ENGLISH NEEDS OF ARCHITECTURAL ENGINEERING STUDENTS AT A PRIVATE UNIVERSITY IN BANDUNG

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ABSTRAK

Penelitian ini menyelidiki kebutuhan Bahasa Inggris mahasiswa arsitek dan mendesain sebuah silabus yang mampu memenuhi kebutuhan berdasarkan hasil penelitian kebutuhan siswa. Penelitian ini mengambil tempat di sebuah universitas swasta di Bandung dengan merekrut sejumlah mahasiswa, alumni yang bekerja di bidang arsitektur, seorang dosen Bahasa Inggris dan kepala program studi jurusan arsitek. Data dikumpulkan dengan cara penyebaran kuesioner dan melakukan wawancara. Hasil penelitian menunjukkan bahwa keterampilan berbicara dan membaca merupakan dua keterampilan yang paling dibutukan oleh mahasiswa di tempat kerja mereka nanti. Berdasarkan hasil analisis kebutuhan, maka dirancanglah dan diusulkan sebuah silabus yang berbasis English Special Purpose untuk memenuhi kebutuhan Bahasa Inggris mahasiswa arsitek di universitas tersebut.

Kata kunci: bahasa inggris untuk arsitek, ESP, silabus berbasis ESP, analisis kebutuhan

ABSTRACT

This study investigated what students of the architectural engineering department need in English and design the suitable syllabus based on the students' needs analysis results. This study was performed at Architecture Engineering Department at one private university in Bandung by recruiting architecture students, alumni who are currently working in architecture field, an English lecturer and the Head Department of Architecture Engineering Department. The data was gathered by distributing questionnaires and semi-structured interview. The result showed that reading and speaking are the two skills most needed by architecture students at their future workplace. Based on the result, an ESP-based syllabus was designed and proposed to meet the needs of architecture students.

Keywords: *English for architects, ESP, ESP-based syllabus, needs analysis*

Introduction

Language and communication skills have been some of the main concerns of higher education students. Students of higher education are expected to be ready for the real world in their field of work in terms of skills related to their field of work

such as reading or writing emails, reports, manuals or instruction and communication skills such as doing meetings or teleconferences and giving presentations to colleagues and clients. Students of higher education also need to have enough English knowledge the get information from kinds of sources, in which most of them are written in English. English is one of the major languages in the world that students will often meet during their study and in their future workplace. It plays an essential role as the predominant tool for communication in the global community. English as the language of global communication is being looked on as one of the most useful subjects in the curriculum.

Students should be provided with not only proper knowledge but also skills in general situation (daily activities) and specific situation (work activities). It is believed that in this era of globalization, students need to master more work related and specific English skills which will help them survive in their future workplace.

ESP is understood as preparing learners to use English within academic, professional, or workplace environments as well as a key feature of ESP course design that the syllabus developed based on the analysis of the needs of the students

(Basturkmen, 2008). It is in accordance with Hutchinson and Waters (1987) that in ESP, English is taught to meet the English needs in area specialization. The needs in area of specialization are worth considering since the language we speak and write varies from one context and another. Therefore, it is essential to design the proper syllabus as one of the efforts in constructing a good education practice.

Specific area of English needs specific syllabus that will be used in designing specific language instruction in the teaching of ESP courses. Kusni (2013) stated that in Indonesia, both ESP course designs at vocational schools and universities are problematic issues. Theoretically, the subjects should be an ESP subject but in reality it is an English for general purpose. However, as the result of preliminary study and based on informal talks with one of the lecturers of architectural engineering department and the head of the department in one university in Bandung, it was inferred that the place she teaches did not and does not analyze what students need before developing the ongoing English syllabus. Whereas, it is essential to know what students need in order to know what teachers will teach. This gap motivates the

researcher to conduct a study in order to come with a solution.

The syllabus of ESP teaching is commonly based on the analysis of what students need. Needs analysis is a cyclical procedure in curriculum development. The results of needs analysis will be useful in identifying general or specific language needs that can be addressed in developing goals, objectives and content for a language program. Needs analysis can result a specific syllabus which can help teachers and facilitators in preparing materials by collecting information from various sources. In addition, by having a clear and proper syllabus, the institution will have a clear and steady description of the course.

Initially, ESP emerged due to the demand of the international world dominated by two forces – technology and commerce – (Hutchinson & Waters, 1987). Today, the situation is similar in which ESP must be able to meet what the present and future goals of the course demanded by the institutions and the students. The study therefore will seek answer to the following questions:

1. What are the English for Specific Purposes needs of Architecture Engineering students?

2. What type of English for Specific Purposes syllabus can be provided to fulfill the needs of Architecture Engineering students?

Methods

This study investigated the English needed by students in the context of architecture engineering program, and what type of English syllabus meets the students' needs in the area of English for Specific Purposes by recruiting different participants (students, alumni, and lecturers) to gain information.

1. Research Instrument

The present research used questionnaires and interview as the instruments to collect the data as the principal tools for doing needs analysis. The collected data was about the analysis of needs of English at an Architecture Engineering program in Bandung. The questionnaires used a modified version of needs analysis questionnaire proposed by Gravatt, Richards, and Lewis (1997, as cited in Richards, 2001:80-88), Jordan (1997), and Saefullah (2013) as they are already validated and published. The questionnaires were distributed to students and alumni as stated in the first research question. A semi-structured interview was given to the lecturers/English instructors

and the head of architecture department in order to obtain more information of English role and position in the department and how essential is English for the students.

2. Data Collection Process

Likert Scale questionnaires were distributed to the students and alumni to obtain information about the learners in terms of students' personal information, students' lack of skills, students' language learning, information of the course environment in which students will study, and to find out the students' needs in their future job. An English instructor and the Head of Architecture Department were given semi – structured interview analyze the existing / on-going English syllabus used by the institution.

Results and Discussion

The data in this study were obtained from thirty five questionnaires from the students of Architecture Engineering Department, interview with the Head Department of Architecture Engineering Department and interview with one of the English lecturers at ITENAS Bandung. The writer also provided the questionnaires answered by the students, the original excerpts of transcripts which occurred during the interview with the Head

Department of Architecture Engineering Department and the English lecturer.

1. The Student Needs

The students' needs cover the information on general information about the learners, the importance of English in the present during study, the importance of English in the future workplace, the people whom students will likely interact with using English, the level of students' proficiency in English, students' difficulty in learning English skills, listening, speaking, reading, writing, participants' preference in English teaching and students' preference of teaching and learning activities. Hutchinson and Waters (1987) divided needs analysis into two areas; target situation needs analysis and learning needs analysis.

2. Target Situation Needs

The participants are students of Architecture Engineering Departments in their 7th semester between the age of 20 and 23 years old. The participants were 39 in total with 22 male students (56.4%) and 17 female students (43.5%). The findings of needs survey are based on the data gathered from three different instruments covering (1) questionnaires for active students of Architecture Engineering, (2) open-ended questions for alumni of Architecture Engineering, and (3)

interview for an English lecturer and the Head Department of Architecture Engineering Department.

Necessities are needs determined by the demands of the target situation; it is what learners have to know in order to function effectively in the target situation. The data from the students' questionnaire regarding how important English is for them are as follow in Table 1.

Table 1. General information about the importance of English at Work

No	The Importance of English at Work	Frequency	%
1	Very Important	30	77%
2	Important	9	23%
3	Less Important	-	-
4	Not Important	-	-
	Total	39	100%

Table 1 show that most students, namely 30 students (77%), believe that English is very important and 9 students (23%) believe that English is or going to be important for their future work. Some of the students believe that English will be vital in future communication with foreign clients or companies, that they will use English in seminars, and to compete with other future architects from abroad.

Table 2 shows most participants agree that English will be useful for the future work place. 35 students (90.15%) agreed that reading is useful at workplace while 4 students (9.85%) did not agree that reading is useful. In writing, 32 (82%) students believed that writing is useful for workplace while 7 students (18%) did not. Most of the students believe that writing skill is useful mainly in designing and preparing presentation slides since they probably will have projects to do, and then they also felt that English will help them in writing proposals, abstracts and correspondence. 36 students believed that English will be useful when they have to give presentations.

Table 2. The Use of English at Future Workplace

No	Use of English	Useful		Not Useful	
		Freq	%	Freq	%
1.	- Reading research journals/abstracts	33	84.6%	6	15.4%
	- Reading architecture literature	**38**	**97.4%**	1	2.6%
	- Reading manuals	33	84.6%	6	15.4%
	- Reading project documents	35	89.7%	4	10.3%
	- Reading instructions	33	84.6%	6	15.4%
	- Reading from sites or mails (the Internet)	**39**	**100%**	-	-
	Average		90.15%		9.85%
2	- Writing research journals/ abstracts	35	89.7%	4	10.3%
	- Writing research/cooperation proposals	**36**	**92.3%**	3	7.7%
	- Writing e-mails	**36**	**92.3%**	3	7.7%

	- Writing weekly/monthly reports	28	71.8%	11	28.2%
	- Writing business/personal letters/ CV	34	87.2%	5	12.8%
	- Taking notes during meetings	22	56.4%	17	43.6%
	- Designing presentation slides	**37**	**94.8%**	2	5.2%
	- Taking notes during lectures	28	71.8%	11	28.2%
	Average		82%		18%
3	- Giving presentations (competitions/projects)	**36**	**92.3%**	3	7.7%
	- Attending meetings/seminars	33	84.6%	6	15.4%
	- Communicating via telephone	32	82%	7	18%
	- Communicating via teleconference	28	71.8%	11	28.2%
	- Communicating formally/informally	**34**	**87.2%**	5	12.8%
	- Communicating in college/at work	32	82%	7	18%
	Average		83.3%		16.7%
4	- Listening to instructions/advice	34	87.2%	5	12.8%
	- Listening to lectures	29	74.3%	10	25.7%
	- Listening to presenters in seminars	35	89.7%	4	10.3%
	- Listening to materials from audio/video	**39**	**100%**	-	-
	Average		87.8%		12.2%

In presentation, there will be many kinds of communication involved such as, delivering presentation, explaining slides, pictures and tables, and giving and answering questions. The students also believed that they will need English to communicate formally or informally with their surroundings in the future.

Finally, 34 students (87.8%) agreed that listening is useful in college while 5 students (12.2%) did not share the same opinion. Listening is important in understanding lectures for those who are planning to continue their study, improving knowledge by listening to presentations in seminars, listening to instruction/advice from their colleagues, superiors, or clients and understanding any information given from video or audio only. Apparently, English is considered very useful for their future workplace which makes it essential and beneficial to learn. By mastering English, students aim to be excellent professionals who can compete internationally.

As expected, Table 3 shows that at their future workplace there were some participants who stated that they will use English very often to communicate with people around them. There are 3 participants (7.7%) said that they will often use English with their superiors, 5 participants (12.8%) said that they will often use English with their co-workers, and 9 participants (23.1%) said that they will often use English with clients. Most of the participants will often use English with their superiors and clients, however they

will seldom use English with their co-workers. Most students never use English with clients may be caused by most clients during internship are locals or the students never do any internship.

Knowing what learners know, do not know and need to know is very important in finding out what the learners lack in which will help the course to be more specific and focused since that is how ESP should be in terms of target audience (Basturkmen, 2010). In designing the proposed syllabus, specific skills will be one of fundamental considerations to which skill(s) the learning experiences will focus on. Therefore, specific skills needed have to be identified before designing the syllabus content.

Table 3. People whom students will use English with at Future Workplace

No		Never		Seldom		Often		Very Often	
		Freq	**Perc**	**Freq**	**Perc**	**Freq**	**Perc**	**Freq**	**Perc**
1	Superior	4	10.3%	15	38.5%	17	43.5%	3	7.7%
2	Co-workers	5	12.8%	16	41.1%	13	33.3%	5	12.8%
3	Clients	3	7.7%	9	23.1%	18	46.1%	9	23.1%

Table 4 is about students' difficulty in learning Speaking skill. The data show that 20 students (71.8%) stated that pronouncing certain sound is not difficult while the other 11 students (28%) stated that it is quite difficult. Pronouncing certain words is not difficult to 25 students (64.1%) but for the other 14 students (35.9%) it is quite difficult. In mastering the topic being discussed, 13 students (33.3%) stated that they have no difficulties in doing that, but the rest 25 students (64.2%) state that it is quite difficult for them and it is difficult for 1 student (2.5%). 14 students stated that using vocabulary is not difficult, while 22 students (56.4%) felt that it is quite difficult and 3 students (7.7%) stated that it is difficult. Only 4 students (10.3%) who have no difficulties in producing well-structured sentences, while 27 students (69.2%) stated that it is quite difficult for them and 8 students (20.5%) think it is difficult. Speaking systematically and fluently is not difficult for 5 students (12.8%), but for 21 students (53.9%) it is quite difficult and it is difficult for 13 students (33.3%). Lastly, 9 students (23%) have no difficulties in using transition words (in conclusion, however, etc.) correctly, though for 26 students (66.7%) it can be quite difficult and for the rest 4 students (10.3%) it is difficult. Overall, the majority of the students (64.1%) find difficulties in speaking.

Table 4. Students' Difficulty in Learning English Speaking Skill

No	When speaking in English, I have difficulties in:	Not Difficult		Quite Difficult		Difficult	
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
1	Pronouncing certain sound	28	71.8%	11	28.2%	-	-
2	Pronouncing certain words	25	64.1%	14	35.9%	-	-
3	Mastering the topic discussed	13	33.3%	25	64.2%	1	2.5%
4	Using Vocabulary	14	35.9%	22	56.4%	3	7.7%
5	Producing well-structured sentences	4	10.3%	27	69.2%	8	20.5%
6	Speaking systematically and fluently	5	12.8%	21	53.9%	13	33.3%
7	Using transition words (in conclusion, however, etc.) correctly	9	23%	26	66.7%	4	10.3%
8	Others: - Having a discussion with serious topic - Choosing the right word						
	Average		35.9%		53.5%		10.6%

Table 5 is about students' difficulty in learning Listening skill. The data show that 12 students (30.8%) stated that recognizing/identifying certain sound is not difficult while the other 26 students (66.7%) stated that it is quite difficult and 1 student (2.5%) state that it is difficult. Understanding main topic is not difficult to 19 students (48.7%) but for the other 20 students (51.3%) it is quite difficult. In understanding vocabulary, 16 students (41%%) stated that they have no difficulties in doing that, but the rest 22 students (56.5%) stated that it is quite difficult for them and it is difficult for 1 student (2.5%). 7 students (17.9%) stated that understanding sentence structure is not difficult, while 26 students (66.7%) felt that it is quite difficult and 6 students (15.4%) stated that it is difficult. Only 3 students (7.7%) who have no difficulties in processing lengthy explanation, while 29 students (74.4%) stated that it is quite difficult for them and 7 students (17.9%) think it is difficult. Recognizing transition words (in conclusion, however, etc.) is not difficult for 18 students (46.2%), but for 17 students (43.5%) it is quite difficult and it is difficult for 4 students (10.3%). Lastly, 13 students (33.3%) have no difficulties in understanding specific information, though for 21 students (53.9%) it can be quite difficult and for the rest 5 students (12.8%) it is difficult. Overall, the majority of the students (70.7%) find difficulties in listening.

Table 5. Students' Difficulty in Learning English Listening Skill

No	When listening in English, I have difficulties in:	Not Difficult		Quite Difficult		Difficult	
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
1	Recognizing/identifying certain sound	12	30.8%	26	66.7%	1	2.5%
2	Understanding main topic	19	48.7%	20	51.3%	-	-
3	Understanding vocabulary	16	41%	22	56.5%	1	2.5%
4	Understanding sentence structure	7	17.9%	26	66.7%	6	15.4%
5	Processing lengthy explanation	3	7.7%	29	74.4%	7	17.9%
6	Recognizing transition words (in conclusion, however, etc.)	18	46.2%	17	43.5%	4	10.3%
7	Understanding specific information	13	33.3%	21	53.9%	5	12.8%
8	Others: - Similar sounds - Unclear sounds - Fast-paced talk						
	Average		29.3%		61.9%		8.8%

Table 6 is about students' difficulty in learning reading skill. The data show that 33 students (84.6%) stated that understanding main ideas is not difficult while the other 6 students (15.4%) stated that it is quite difficult. Understanding vocabulary is not difficult to 24 students (61.5%) but for the other 14 students (36%) it is quite difficult and 1 student (2.5%) stated that it is difficult. In understanding sentence structure, 19 students (48.7%%) stated that they have no difficulties in doing that, but the rest 19 students (48.7%) stated that it is quite difficult for them and it is difficult for 1 student (2.5%). 20 students (51.3%) stated that Finding specific information is not difficult, while 19 students (48.7%) felt that it is quite difficult. There are 28 students (71.8%) who have no difficulties in drawing conclusion from information, while 10 students (25.7%) stated that it is quite difficult for them and 1 student (2.5%) thinks it is difficult. Overall, the majority of the students (63.6%) do no find difficulties in reading.

Table 6. Students' Difficulty in Learning English Reading Skill

No	When reading in English, I have difficulties in:	Not Difficult		Quite Difficult		Difficult	
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
1	Understanding main ideas	33	84.6%	6	15.4%	-	-
2	Understanding vocabulary	24	61.5%	14	36%	1	2.5%
3	Understanding sentence structure	19	48.7%	19	48.7%	1	2.5%

No		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
4	Finding specific information	20	51.3%	19	48.7%	-	-
5	Drawing conclusion from information	28	71.8%	10	25.7%	1	2.5%
	Average		63.6%		34.9%		1.5%

Table 7. Students' Difficulty in Learning English Writing Skill

No	When writing in English, I have difficulties in:	Not Difficult		Quite Difficult		Difficult	
		Freq.	Perc.	Freq.	Perc.	Freq.	Perc.
1	Putting ideas into sentences	14	36%	22	56.4%	3	7.7%
2	Using vocabulary	18	46.2%	19	48.7%	2	5.1%
3	Using sentence structure correctly	7	17.9%	25	64.1%	7	17.9%
4	Using grammar and punctuation well	16	41%	20	51.3%	3	7.7%
5	Using transition words (in conclusion, however, etc.)	10	25.7%	27	69.2%	2	5.1%
6	Composing sentences into coherent paragraphs	7	17.9%	25	64.1%	7	17.9%
7	Writing summary, abstract, etc.	8	20.5%	24	61.5%	7	17.9%
	Average		29.4%		59.3%		11.3%

Table 7 is about students' difficulty in learning writing skill. The data show that 14 students (36%) stated that putting ideas into sentences is not difficult while the other 22 students (56.4%) stated that it is quite difficult and 3 students (7.7%) stated that it is difficult. Using vocabulary is not difficult to 18 students (46.2%) but for the other 19 students (48.7%) it is quite difficult and for 2 students (5.1%) are difficult. In using sentence structure correctly, 7 students (17.9%) stated that they have no difficulties in doing that, but the rest 25 students (64.1%) stated that it is quite difficult for them and it is difficult for 7 students (17.9%). 16 students (41%) stated that using grammar and punctuation well is not difficult, while 20 students (51.3%) felt that it is quite difficult and 3 students (7.7%) stated that it is difficult. Only 10 students (25.7%) who have no difficulties in using transition words (in conclusion, however, etc.), while 27 students (69.2%) stated that it is quite difficult for them and 2 students (5.1%) think it is difficult. Composing sentences into coherent paragraphs is not difficult for 7 students (17.9%), but for 25 students (64.1%) it is quite difficult and it is difficult for 7 students (17.9%). Lastly, 8 students (20.5%) have no difficulties in writing summary, abstract, etc., though for 24 students (61.5%) it can be quite difficult and for the rest 7 students (17.9%) it is difficult. Overall, the majority of the students (70.6%) find difficulties in writing.

Based on the findings, most architecture students have difficulties in speaking and writing in various conditions. Therefore, the proposed syllabus should also put these conditions into consideration is designing the course and choosing the materials.

Table 8. Participants Preference of English Teaching General Information

Medium of Instruction	Frequency	Percentage
English	7	17.9%
English and Indonesian	29	74.4%
Indonesian	3	7.7%
Study		
Individually	4	10.3%
In small groups	22	56.4%
In large groups	6	15.4%
In pairs	7	17.9%
Time Allotment in a week		
2 hours	9	23%
4 hours	17	43.6%
6 hours	8	20.6%
Others	5	12.8%

Table 8 shows the preference of the participants in learning English. The first is how they prefer the lessons to be delivered in the classroom. 29 students (74.4%) prefer the English teaching to be taught in both English and Indonesian. The rest 7 students (17.9%) prefer to have the English lesson taught fully in English while 3 students (7.7%) prefer to be fully in Indonesian. As for the methods in learning, the majority of students (65.4%) prefer to study in small groups. They feel they can learn the best in the company of their fellow learners. The rest of the students have their own different preference, 4 students (10.3%) prefer to study individually, 6 students (15.4%) prefer to study in large groups, and 7 students (17.9%) prefer to study in pairs. Lastly, the students were asked about the time allotment they prefer to have in a week. The majority of students which consists of 17 students (43.6%) prefer to have 4 hours in a week to learn English, while 9 students (23%) prefer 2 hours, 8 students (20.6%) prefer 6 hours, and 5 students (12.8%) prefer others (1 hour, 8 hours). From the table, the majority of students (74.4%) prefer the lesson to be delivered in English and Indonesian, and 22 students (56.4%) prefer to study in small groups, and 17 students (43.6%) prefer to study for 4 hours in a week.

Table 9. Students' Preference on English Teaching Activity

No	Teaching Activity	Un important		Less Important		Important		Very Important		Essential	
		F	%	F	%	F	%	F.	%	F	%
1	Practicing with vocabulary pronunciation	2	5.1	2	5.1	5	12.8	11	28.2	19	48.7

2	Performing conversation	1	2.6	-	-	6	15.4	11	28.2	21	53.8
3	Giving presentation	1	2.6	2	5.1	13	33.3	12	30.7	11	28.2
4	Practicing teleconference	2	5.1	4	10.3	17	43.6	11	28.2	5	12.8
5	Watching Videos	2	5.1	2	5.1	10	25.6	10	25.6	15	38.5
6	Listening to Audios	1	2.6	1	2.6	10	25.6	17	43.6	10	25.6
7	Practicing reading strategy	2	5.1	4	10.3	11	28.2	11	28.2	11	28.2
8	Answering essay questions from texts	2	5.1	3	7.7	20	51.3	5	12.8	9	23.1
9	Answering multiple choice questions from texts	2	5.1	4	10.3	19	48.7	8	20.5	6	15.4
10	Practicing writing (abstracts, e-mails, CV, reports, etc.)	1	2.6	-	-	10	25.6	13	33.3	15	38.5
11	Making presentation slides	1	2.6	6	15.4	12	30.7	9	23.1	11	28.2
12	Translating texts Indonesian - English	2	5.1	1	2.6	8	20.5	16	41	12	30.7
13	Translating texts English - Indonesian	2	5.1	1	2.6	11	28.2	14	35.9	12	30.7
	Average		4.1		5.9		30		29.2		31

Table 9 shows that most students prefer to practice with vocabulary pronunciation, perform conversation to practice their confidence in speaking, listen to audio to practice their listening, translate Indonesian texts into English texts, and lastly, answering multiple choice questions from texts.

Based on the results of needs analysis above, most of the students prefer learning in small groups, with the medium instruction in both English and Indonesian. Most students also stated that they need about 4 hours to learn English in a week. Practicing with vocabulary pronunciation, performing conversation, listening to audios, translating Indonesian texts into English texts, answering essay questions from texts, and answering multiple choice questions from texts will be considered as the main contents of teaching and learning activities based on the results of the above needs analysis.

3. The Alumni's Needs

The participants gave valuable data as professionals who actually know what English language skill(s) they really need. 8 alumni (89%) stated that they have to have the ability to give presentations, which was followed by 7 alumni (78%) who mentioned that they need to read instructions, 6 alumni (67%) stated that they often read e-mails, 5 alumni (57%) stated that they need to listen instruction, write e-mails, and write reports in English. Based on the data gathered, 8 alumni (89%) stated speaking is the most important skill, 6 alumni (67%) stated that

reading is the second most important skill while writing and listening came in last.

4. Lecturer's opinion on Students' Needs

The lecturer explained how students of Architecture Engineering actually need a specific English course which will help them ready to face and survive in their future workplace. The English course the students get is General English which probably will not help them much in the real work situation.

5. The head of department's opinion on Students' Needs

The head of department's opinion on students' needs is about finding out more based on another perception. The analysis on the interview transcript answers this question. The result of the interview aims to support the data from the students' questionnaires in order to obtain more understanding about the students' needs of English as architecture students.

In order to triangulate the data which was obtained from students' questionnaires, alumni's open-ended questions, and an interview with an English lecturer, another interview was conducted in order to get better information about the needs of English both in the present and in the future as architecture students. The head department stated that the most needed skill(s) are reading and speaking.

Therefore, it is clear that the two language skills that are needed the most by architecture students are reading and speaking. Since head of department is one of the sources of information on needs analysis, this statement will be used in formulating the learning objectives in the syllabus. Because the information above is from the head department herself, it is a legal reason for syllabus designer to use the information as the reason to design the proposed syllabus.

For reading, it is better to choose specific topics related to architecture. It will help them understand architectural terms within related topics. Besides reading and speaking skills, the students also need to know and understand specific terms used in architecture.

After analyzing and classifying the questionnaires into some topics, there are some conclusions that can be classified into several areas. They need English mostly for reading architecture literature and also sources from the Internet, and giving presentation and communicating with clients, co-workers and superiors. They also need English to read research journals/abstracts, read architecture literature, read manuals, read project

documents, read instructions, read from sites or mails (the Internet), write research journals/ abstracts, write research/cooperation proposals, write e-mails, write weekly/monthly reports, write business/personal letters/ CV, design presentation slides, take notes during lectures, give presentations (competitions/projects), attend meetings/seminars, communicate via telephone, communicate via teleconference, communicate formally/informally, communicate in college/at work, listen to instructions/advice, listen to lectures, listen to presenters in seminars, listen to materials from audio/video.

In order to become architects with good English knowledge and skills, students must be able to perform all the macro skills; speaking, reading, listening and writing. The portion and the urgency of each skill will vary. Based on the data, reading and speaking are the most necessary skills for an architect. However, most of the students have difficulties in speaking systematically and fluently and also in using transition words which is basically a problem in communicating ideas well. While in reading, some students have small difficulties in finding specific information and understanding sentence structure. Students need to learn the strategy to overcome these difficulties. These difficulties are also important elements needed to be considered in the proposed syllabus.

After determining the areas of difficulty, i.e. the students' needs, the next step was to state the statements about goals and objectives of the course from the gathered information. Goals refer to the general purposes for which a language is being learned (Richards, 2001 & Nunan, 2004). Identifying the learning goals, according to Nunan (2004), is an important step in the developmental process of language program. In this study, the goals and objectives from the gathered information can be derived through examining each area of difficulty and specifying the required skills and knowledge such as understanding the specialist vocabulary, reading text for understanding the main points, sentence structuring, etc. The following objectives were identified for an ESP course for the students of Architecture.

The course should enable the students to:

1) Deducing meaning and understanding the meaning of unknown words through using word formation knowledge and context clues;

2) Identifying the topic;

3) Identifying the main idea (stated, implied) ;

4) Noticing the details;

5) Getting the general point of the text through rapid reading (skimming) ;

6) Looking for specific information (scanning);

7) Presenting ideas and information in an organized way;

8) Speaking fluently;

9) Using appropriate discourse markers and conjunctions; and

10) Using appropriate terminology

According to the obtained results from the needs analysis questionnaire, the language skills and knowledge needed for Architecture students were mostly reading and speaking in their courses, which can be regarded as dominating skills in their work place. After analyzing the data from different sources and triangulating the results, the proposed syllabus will be an integration of a skill-based syllabus and content-based syllabus. As Brown (1995) stated that skill-based syllabus is used in determining a specific way of defining the content of language teaching or in other words, a specific way of using language which combines structural and functional ability but exists independently of specific settings or situations. In addition, content-based syllabus embraces a range of

communicative competence, which includes grammatical competence, sociolinguistic and discourse competence, and strategic competence along with its relation to academic activities. These become the basics to propose a combined syllabus of skilled-based syllabus and content-based syllabus.

Conclusion

The present study primarily investigated the English needs of undergraduate architecture students based on the data collected from multiple stakeholders. According to the needs analysis performed in this study, speaking and reading were considered as the most important skills to master during students' time as students and in the future when students work as professionals. Based on the result of the needs analysis, a syllabus which combines content-based syllabus and skill-based syllabus is proposed. The proposed syllabus is expected to meet the needs of architecture students. Although speaking and reading skills are prioritized in the course, other skills will also be included implicitly.

Recomendation

It is suggested that architecture students expose themselves to many

sources of English material which will benefit them in many aspects. Students should be prepared to engage real life communications in daily and professional conversation. Therefore, it is important to have basic knowledge of English both macro (speaking, reading, writing, and listening) and micro skills (vocabulary, grammar, etc.). Architecture students should first take General English course as a preparatory program to prepare them before taking a more specific English course.

Finally, this study may provide a sound basis for future curriculum or syllabus renewal projects. However, in order to keep the dynamic nature of English language and students' needs, it is suggested to perform further needs assessment regularly and continuously to update the present condition and situation of students.

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