

NEEDS ANALYSIS-BASED ENGLISH SYLLABUS FOR COMPUTER SCIENCE STUDENTS OF BINA DARMA UNIVERSITY

Ira Septiana

*English Education Department, Faculty of Teacher Training and Education,
Sriwijaya University, Indonesia*
Email: iraseptiana733@gmail.com

Ismail Petrus

*English Education Department, Faculty of Teacher Training and Education,
Sriwijaya University, Indonesia*
Email: ismailpetrus@yahoo.com

Rita Inderawati (Corresponding Author)

*Department of English Language Education, Faculty of Teacher Training and Education,
Sriwijaya University, Indonesia*
E-mail: rita_inderawati@fkip.unsri.ac.id

APA Citation: Septiana, I., Petrus, I., & Inderawati, R. (2020). Needs analysis-based English syllabus for computer science students of Bina Darma University. *English Review: Journal of English Education*, 8(2), 299-310. doi: 10.25134/erjee.v8i2.3027.

Received: 21-01-2020

Accepted: 27-03-2020

Published: 01-06-2020

Abstract: This study aims to design an appropriate English syllabus for computer science students of Bina Darma University. This study analyzes the needs of students using Target Situation Analysis (TSA), Deficiency Analysis (DA), and Strategy Analysis (SA). Descriptive analysis approach method is used in this study. There were 61 students in the second semester of Bina Darma Palembang majoring in computers, 1 lecturer and director of the institute involved in this study. Data were collected obtained from questionnaires, interview, observation, and documents review. The results show that the target needs are speaking and writing skill. The two language basic skills get a large portion in the preparation of the English syllabus. In addition, students need a learning process to focus more on practice than theory. The learning process also needs to be integrated with technology to make classroom activities more interesting. Finally, this study proposes a syllabus that is recommended to use in the institution.

Keywords: *need analysis; course framework; teaching materials; computer science; English syllabus.*

INTRODUCTION

Designing appropriate syllabus of English for Specific Purposes (ESP) which is based on need analysis is extremely demanded. English syllabus for special purposes that is well designed and able to meet the needs of its students is of concern to many academies in many countries. Because the learning process of English will not run smoothly and successfully if it is not supported by a convincing syllabus. Studies about this issue have been conducted by Javid and Zahid (2013), Zahra and Ali (2015), Badruddin (2015), Yusnita (2016), Fareen (2017), Belinda (2017), Murphy (2018), Sartika, Puspita and Imranuddin (2018), Wu and Lou (2018) and Muhammad and Raof (2019).

Javid and Zahid (2013) confirmed that ESP is still as a major concern of English teacher around the world. ESP courses are likely to be designed for adult learners but may be organized for learners at the secondary school level. However,

Zahra and Ali (2015) and Murphy (2018) warned that a well-written syllabus could provide a doorway into the pedagogical beliefs of the teacher, it is a well-written description: a plan about what to be included in the course for the learning objectives.

A study was conducted by Badruddin (2015) confirmed that students' language needs include language skills and learning preferences. This research reveals that of the three language skills, reading is often used and learning through listening and speaking were mostly preferred by students. In line with this, Yusnita (2016) explored needs analysis through discussing the principles of material design and reading strategies, discussing work agreements, syllabi, reading material, and using sample lessons. needs analysis is obtained after exploring information about what knowledge and skills are needed as a basis for developing the course framework and teaching materials. Likewise, about class

activities and climate what is needed by students. Yusnita (2016, p. 28) asserted that: "This course framework contained general points of reading themes and topics, information of classroom activities that followed up reading, the length of study session, the number of the course meetings, and the number of participants. The course framework became the basis to write the syllabus. Finally, the syllabus became the basis for designing reading materials".

Incorporation syllabus and cultural aspect is very important to be noted. About this, Fareen (2017) firmed that English teachers should incorporate cultural elements in their syllabus on metadata materials to prepare learning materials that are suitable for students 'needs and to develop students' awareness of these linguistic features. This is what Belinda (2017) warned that syllabus is concerned with the specification and planning of what is to be learned. However, syllabus is a series of planning materials to be studied by students. But a good, precise and effective syllabus can only be designed based on students' needs.

A research on communicative English syllabus conducted by Sartika, Puspita and Imranuddin (2018) revealed that speaking skills are the most needed aspects of hospitality students in Bengkulu when compared to other language skills (reading, listening and writing). This needs mapping is the basis for preparing a syllabus according to their needs. Therefore, communicative English syllabus based on the results of this study must provide a large language exposure for students. The syllabus has to be designed based on communicative an approach that emphasizes communication and real life situations. Syllabus based the communicative approach will help students use language as a tool communication on every aspect working conditions at the hotel in order to improve their language skills when they interact with hotel customers. Undoubtedly, needs analysis is the basis for English teachers to design a course framework and syllabus that is relevant to the needs of their students. A good syllabus that really makes the needs of students as the main reference for the preparation of teaching materials (Wu and Lou, 2018).

Muhammad and Raof (2019) analyzed the English language needs of engineering students studying at Saudi universities and to identify what academic assignments they often need. Participants' perceptions of task targets were compared and examined to see if there were

significant differences between groups based on department specialization or year of study. In all, 27 assignments were identified as being most often performed by undergraduate students in all engineering departments at the university. This finding also revealed significant differences in undergraduate responses at the four study levels. This finding suggests incorporating these tasks into the current ESP syllabus that is tailored to the immediate needs of engineering graduates.

From various studies on the design of the English syllabus for special needs emerged that the analysis of student needs became the main reference and basis for course framework. Analysis of student needs is certainly diverse in various educational institutions and regions so that requires a different syllabus design approach according to their individual needs. Identifying various types of student needs and analyzing them are simultaneous activities that must be carried out by English teachers so that they find the right patterns in designing syllabi. From previous research also emerged that there has been no research that specifically examines the needs analysis of students of the Faculty of Computer, Bina Darma University, Palembang

METHOD

Research site and participants

This study is conducted at Bina Darma University concentrating on second semester with - A accreditation. This study analyzes the needs of students using Target Situation Analysis (TSA), Deficiency Analysis (DA), and Strategy Analysis (SA). This University was considered as the field of study due to its easy accessibility. Another reason was the urgency of having the specific English syllabus which is compatible with ESP approach. Here, the researcher focused on third semester students. The consideration to choose third semester students is suggested by the head master from this institution due to their unavailability of English syllabus and his consideration to make third semester students as the starting point for having needs-analysis syllabus design. Therefore, the focus of this study was the Computer majoring.

According to the first study was conducted by Wu & Lou (2018) of Yangtze University. The purposes of the study were to depict the existence conditions of the present English Course; to find out the students need and the faculty expectations on the English course through need analysis, and to propose a better English course design based on the need analysis.

The research participants for this study second- year students of Computer Science Department of University of Bina Darma Palembang and one teacher of English who teach computer expertise program and three classes that consist of 61 second - semester students of computer program.

Triangulation

Triangulation is an attempt or map out, or more fully, the richness and complexity plain of human behavior by studying it from more than one stand point (Huang, 2018). Furthermore, for an overall improvement in the quality of the result needs analysis, the best approach is triangulation of sources and methods (Hotham, Vogt, & Tulkki, 2013). There are four basic types of triangulation proposed by Ngulube and Ngulube (2015) i.e.: data triangulation, investigator triangulation, theory triangulation and methodological triangulation.

Data collection

To collect the data, the researcher used four instruments. The instruments included questionnaire, interview, observation and document review. Needs analysis questionnaire are distributed to the students in the classroom to find out the target needs and learning needs. The questionnaire format is adapted from Wu and Lou (2018) and the questions were adopted from Dewi and Amri (2019). which had been developed referred to the theory of needs assessment proposed by Wu and Lou (2018). Thus, the questionnaire was made up appropriate with the learners involved. There were altogether 34 questions in the questionnaire: 6 items for students' profile, 4 items for the Target Situation Analysis, 20 items for the Present Situation Analysis, 1 item for Deficiency Analysis, and 3 items for Strategy Analysis, the questions were in Indonesia language in order to each the students to answer the questions.

Interview is one of research methods that is used to collect the data needed based on the purpose of a study (Astuti and Lammers, 2017). In line with that, defines interview as a dialogue between interviewers who wants to gather information from interviewer. Kumar (2018) classifies the interview data process into: unstructured open-ended interview, semi structured interview and focus group interviews, the three interview models chosen because it is possible for researchers to receive broad answers and unexpected answers that could be developed

There two forms of interview guides in this study, one is administered to the teacher of

English who teach second - semester students of computer program expertise area and the other is administered to the director from this institution through unstructured open-ended interview. The interview questions are translated into Indonesian language in order to ease the interviewer in answering the questions. The interview results were recorded by using voice recorder and then transcribed descriptively.

Through observation, researchers will investigate classroom settings and teaching and learning activities in English in the third semester computer program expertise class at Bina Darma University Palembang. (Turner, 2015; Cardinal, 2015; Burton, 2015). states that observations observe the behavior of people in certain situations to obtain information about a phenomenon.

Observations will be focused on classroom settings and teaching and learning processes to help answer research questions number 2. Observations are conducted one day in three classes for 60 students in the second semester. During observations, researchers take field notes about class facilities and infrastructure as well as the process teaching and learning to obtain additional information and/or verify data obtained from questionnaires and interviews.

Documents review belongs to gathering information activity through some documents such as books, daily reports, and etc. The documents review was taken to support the primary data. In this study, the researcher reviewed the syllabus and lesson plan used by the teacher of English. The focus was on the contents and organization, and the approach.

Data Analysis

This research will be used descriptive qualitative data to answer research questions 1 and 2, the researcher administered the needs analysis questionnaire to the students in order to find out their target needs and learning needs. Needs analysis theory had been reviewed and compared to the data collected from questionnaire, interview, observation, and documents review. Then, the results of needs analysis were used to design and propose the English syllabus which was the research questions 3.

In data collection process, the researcher will used questionnaire result as the primary data. In order to answer the first and second research questions on the students' target and learning needs, the questionnaire data had been obtained from four subcategories of needs analysis i.e. Target Situation Analysis (TSA). Present

Situation Analysis (PSA), Deficiency Analysis (DA), and Strategy Analysis (SA) (Appendix A). Target needs were discovered from PSA, TSA, and DA, meanwhile learning needs were discovered from SA. Then, the students' questionnaires were analyzed quantitatively by using frequencies in data tabulation and percentages for each item of questionnaire. The highest percentage of the answers of each question is considered representing students' needs. The tables are used to display the results. Then, the data results were presented descriptively.

The interview is based on interview guide. The participants for this interview are the teacher of English and the Director of institution of University of Bina Darma Palembang the Director of institution of University of Bina Darma Palembang. The interview session for the teachers of English is expected to find out the students pre-learning situation, present situation, and future situation and the learning process which is implied. Thus, the interview session for the Rector and Director of curriculum was aimed to dig the stakeholders' hope and expectation in producing skillful and knowledgeable graduates from University of Bina Darma Palembang. The interview will be recorded by using voice recorder and then it will be transcribed descriptively in order to strengthen the questionnaire results.

In order to obtain any supporting information for questionnaire and interview results, observation technique is conducted. The direct-observation is done in this technique. The researcher will take some pictures and wrote notes (field-note taking) during the study. The notes had been written soon after leaving the classroom. The notes were divided into two sessions, descriptive information and reflective information.

The descriptive information included all the factual data that is being recorded, i.e. time and date, the physical setting, social environment and the descriptions of the subject and object being studied and their roles. The reflective information includes the observer's reflections about the observation, i.e. ideas, questions, concerns, and other related thought (Beaudoin, 2017). The first point observed was about classroom setting and the second point observed was about teaching and learning process. In observing the classroom setting, the researched focus on its physical condition. Moreover, the researcher observed the teaching and learning process in order to see the

alignment among the process and the syllabus and lesson plan. After obtaining the results, then it was transcribed descriptively.

The documents that had been reviewed and described by the researcher were syllabus used by the teacher. The researcher will be tried to analyzed the components contained in the syllabus to the universities guidance and also reviewed the lesson plan created by the teacher based on syllabus. Those documents are obtained from University of Bina Darma Palembang and will support the data obtained from the other instruments.

RESULTS AND DISCUSSION

Based on the result of Needs Analysis questionnaire that was given to the students. The questionnaire was divided into five sections (Rahman. M, 2015). The first section consisted of students' profiles, second section was Target Situation Analysis (TSA), third section was Present Situation Analysis (PSA), fourth section was Deficiency Analysis (DA), and the last section was Strategy Analysis (SA). Those analyses analyze students' target needs and learning needs at Computer majoring students University, especially Information System Study Program (S1) and Informatics Engineering (S1) second semester students. The descriptions of the needs analysis are presented below.

Students' profiles

The data collected from this section were students' name, age, school, grade, and expertise program. There were 48 students from Information System Study Program (S1) semester 2, and Informatics Engineering students (S1) semester 2 were 12 students. Based on the profile filled by students in the questionnaire following the division of students based on the genre.

Target situation analysis (TSA)

This part presents students' general intentions in learning English, students expectation of their English proficiency level and mastery in the target situation, and students' English necessity for their future work. There are four questions that represent those aspects which are shown

In summary, the results of questionnaire related to the theory Wu and Lou (2018). formulated that the framework of analysis of TSA's most famous needs. TSA refers to the tasks and activities undertaken by the learners / will use English for the target situation revealed that the student' necessities toward learning English were to communicate fluently to foreigners,

clients/guests, and colleagues for present time to future form to others. Therefore, to assist the necessities of the students, being familiar with computer term and able to use grammar correctly would also useful to support their career in the computer skills area, as the consequence, these facts should be considered by the teacher of English and the stakeholders to accommodate it properly.

Presents situation analysis (PSA)

There are twelve data information that can be obtained from present situation Analysis (PSA). The information was about student's current proficiency level of English, desired speaking input, length of text for speaking, speaking topic, desired reading input, length of text for reading, reading topic desired writing input, length of text for writing, and writing topic. Besides, the data obtained were also about student's preference learning activities, speaking, reading, writing, pronunciation, vocabulary, and grammar.

In summary concluded that analyzes the Present Situation Analysis (PSA) related to the theory (Xing, 2018) described that the PSA (Analysis of the Present Situation) attempt to determine what students are doing at the beginning of their language courses, see their strengths and weaknesses. From the results of questionnaires, it can be concluded that the input of learning for listening, speaking, reading and writing skills is dominated by computer problems for learning topics. Therefore, students prefer a variety of activities for each skill.

Deficiency analysis (DA)

This part presents students' language skills and aspect difficulties that had been analyzed through deficiency analysis (DA). There were eight choices provided in the questionnaire about students' language skills and aspects difficulties. The choices were; listening, speaking, reading, writing, vocabulary, grammar, and pronunciation.

Table 1. *Students' language skills and aspects difficulties*

No	Question Item	Respondent	Percentage
1	Students' difficultties of language skills and aspect		
	Listening	36	59,1%
	Speaking	15	24,6%
	Grammar	8	13,1%
	Pronunciation	6	9,83%
	Reading	4	6,6%
	Vocabulary	3	4,9%
	Writing	2	3,3%
	Etc	3	4,9%

Based on the results above, related the theory from Wu and Lou (2018). In the model, needs analysis consists of two parts: target situation needs and learning needs. Target needs include "necessities", "lacks" and "wants". "Necessities" are determined by the demand of the target situation. They are the necessary needs that enable the learner to use effectively in the target situation. "Lacks" are the gap between "necessities" and what the learner already knows, that is the existing proficiency of the learners. "Wants" are learners' subjective needs, which has no direct relationship between the objective needs perceived by the teachers and course designers. Learning needs, on the other hand, are how learners learn the language. It can be summarized from the theory and result questionnaire that the students considered themselves having difficulties in almost all of the language, but all of the that English lesson is still regarded as difficult for the students. Therefore, the teacher of English should

make an innovative learning to engage the students in the classroom.

Strategy analysis (SA)

This part presents students' preferred ways of learning and students' point of view towards teacher's role in teaching and learning process. The information gathered from three question in the questionnaire drew the strategy analysis (SA) required by the students. The first data obtained from the SA was about classroom arrangement to complete the task, individual work, park work, or group work.

In short, the data collected from these questions shows students 'classroom management preferences, student learning style preferences, and students' expectations about the teacher's role. Somehow, the results of the analysis help the course designer, lecturer, or teacher to make the course / class more interesting, enjoyable, and effective for teaching and learning processes related to theory According to Chandra (2015), class management has two different objectives:

"This not only strives to build and maintain an orderly environment so that students can engage in meaningful academic learning, but also aims to enhance students' social and moral growth ". it can be concluded that in the classroom the teacher should always get his focus from the students so that learning will run successfully

Overall, the result of needs analysis questionnaire above was made to design syllabus together with the results of interview, observation, and document review.

In this study, two interviewers were involved in order to support the data obtained from the questionnaire. The interviewers were the teacher of English of second semester of computer majoring and the Director of institution of University. Therefore, to keep the interviewees anonymous, initials would be used in presenting the information source.

In this study, the researcher had reviewed two documents; syllabus and lesson plan. These documents were taken from Bina Darma University. Those documents which were obtained showed that the content provided were not in details and suitable for computer expertise program. The syllabus observed had no specific content related to computer area. It was also portrayed on the lesson plan made by the teacher which contained general English not specific English. The core competences and basic competences in the syllabus were taken specifically of each unit considering the majors in which students enroll for. It described only the learning materials in which the teacher could convey the materials. The materials, therefore, could be adopted for any students' majors. As the consequence, the lesson plan which is derived from the syllabus had no significant different related to the materials and the learning process.

After the data had been analyzed and triangulated, the target needs were derived from necessities, lacks, and wants obtained from the four data sources. The necessities for the students included language aspects and language skills which need to be mastered by the students i.e. speaking and listening. The details of speaking skill were conversation with the computer field. Then the details of listening skill were understood what the colleagues said and the partners said about computer field. For the language aspect the data showed that there were two language aspects which were needed by the students i.e. pronunciation and grammar. Based on the results of students' questionnaire and the interview session, it could be concluded that the specialized

pronoun ions about computers content was needed. Therefore, mastering grammar which could help the language skills and aspect implementation was also needed.

The lacks of the students which were obtained from the data information concerned on difficulties and weaknesses. As the results of the data analysis, it was obviously seen that the students were lack of speaking and writing skills. The results of students' questionnaire also revealed that their lack of language aspect was also on vocabulary and grammar. This fact was also supported by the interview results with the teacher of English that the students were lack of vocabulary. Indeed, the lack of speaking and writing skills of students was affected by their lack of English term and grammar mastery. Therefore, the students needed to be treated by having more practices in the learning process.

Besides the necessities, the other thing which is needed to be accommodated is the learners' wants. From the questionnaire results, it was revealed that the students' personal reason to learn English was too able to communicate with foreigners. However, these students want would be accommodated since it was correlated to their necessities. Then, although the students had chosen their priorities of language skills, the students still would like to have four language skills taught based on their wants. Unfortunately, due to time limitation, the researcher composed the syllabus by having speaking and writing as the dominant skills to be taught and could not accomplished students' want to also have listened and reading.

In addition to target needs, the data also provide information for the learning needs. The needs contained information such as mode, learning activities, practice, media, students' role, and teacher's role. The learning needs are somehow related to 'route' which is needs to go from 'lacks' or starting point to 'necessities' or destination. The modes used were oral and written. The learning activities applied were dialogue, role play, arrange jumbled sentences form sentences, correcting incorrect sentence structure and punctuation, highlighting discussing content, and composing text. For the language aspect, vocabulary task and grammar task were given to the students. The practices in the syllabus were based on practice-based learning, ICT-based learning, and pair/group discussion. The media used were the facilities such as laptop/computer, LCD, and audio visual aid which were provided in the language laboratory which can be used in

the classroom' role. The students would like to have pair/group discussion to do task or solve problems in learning process. The teacher' role in the learning process which was preferred by students was as guide and facilitator.

Table 2. *Target needs and learning needs*

Target Needs	
Necessities	
Language skills	<ul style="list-style-type: none"> • Speaking (asking, describing, giving question in orally) • Writing (how to write email, note, proposal ...etc.)
Language aspect	<ul style="list-style-type: none"> • Specialized vocabulary (computer) • Grammar
Lacks	
Language skills	<ul style="list-style-type: none"> • Speaking • Writing
Language aspect	<ul style="list-style-type: none"> • Vocabulary • Grammar
Wants	
Language skills	<ul style="list-style-type: none"> • Speaking (Dialogue practicing related to computer topic) • Writing (Example text of computer topic) • Listening (Dialogue with picture of computer topic)
Mode	
	<ul style="list-style-type: none"> • Oral • Written
Learning activities	
	<ul style="list-style-type: none"> • Dialogue • Arranging jumbled sentences • Correcting incorrect sentence structure and punctuation • Highlighting discussion content • Composing text
Practice	
	<ul style="list-style-type: none"> • Practice-based learning • ICT-based learning • Pair/group discussion
Media	
	<ul style="list-style-type: none"> • Laptop • LCD • Audio visual
Students' role	<ul style="list-style-type: none"> • Pair/group discussion to do task or solve problems
Teachers' role	<ul style="list-style-type: none"> • As tutor • As facilitator

Proposed syllabus design

This proposed syllabus design followed the results of target needs and learning needs obtained from the field. Therefore, the researcher also compromised the teacher of English and the director of institution. The details are started from rationale, aims and objectives, teaching method, teaching materials, assessment, and teaching media.

Rationale

The syllabus was for computer major students Bina Darma University Palembang. The class was English for Occupational Purposes (EOP) which focused on speaking and writing and furnished with vocabulary and grammar. This concept was suitable with absolute characteristics and variable characteristics mentioned by Wu. J & Lou. Y (2018). The students categorized as basic English learner who needed basic grammar and

specialized vocabulary so it could help them improving speaking and writing skills (oral and written). Therefore, every meeting always focuses on grammar, vocabulary, writing, and speaking. Based on the analysis, the students wanted to have all four language skills taught, yet the researcher could not accomplish the students' wants due to time limitation. Hopefully, the students were able to reach the aims of the teaching and learning process by following the syllabus which had been designed through needs analysis.

Aims and objectives

This part explains the aims and objectives of the English teaching and learning of computer major. In general, the aims of the students at the end of learning process are to:

1. Improve students' ability to be fluent in oral written communication

2. Enrich students' ability to master vocabulary related to computer content
3. Comprehend basic grammar and its language function for real conversation at class and future job later.

The objectives of the course were formulated as shown below.

Speaking:

The students are able to form sentences for

- Greeting and self-introduction
- Describing job
- Describing computer hardware
- Asking and giving information about solving customer service problems

Writing:

1. The students are able to
 - Reply to the email about introduce yourself and three people in your group
 - Write a job description
 - Write an email about comparing product
 - Write sentence about comparing software
 - Write a report
2. The students are able to arrange or compose sentences into good paragraph

Vocabulary:

1. The students are able to increase and understand vocabulary related to their expertise program: jobs, computer, websites, database, networking, reporting
2. The students are able to apply the vocabulary use into real situation

3. The students are able to form sentences by using the vocabulary taught

Grammar:

1. The students are able to understand basic grammar structures
 - Tenses
 - Schedules
 - Superlatives
 - Question words (5W+1H)
 - Linking ideas

Teaching method

Based on the results of the analysis in the field, the students were interested in having a lot of practices in the classroom. Since the class was based on practice-based learning, the methods used were dialogue practicing and role playing to increase speaking skill and the methods used for increasing writing skill were fun learning methods include arranging jumbled sentences, correcting incorrect sentence structure and punctuation, highlighting discussion content, and composing text to make the learning process interesting. ICT-based learning was applied for teaching and learning process which allowed the teacher to deliver the lesson through media such as laptop, LCD, and audio-visual aid. Therefore, pair/group discussion were implemented in teaching and learning process based on students' choice from questionnaire results.

Teaching Materials

Table 3. *Teaching materials incorporates meeting, theme and learning focus*

MEETING	THEME	LEARNING FOCUS		
		Speaking	Grammar	Writing and vocabulary
1	Meeting people	Introducing yourself and others "How do you greet people in your country? What do you say when you greet people in English?"	Present tense of <i>be</i> "I'm Natasha, nice to meet you."	Introductions personal questions
2	Jobs in IT	Describing your job "List the IT jobs you know"	Present Simple "What do you do? I am a programmer."	Jobs
3	Schedules	Describing your daily routine and times "What time does it start/begin/finish/end"	Schedules What time does it start?	Routines Times
4	Spelling	Using the alphabet List the IT acronyms you know.	What does WWW stand for? How do you spell that?	IT acronyms The alphabet
5	EXERCISE AND REVIEW			
6	Computer hardware	Describing hardware	computer Comparatives That monitor is	Computer hardware

			“Make a list of all the computer hardware you use in your work or study. “	<i>bigger than mine.</i>	
7	Computer software	Describing computer software	“Make a list of all the computer software you use in your work or study. “	Superlatives That <i>software is the easiest to use.</i> Present tense of <i>have(got) We've got the best software</i>	Computer software
8	Working with computers	Describing tasks	“Listen and complete this dialogue “	Present continuous <i>Are you installing it now?</i>	Computer tasks
9	Computer usage	Understanding computer usage	“Make a list of computer usage where you work or study “	<i>must, mustn't, can, can't, don't have to I must update my files</i>	Computer usage
10	UTS				
11	Website purpose	Talking about websites	“Which websites do you use in your working study? Make a list and share it with a partner. Do you use the same sites? “	Question words (1) <i>Which websites do you visit?</i>	Purpose of websites
12	Website analytics	Getting information about websites	“What information can you get about website traffic using a website analysis application? Work in pairs. Make a list. “	Question words (2) <i>How many people visit our website?</i>	Website analysis tools
13	Website development	Developing a website	“Describe something you do every day at home or at work. “	Large Number Describing steps in a process <i>After that...</i>	Functions of a website Features of a website
14	The best websites	Talking about your favorite websites	“What are your favorite websites? Why?”	Describing things <i>There are a lot of photos on this website</i>	Adjectives
15	REVIEW				
16	UAS				

Assessment

The formative and summative assessments were used to assess students' learning results. The formative assessment was done every meeting to know whether or not the students accomplished the learning objectives, or in other word to know students' progress after the meeting. The test was dialogue practicing, role playing, fill in the blank text, multiple choice, and composing text. In the

end of the semester, the summative assessment would be given in order to see the students' whole achievement after the class is started.

Teaching media

The main teaching media preference is written/printed materials. Therefore, based on the observation results, the language laboratory can be used for learning process. So, the teaching

media that can be used are written/printed materials, laptop, LCD, and audio visual aid.

CONCLUSION

Designing an English syllabus requires careful analysis of student needs. Careful identification of students' needs is the first step for English teachers to design what knowledge and skills are needed. This includes what activities are expected and needed to improve students' academic abilities. The course framework and organically-built syllabus will certainly be very useful in the learning process in class.

REFERENCES

- Alsamadani, H. A. (2017). Needs analysis in ESP Context: Saudi engineering students as a case study. *Advances in Language and Literary Studies*, 8(1), 58-68.
- Astuti, P., & Lammers, J. (2017). Individual accountability in cooperative learning: more opportunities to produce spoken English. *Indonesian Journal of Applied Linguistics*, 7(1), 215-228. doi:<https://doi.org/10.17509/ijal.v7i1.6878>
- Badruddin, D. (2015). Developing a task-based syllabus based on needs analysis for midwifery at UIN Salauddin Makassar. *English, Teaching, Learning and Research Journal*, 1(1), 112-130.
- Beaudoin, A. (2017). *Book review: Field Notes on Science and Nature by Michael R. Canfield*. Canadian Field Naturalist.
- Belinda, H. (2017). Dealing with the English communication difficulties faced by computer science students during their internship. *Journal of Research in Humanities and Social Science*. 2(6), 47-50.
- Chandra, R. (2015). Classroom management for effective teaching. *International Journal of Education and Psychological Research (IJEPR)*. 4(4). 13-15
- Chen, I. J., Chang, Y. H., & Chang, W. H. (2016). I learn what i need: Needs analysis of English learning in Taiwan. *Universal Journal of Educational Research*, 4(1), 1-5. doi:10.13189/ujer.2016.040101.
- Dewi, R., & Amri, Z. (2019). An analysis of culinary art vocational students' needs in learning English at the public vocational high school 9 Padang. *Journal of English Language Teaching*, 8(4). 504-514
- Dong, X. (2016). Research on the Teaching Methods of College English. *Creative Education*, 7, 1233-1236. doi: [10.4236/ce.2016.79129](https://doi.org/10.4236/ce.2016.79129).
- Dudley, E., St. John in Javid, & Choudhary, Z. (2013). English for Specific Purposes: Its Definition, Characteristics, Scope, and Purpose. *European Journal of Scientific Research*, Vol. 112(1), p. 138-151.
- Evertson, C. M., & Weinstein, C. S. (2006). Classroom management as a field of inquiry. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (p. 3-16). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fareen, J. A. M. (2017). English for placement purposes: Developing a needs based course for meeting the employment demands of IT industries. *Eurasian Journal of Applied Linguistics*, 3(1), 49-66.
- Huang, X. (2018). The effectiveness of needs analysis informing ESP syllabus design. *Journal of Education, Society and Behavioural Science*, 28(3), 1-7, DOI: 10.9734/JESBS/2018/46327.
- Kaharuddin, A. & Yassi, A. (2015). *Syllabus design for english language teaching*. Yogyakarta: Indonesia Trust Media Publishing.
- Kumar, H. (2018). Qualitative research methodology in social sciences and related subjects in Bangladesh. *Journal of Economic Development, Environment and People*, 7(1), 23-48.
- Mohammed, A. S. E., & Nur, H. S. M. (2018). Needs analysis in english for academic purposes: The case of teaching assistants at the University of Khartoum. *HOW*, 25(1), 49-68.
- Mohammed, S. A. H. (2016). Investigating the application of needs analysis on EAP business administration materials. *English Language Teaching* 9(1), 74-79.
- Muhammad, I & Raof, A. B. A. (2019). *Assessing the ESP needs of Saudi engineering undergraduates: A diagnostic view*. *Arab World English Journal*, 10(4), 204-222.
- Murphy, R. S. (2018). The concept of syllabus design and curriculum development: A look at five major syllabus designs. In A. Faravani, M. Zeraatpishe, M. Azarnoosh, & H. R. Kargozari (Eds.), *Issues in Syllabus Design* (Vol. 6, p. 1). Rotterdam.
- Nafissi, Z., Rezaeipanah, F., & Monsefi, R. (2017). Pre and post test evaluations of students in the needs-analysis based EAP course at undergraduate level. *Advances in Language and Literary Studies*, 8(1) 207-214.
- Ngulube, P., & Ngulube, B. (2015). Mixed methods research in The South African Journal of Economic and Management Sciences: An investigation of trends in the literature. *South African Journal of Economic and Management Sciences*, 18(1), p.1-13.
- Rahman, M. (2015). English for specific purposes (ESP): A holistic review. *Universal Journal of Educational Research*, 3(1), p.24-31.
- Sari, F. (2019). The issues of ESP instruction for university level in Indonesia. *Global Expert Jurnal Bahasa dan Sastra*, 7(1), 1-6.
- Sartika, AA. Puspita, H., Imranuddin. (2018). Model of communicative English syllabus for students of hotel department at SMKN 7 Bengkulu. *Journal of English Education and Teaching*, 2(1), 1-12.

- Turner, Scott & Cardinal, Laura & Burton, Richard. (2015). Research design for mixed methods: a triangulation-based framework and roadmap. *Organizational Research Methods*, 20. 10.1177/1094428115610808.
- Whitehead, D., & Whitehead, L. (2016). Sampling data and data collection in qualitative research.
- Wu, J. and Lou, Y. (2018) Needs Analysis of Chinese Chemical Engineering and Technology Undergraduate Students in Yangtze University in English for Specific Purposes. *Creative Education*, 9, 2592-2603. doi: [10.4236/ce.2018.915195](https://doi.org/10.4236/ce.2018.915195).
- Xing, H. (2018) Language Teaching Research Based on Applied Linguistics Theory. *Open Journal of Social Sciences*, 6, p. 340-348. doi: [10.4236/jss.2018.612029](https://doi.org/10.4236/jss.2018.612029).
- Ye, X. (2018). The Need Analysis of English for Students in International Trade Major and the Proposed Strategies—A Case Study in Two Application-Oriented Universities of Fujian Province. *Journal of Southwest Jiaotong University (Social Sciences)*, 19, p.9-17.
- Yu, Z. G., & Fu, L. P. (2015). Demand analyzing and course setting of english for academic purpose of postgraduates from science and engineering disciplines. *College English Teaching and Research*, 78(1) 70-75.
- Yusnita, D. (2016). Designing reading materials for the faculty of social and political sciences at UIN Syarif Hidayatullah Jakarta. *Indonesian Journal of English Education*, 2(1), 28-45.
- Zahra, B., & Ali, T. (2015). Syllabus design and needs analysis of students in educational system. *Department of Foreign Languages and Linguistic*. Australia: Australian international Academic Centre, 6, p.163-165.
- Zhen, C. H., Cao, F. L., Guo, S. F., Zhang, H. Y., & Yang, S. S. (2015). EGAP Need of Graduate Students in Medical Universities. *Journal of Bengbu Medical College*, 40, p.814-816.
- Zohoorian, Z. (2015). A needs analysis approach: An investigation of needs in an EAP context. *Theory and Practice in Language Studies*, Vol. 5(1), p. 58-65. Retrieved May 12, 2018.

Ira Septiana, Ismail Petrus, & Rita Inderawati

Needs analysis-based English syllabus for computer science students of Bina Darma University