questions about the type of English competency test ever taken and the score achieved. In the third part, respondents sort the English skills from the less-needed to the most needed skills in the college life and in the working field they will be in. The fourth part about the English competency needed is the core part of the questionnaire in this study. This section consists of a number of closed-ended questions in which the respondents can provide an answer on the Likert scale related to English competence needed both in the academic world and in the working world. The fourth section is designed based on the Common European Framework of Reference for Languages (CEFR) A2 level (beginner/basic user). Meanwhile, some of the competencies of the productive skills (speaking and writing) are taken from B1 level (independent user) to facilitate comprehensible input ($i+1$) as proposed by Lightbown and Spada (2006, p. 39). The final part consists of closed-ended questions with Likert scale on the perception of effective teaching materials. The section is aimed at finding out the expected aspects of an English language teaching materials to achieve the intended learning outcome.

Meanwhile, there are ten open-ended questions in the interview question list that become the guidance of interview with the study program managers. These questions are about the formulated learning outcomes, the expected communication skills, and language skills that become the learning focus of the study program. Other matters related to the implementation of the learning, constraints faced, and solutions applied are also parts of the interview questions. In addition, graduate work fields and the role of English language competency and skills in supporting general curriculum of the study program and the graduates' performance are also asked during the interview.

Before being administered to collect the data, the designed questionnaire was piloted to 39-semester-1 students from four study programs, namely Applied Bachelor of Economic Development, Applied Bachelor of Banking, Applied Bachelor of Public Sector Accounting, and Applied Bachelor of Property Management and Valuation to know its validity and reliability. The validity of the questionnaire (especially for sections 5 and 6) was measured with the SPSS 25 application using Pearson Correlation and Sig. (2-tailed). From the calculation, it is known that the Correlation score of 50 items in Section 4 is > 0.316 (r table) and the score of Sig. (2-tailed) is < 0.05 . All question items in Section 4 can be considered valid. As for Section 5, in which it has 22 questions, there are 20 questions that have Correlation score > 0.316 (r table) and Sig. (2-tailed) < 0.05 , so those 20 questions are valid. However, the remaining two questions are classified as invalid questions and were eliminated from the questionnaire. Then, the reliability test was done with Cronbach's Alpha. Section 4 of the questionnaire has 50 questions with a score of .990 (> 0.60) and Section 5 with 22 questions has a score of .895 (> 0.60), then it can be concluded that all the questions are reliable.

The questionnaire was then distributed via google form to the total of 483 freshmen from 13 applied bachelor programs. After being distributed, data from questionnaires were analyzed with descriptive statistics by specifying the frequency, percentage, mean, and mode. It was intended to seek the tendency or similarity of results from all respondents. The decision to determine the importance of each factor was based on Sudijono (2009, p. 175) descriptors for interpreting the mean scores. Then, data from the interview in the form of recording were transcribed and classified into six categories: learning outcomes; communication skills; focused language skills; learning process, constraints, and solutions; graduate working area; and role of English competency and skills in supporting the curriculum and graduate performances. Those data were used as triangulation.

RESULTS AND DISCUSSION

Results obtained through questionnaires distributed to 483 students of semester 1 of the 13 applied bachelor study programs have some key points of self-evaluation, English language skills

required, English language competencies required, and perception of effective teaching materials. First, the level of English proficiency of the respondents according to the self-evaluation is depicted in Figure 1. Seventy one percent of respondents (342 students) mention that they are at the beginner level (equivalent to TOEFL 337-459) (Educational Testing Service, 2012). One hundred and thirty five respondents (28%) rate their English proficiency at the intermediate levels, while the other six respondents (1%) feel that they are at the advanced level. It can be said that most of the respondents are in beginner or basic user level (A2) of CEFR (Council of Europe, 2001).

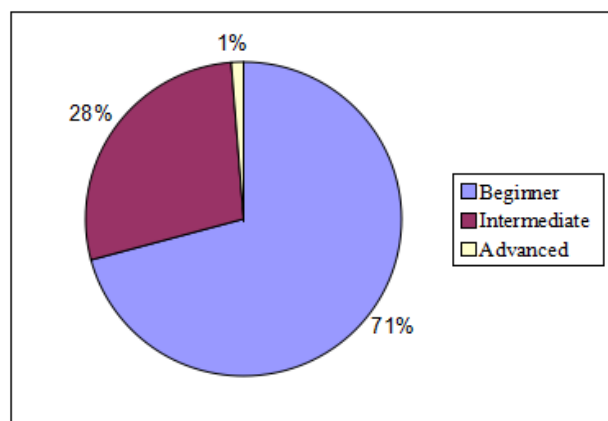


Figure 1. English Proficiency Level

The respondents also assessed the proficiency of each English skill and language features (in Figure 2). Reading skill is assessed as their highly mastered skill with the mean score 3.56. It is followed by skill and language features consecutively as follows; listening (3.20), writing (3.16), pronunciation (3.08), vocabulary (3.05), speaking (2.86), and the lowest is grammar (2.73). The proficiency of the reading skill is categorized as 'good' as it is within the range of 3.40-4.19 and the others are called 'fair' which are within the score range of 2.70-3.39 (Sudijono, 2009, p. 175).

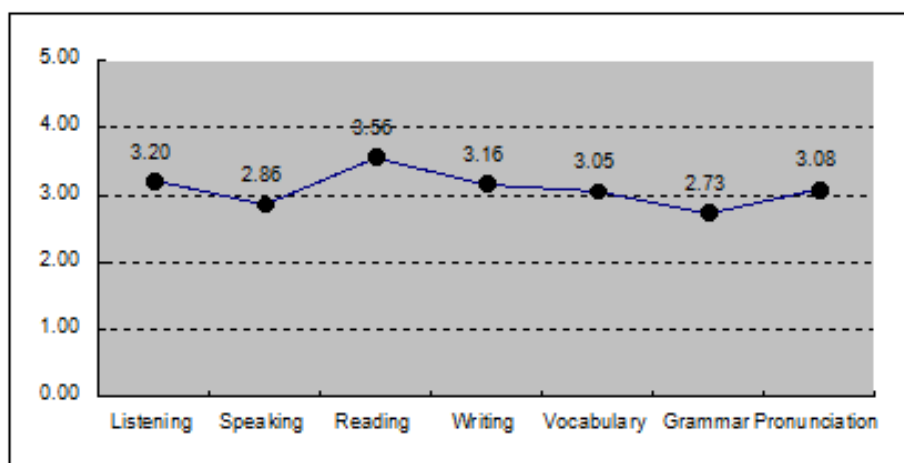


Figure 2. English Language Skills and Features Proficiency

The data of the required English competencies are displayed in the mean score in Table 1, Table 2, Table 3, and Table 4 and perception of effective teaching materials according to respondents is in Table 5. Tables 1 - 4 show the mean score of the response given by all respondents of the close-ended questions using Likert scale with five options, ranging from “totally not needed” to “highly needed”. Based on the criteria adapted from Sudijono (2009, p. 175), 1.00-1.89 means “totally not needed”, 1.90-2.69 is “not needed”, 2.70-3.39 can be interpreted as “fair”, 3.40-4.19 is “needed”, and 4.20-5.00 means “highly needed”.

Table 1. Required English Competencies for Listening Skill

No	Competencies	Response
Listening		
1	Able to generally identify the topic of discussion delivered by native speakers	4.47
2	Able to follow a lecture or talk within his/her own field	4.35
3	Able to catch the main point in short, clear, simple messages and announcement	4.12
4	Able to understand directions	3.86
5	Able to understand and extract the essential information from short recorded passages	4.13
6	Able to identify the main point of TV news items	3.75

The mean score for the listening skill has the highest score of 4.47 and the lowest score is 3.75. Of the six competencies offered, item number 1 with the highest score is “able to generally identify the topic of discussion delivered by native speakers” is said to be “indispensable/highly needed”. Meanwhile, item number 6 with the lowest score (able to identify the main idea of TV news items) is categorized as “needed” competency.

For reading skills, there are eight competencies that come out in the questionnaire. The competencies that has the highest mean score (4.31/”highly needed”) are “to understand basic types of standard routine letters/email (inquiries, orders, letters of confirmation, etc.) on familiar topics” and “to understand regulations (for example safety regulation)”, while the lowest (4.07/”needed”) is “able to understand simple instructions on equipment encountered in everyday life”.

The speaking skill offers 31 competencies. “Able to generally follow changes of topic in formal discussion related to his/her field (e.g. economics and business, electrical engineering, computer, etc)” is a “highly needed” item with a mean score of 4.57. “Able to get all the information needed about travel and tourism” is referred to as 'needed' competence despite having the lowest mean score, which is 3.98.

Table 2. Required English Competencies for Reading Skill

No	Competencies	Response
Reading		
7	Able to understand basic types of standard routine letters/email (inquiries, orders, letters of confirmation etc.) on familiar topics	4.31
8	Able to understand short simple personal letters/emails	4.15
9	Able to find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus, reference lists and timetables	4.16
10	Able to locate specific information in lists/labels	4.09
11	Able to understand everyday signs and notices: in public places, and in workplaces,	4.08
12	Able to identify specific information in simpler written material he/she encounters such as letters, brochures and short newspaper articles describing events	4.14
13	Able to understand regulations (for example safety regulation)	4.31
14	Able to understand simple instructions on equipment encountered in everyday life	4.07

There are five competencies for writing skill. The highest scoring competence is “able to write very simple personal letters expressing thanks and apology”. With a mean score of 4.31, the item can be said to be a “highly needed” competency. The last competency “able to write short poems about people” is deemed “needed” by the respondent because it has a mean score of 3.40.

In general, it can be said that 50% of the overall competencies (25 items) listed in the questionnaire are needed by the respondents in the academic activities and predicted to be needed in their work field. The twenty-five items are dispersed in all four language skills, both receptive and productive, namely listening, reading, speaking, and writing. Meanwhile, another 50% (25 competencies) are considered “highly needed” by the respondents. Therefore, none of the competency is called “fair”, “not needed”, or even “totally not needed” so that there is no item needs to be eliminated. In other words, all these competencies are indispensable to be accommodated in English

learning materials of *Bahasa Inggris I*. This confirms that the level of the 1st semester students is A2 because they assume that the competencies designed based on level A2 (beginner/Basic user) in CEFR (Council of Europe, 2001) is needed and even highly needed. Therefore, the teaching materials should become comprehensible inputs, which is $i+1$ or one level above the learners' proficiency as stated by Lightbown and Spada (2006). By having that concept, the teaching materials will be understood by the learners, as well as enhancing their learning skills.

Table 3. Required English Competencies for Speaking Skill

No	Competencies	Response
	Speaking	
15	Able to maintain a conversation with native speakers on a variety of subjects related to his/her everyday aspect or field of interest	4.55
16	Able to understand and use expressions of greetings and farewells	4.08
17	Able to understand and use expressions of introductions	4.19
18	Able to make and respond to thanks, invitations and apologies	4.30
19	Able to participate in short conversations in routine contexts on topics of interest.	4.40
20	Able to say what he/she likes and dislike	4.03
21	Able to generally identify the topic of discussion around him/her	4.24
22	Able to make and respond to suggestions.	4.52
23	Able to agree and disagree with others	4.33
24	Able to discuss what to do, where to go and make arrangements to meet.	4.52
25	Able to generally follow changes of topic in formal discussion related to his/her field (e.g. economics and business, electrical engineering, computer, etc)	4.57
26	Able to exchange relevant information and give his/her opinion on practical problems	4.51
27	Able to say what he/she thinks about things when addressed directly in a formal meeting	4.55
28	Able to understand enough to manage simple, routine tasks	4.24
29	Able to discuss what to do next, in solving a simple problem or everyday routines.	4.30
30	Able to ask for and give direction and instruction	4.25
31	Able to communicate to ask for and get information about everyday routines	4.44
32	Able to cope and deal with common aspects of everyday living such as travel, lodgings, eating and shopping (e.g. ordering a meal, ordering a taxi, hotel check in/check out, purchasing goods and bargaining a price, etc.)	4.41
33	Able to get all the information needed about travel and tourism.	3.98
34	Able to ask for and provide everyday goods and services.	4.04
35	Able to give and receive information about quantities, numbers, prices etc	4.15
36	Able to exchange information about recent issues, habits and routines, pastimes and past activities	4.33
37	Able to exchange information about activities in a work environment, free time and personal information.	4.35
38	Able to communicate ideas and information on familiar topics in an interview	4.47
39	Able to describe briefly present and past events and also present and past activities	4.19
40	Able to describe personal experiences.	4.13
41	Able to describe possessions and compare objects	4.09
42	Able to describe everyday aspects of his/her environment e.g. personal information, people, family, job or study experience in simple terms	4.10
43	Able to briefly give reasons and explanations for opinions, plans and actions.	4.33
44	Able to deliver very short, rehearsed announcements	4.11
45	Able to answer straightforward follow up questions on a delivered presentation	4.50

The final section of the questionnaire consists of closed-ended questions with Likert scale on the perception of effective teaching materials. The section is aimed at finding out the expected aspects of English language teaching materials to achieve the intended learning outcomes.

Table 4. Required English Competencies for Writing Skill

No	Competencies	Response
Writing		
46	Able to write very simple personal letters expressing thanks and apology	4.31
47	Able to write short and simple message (in form of notes or written interaction) on a variety of subjects related to his/her everyday aspect or field of interest	4.11
48	Able to write short, simple, free composition about everyday aspects of his/her environment e.g. people, places, events, past activities and personal experiences or his/her topics of interest in linked sentences	4.03
49	Able to write short, simple imaginary biographies about people	3.88
50	Able to write short poems about people	3.40

Table 5. Perception of Good Teaching Materials

No	Criteria	Response
Content		
1	The contents are relevant with the learned subject	4.50
2	The topics are interesting	4.54
3	The topics are up-to-date and relevant to global needs	4.65
4	The learning materials are authentic (original)	4.46
Sequence		
5	The materials are arranged sequentially from easy to difficult	4.32
6	The exercises are arranged in a sequence starting from the guided to free exercise	4.42
Exercises		
7	The instructions of exercises are easy to understand	4.62
8	The content of exercises can be understood	4.47
9	The types of exercises are various	4.59
10	The types of exercises are interesting	4.16
11	The types of exercises are challenging	4.73
12	The types of exercises can train all four skills (listening, speaking, reading, writing)	4.41
Language Features		
13	There are vocabulary lists	4.41
14	There are useful phrases (expressions) that help increase language proficiency	4.49
15	There are grammar sections related to usage / material context	4.47
Technology		
16	The teaching material is involving the use of other learning media (audio and video)	4.54
Layout		
17	The design of the teaching material is attractive	4.48
18	There are illustrations (pictures, tables, graphs, etc.) of the material/explanation	4.47
19	The font type and font size can be read easily	4.39
Price		
20	The price of teaching materials is affordable	4.55

Table 5 illustrates the perception of effective teaching materials according to the respondents. The criteria of the teaching materials are divided into several aspects: content, order, practice, language features, technology, layout, and price. The respondents' perception is expressed in the options on the Likert scale. The descriptors of the mean score range are "totally insignificant" (1.00-1.89), "insignificant" (1.90-2.69), "fair" (2.70-3.39), "significant" (3.40-4.19), and "very significant" (4.20-5.00) (adapted from Sudijono, 2009, p. 175).

Of the 20 criteria offered in those seven aspects, 19 criteria are considered "very significant". The respondents consider that "challenging exercises" is paramount to them. This criterion is followed by "up-to-date topics/relevant to global needs" also considered very important. Besides, Triyono (2016, p. 356) states that academic institutions need to adjust the teaching materials with the competencies required by the industry. In addition to these two criteria, "easy-to-understand instruction" is the next criterion a teaching material should have. The mean scores of those three criteria are 4.73, 4.65, and 4.62 respectively. Moreover, from the findings, students also consider

varied exercises, varied teaching media, and interesting topics very important to be in a teaching material. This is in line with the findings of needs analysis by Hamid et al. (2017, p. 153) showing that students need interesting topics as well as active learning process with different types of exercises or activities in their module to increase learning outcomes. In addition to the criteria aforementioned, the other listed criteria are important to be considered in developing teaching materials, especially for *Bahasa Inggris I*, with the lowest mean score of 4.16. By looking at these scores, all the criteria in Table 5 are significant and even very significant for the teaching materials development for *Bahasa Inggris I* at the Vocational College UGM. In addition to data from the questionnaires distributed to the students, there are also data from interview with all (13) heads of applied bachelor programs of Vocational College UGM in 2019-2020. However, there were two heads of the study program that have not been successfully interviewed due to health problem and the leader turnover period. Interview results with 11 heads of study program are summarized as follows.

Learning Outcomes

The learning outcomes formulated by most study programs (from major to less prioritized) are that the students can: (1) communicate in general and workplace context actively and passively, (2) analyze communication results for a specific purpose, (3) do presentation in particular field of study, (4) write a simple report, (5) comprehend text related to particular field of study, (6) understand basic grammar, (7) understand specific terms of particular field of study, (8) obtain certain score in TEVocS, and (9) obtain certain score in general proficiency tests (IELTS/TOEFL/TOEIC).

Communication Skills

Communication skills expected by the program managers are: (1) basic communication in general and work context with co-workers, clients, or vendors, (2) communication to capture the client's needs and analyze it, (3) communication through discussion, (4) communication through presentation, (5) written communication by making a report, (6) written communication through business correspondence, (7) understanding communication ethics, (8) understanding a specific job code of ethics, and (9) communication through academic writing.

Focused Language Skills

The language skills becoming the study program's focus are active skills: speaking and writing, considered crucial since the learning outcomes brought by heads of study programs focus on communication, while students' proficiency in both skills (Figure 2) is still rated "fair". However, other skills and language features such as reading, listening, grammar and vocabulary mastery, and confidence to communicate orally also need to be developed to produce comprehensive outcomes.

Learning Process, Constraints, and Solutions

In its implementation, *Bahasa Inggris I* in most study programs are handled by teachers from English Program. Nevertheless, there are obstacles faced by the study programs, like (1) the shortage of lecturers, (2) the large class size, (3) limited number of classrooms, (4) no adequate language laboratory available, (5) less qualified sound system in classrooms, (6) differences in general terms with specific field terms, (7) limited number of native speakers, (8) lack of courage and confidence to speak or convey ideas/opinions in English, and (9) low TEVocS score of a few students.

The solutions applied to overcome those constraints are (1) in some study programs, *Bahasa Inggris I* is handled by their own lecturers (non-English program lecturers), (2) utilizing the existing classrooms and facilities, (3) utilizing information and communication technology, (4) providing English literature for non-English courses, (5) inviting guest practitioners/lecturers experts in a specific field, (6) inviting expert lecturers (from other countries) in a special program with study programs to have public lectures, (7) encouraging students to join student exchange program, competitions, exhibitions, conferences, (8) providing supplementary materials for TEVocS preparation.

In addition to solutions, there are also plans that can be applied in order to improve the quality of *Bahasa Inggris I*, such as (1) conducting English language tutorials for certain fields, (2) conducting English Day/English Club, (3) conducting English proficiency test for the admission of new students, (4) making classes more effective by reducing the number of students for each English class, (5) encouraging non-English lecturers to use English in their classes, and (6) proposing a program that enables students from other study programs to take an English course at the English Program.

Graduate Working Area

The working field of the graduate from the 13 study programs are varied. They are archive, medical record field and health information, economics, banking, accounting, property, mechanical engineering, construction, software, internet/network, and electrical engineering.

The Role of English Competency and Skills in Supporting the Curriculum and Graduate Performances

The afore-mentioned English competencies and skills are able to (1) support active communication with many parties, (2) help the students/graduates understand English-language literature, (3) support the preparation of professional certification conducted in English, (4) support the preparation of competitions in English, (5) support internet-based lectures with English materials, (6) support in doing presentation, and (7) support in providing services. In general, the study programs target that the students can communicate in English in academic and workplace context after taking *Bahasa Inggris I*. This reflects the theory of language competency in which the students should use the language for wide range of communication purposes (Nunan, 2001; Renandya et al., 2018).

CONCLUSION

The needs analysis done results in information about the level of English proficiency of the students, learning outcomes or competencies that must be attained by students through *Bahasa Inggris I* course, students' perception about effective learning materials, the learning outcomes, the expected communication skills, and language skills required by the institution. This study leads the writers to move forward to the next study about designing the blueprint of the learning materials.

REFERENCES

- Bachman, L. F. (1990). *Fundamental considerations in language testing*. Oxford University Press.
- Broughton, G., Brumfit, C., Flavell, R., Pincas, A., & Hill, P. (2003). *Teaching English as a foreign language* (2nd ed.). Routledge.
- Canale, M. (1983). From communicative competence to communicative language pedagogy. In Jack C. Richards & R. W. Schmidt (Eds.), *Language and communication* (pp. 1–47). Routledge.
- Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1(1), 1–47. <https://doi.org/10.1093/applin/I.1.1>
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Council of Europe. <https://rm.coe.int/168045b15e>
- Dooley, P. (2010). Students' perspectives of an EAP pathway program. *Journal of English for Academic Purposes*, 9(3), 184–197. <https://doi.org/10.1016/j.jeap.2010.02.013>
- Driscoll, A., & Wood, S. (2007). *Developing outcomes-based assessment for learner-centered education: A faculty introduction*. Stylus Publishing.

- Educational Testing Service. (2012). *TOEFL ITP - CEFR executive summary update with section scores*. ETS Global. <https://www.etsglobal.org/content/download/1413/24826/version/4/file/TOEFL+ITP+CEFR+executive+summary+update+with+section+scores.pdf>
- Hamid, M. A., Aribowo, D., & Desmira, D. (2017). Development of learning modules of basic electronics-based problem solving in Vocational Secondary School. *Jurnal Pendidikan Vokasi*, 7(2), 149–157. <https://doi.org/10.21831/jpv.v7i2.12986>
- Huang, L.-S. (2010). Seeing eye to eye? The academic writing needs of graduate and undergraduate students from students' and instructors' perspectives. *Language Teaching Research*, 14(4), 517–539. <https://doi.org/10.1177/1362168810375372>
- Hymes, D. H. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics: Selected readings* (pp. 269–293). Penguin.
- Lambert, C. (2010). A task-based needs analysis: Putting principles into practice. *Language Teaching Research*, 14(1), 99–112. <https://doi.org/10.1177/1362168809346520>
- Li, J. (2014). Needs analysis: An effective way in business English curriculum design. *Theory and Practice in Language Studies*, 4(9), 1869–1874. <https://doi.org/10.4304/tpls.4.9.1869-1874>
- Lightbown, P. M., & Spada, N. (2006). *How languages are learned* (2nd ed.). Oxford University Press.
- Litz, D. R. A. (2001). Textbook evaluation and ELT management: A South Korean case study. *The Asian EFL Journal*, 1–53. <https://www.asian-efl-journal.com/thesis/textbook-evaluation-and-elt-management-a-south-korean-case-study/>
- Llurda, E. (2000). On competence, proficiency, and communicative language ability. *International Journal of Applied Linguistics*, 10(1), 85–96. <https://doi.org/10.1111/j.1473-4192.2000.tb00141.x>
- Long, M. H. (2005). *Second language needs analysis*. Cambridge University Press.
- Looney, J. (2008). *Teaching, learning and assessment for adults: Improving foundation skills*. Organization for Economic Cooperation and Development (OECD).
- Nunan, D. (2001). Second language acquisition. In R. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (4th ed., pp. 87–92). Cambridge University Press. <https://doi.org/10.1017/CBO9780511667206.013>
- Poedjiastutie, D., & Oliver, R. (2017). English learning needs of ESP learners: Exploring stakeholder perceptions at an Indonesian University. *TEFLIN Journal*, 28(1), 1–21. <https://doi.org/10.15639/teflinjournal.v28i1/1-21>
- Renandya, W. A., Hamied, F. A., & Joko, N. (2018). English language proficiency in Indonesia: Issues and prospects. *The Journal of AsiaTEFL*, 15(3), 618–629. <https://doi.org/10.18823/asiatefl.2018.15.3.4.618>
- Richards, J. C. (2001). *Curriculum design in language teaching*. Cambridge University Press.
- Stoller, F. L., Horn, B., Grabe, W., & Robinson, M. S. (2006). Evaluative review in materials development. *Journal of English for Academic Purposes*, 5(3), 174–192. <https://doi.org/10.1016/j.jeap.2006.07.003>
- Sudijono, A. (2009). *Pengantar statistik pendidikan*. Rajawali Pers.
- Triyono, M. B. (2016). Pengembangan isi kurikulum pendidikan teknik alat berat berbasis kebutuhan industri. *Jurnal Pendidikan Vokasi*, 6(3), 355–363. <https://doi.org/10.21831/jpv.v6i3.12159>
- Zohoorian, Z. (2015). A needs analysis approach: An investigation of needs in an EAP context. *Theory and Practice in Language Studies*, 5(1), 58–65. <https://doi.org/10.17507/tpls.0501.07>