Investigating Learners' Performance in TOEFL Prior to their Participation in the TOEFL Enhancement Training Program

Ardi Marwan (Corresponding Author),
Anggita and Indah Anjar Reski
The State Polytechnic of Pontianak, Indonesia

Abstract. This study discussed TOEFL need analysis of students and also identified the TOEFL sub-skills which require improvement and their preferred teaching strategies. Twenty-four students from an Indonesian Polytechnic were involved as participants. To examine students' TOEFL scores, a paper-based TOEFL test (practice version) excluding writing was used. The test scores were analyzed to identify students' English proficiency level at the beginning of the project. Then, the results were further analyzed to examine the problematic sub-skills. Next, focus groups were incorporated to examine students' learning preferences. Test results showed that 20 students achieved scores of less than 400 (i.e. only 4 with scores of above 400 but less than 500). These scores implied that all students in this study required further training to improve their TOEFL scores. Findings from test items analysis revealed that students were only good at few sub-skills and still had problems with many others. Results of focus groups suggested that students preferred to be taught using learner-centered teaching approaches. This study, therefore, recommends the development of module and training plans according to the outcomes of this analysis study.

Keywords: Needs analysis, TOEFL, test, performance.

Introduction

This study examines the type of training or referred as sub-skills that students need and the preferred teaching strategies in order to help them achieve higher TOEFL (Test of English as A Foreign Language) scores. It is part of a larger study involving a three-year-long project where its first year is aimed at collecting baseline information or data with regard to students' learning needs and preferred teaching strategies. The second year is used to develop a learning module which is designed according to the information obtained in the needs analysis work. The first cycle of the

treatment or training lasting for 20 weeks will also be carried out in the second year. If the results of TOEFL scores after the training still show no significant improvement, then the second cycle of training will be carried out in the third year.

This article reports the findings attained in the first year of the overall three year project (i.e. analyzing learning needs). This question is worth researching for at least two reasons. Firstly, improving English skills often involves a lengthy process of learning that can even last for many years. It is most unlikely that someone can improve their English proficiency within a short period of time (e.g. in a few months) unless they undergo a very well arranged and effective training program or are exclusively exposed to an English only speaking environment (e.g. undertaking learning in English speaking countries). This research, in its second and third year of implementation, seeks to carry out an intensive training program incorporating teaching strategies that are of students' interest and the module designed according to the results of this current analysis work. We argue that effective training should be accompanied by a well-developed module and effective teaching strategies. Through this couple of months training, students are expected to improve their TOEFL scores significantly. Then, research looking into TOEFL test sub-skills requiring improvement and preferred teaching strategies is still underrepresented in the language testing literature. Most previous studies mainly addressed the issues of items difficulty (e.g., Sung, Lin, & Hung, 2015), factors affecting test performance (e.g., Al-Rawashdeh, 2010; Fahim, Bagherkazemi, & Alemi, 2010; Ling, Powers, & Adler, 2014; Mahmud, 2014), test taking strategies (e.g., Heffernan, 2006), the relationship between a certain variable and TOEFL performance (e.g., Fahim et al., 2010). This study, thus, fills in this gap by presenting information about kinds of sub-skills and teaching strategies that should be taken into consideration in the process of module and teaching strategies development prior to the delivery of the TOEFL training program.

Context of this Study

The polytechnic of this study requires students to demonstrate a certain level of English prior to their graduation and paper-based prediction TOEFL is used as the standard for measuring such performance. To date, various efforts have been undertaken to enable students achieve the required level of English while pursuing their education in this institution. First of all, all new students are obliged to have their English performance assessed and the scores are shown to their English teachers for their record. Teachers are also advised to facilitate learning which enables students achieve better performance in the skills tested in TOEFL.

Second of all, a language unit provides a fee-based TOEFL training for students interested in improving their English. Since it is not a free program, this unit usually has no more than 3 classes to handle in an academic year. So, not all students can benefit from the service. All students, once again, are provided with another TOEFL test prior to the completion of their three-year diploma study.

The training program managed by the language unit is carried out without a process of needs analysis and the use of a well-designed module. Trainers only use TOEFL practice test items found in the commercial books as their teaching handouts. With such a training approach, a success guarantee is difficult to attain and it certainly requires a significant change. This study, therefore, proposes a change through careful work involving the analysis of TOEFL sub-skills that students need

Literature Review

Needs Analysis
Needs analysis or needs assessment is generally defined as activities performed by an individual or a group of individuals aimed to identify areas that require improvement (see Jordan, 1997; Long, 2015; Songhori, 2008; Wai et al., 1999). It "offers value by providing logical and disciplined methods for collecting useful information and making decisions based on that information". This work is often done before any action has been taken" (Watkins, Meiers, & Visser, 2012, p. 2). According to Akyel and Ozek (2010, p. 969) "the answer to how educators or practitioners develop effective curricula often lies in needs analysis". Expressed in a similar fashion, Long (2015, p. 1) argues that in the context of foreign and second language learning, a careful needs analysis is important to be done as it is "the prerequisite for effective course design" (see also Berwick, 1996). In other words, teaching a language without knowing students' learning need will result in inefficient outcome. Grier (2005) mentions needs analysis as a way to identify reliable information about what students need to learn. He suggests that teachers including curriculum developers have to "base their curricular decisions" on the careful process of needs analysis because only through which they can collect valid information about their learners' learning need (p.65)(see also Brown, 1995; Fultcher, 1999; Songhori, 2008).

In the past, within the context of English as a foreign language , needs analysis was mostly done when English was taught for specific purposes (e.g., English for business, Engineering, Science, etc). But today, needs analysis is also crucial for the study of English for general use (Brown, 1995; Songhori, 2008). Songhori argues that "the needs of the learners are

of paramount importance in any language process" (p.22). Needs analysis is also often associated with efforts to identify areas in which students are still lacking. This analysis process usually results in students' current language ability and identification of strategies used to reach the expected ability or outcome (Jordan, 1997).

Brown (1995) asserts that needs analysis is an integral part of a language education program and it plays a crucial role as it determines the success of this language program implementation. Figure 1 illustrates that needs analysis is performed in order to meet the learning objectives, the design of learning materials and the planning of teaching strategies. The learning activities carried out should be then evaluated for measuring their effectiveness. In short, needs analysis is a process that has to be undertaken to ascertain that if learners can meet their learning needs and improve language learning performance.
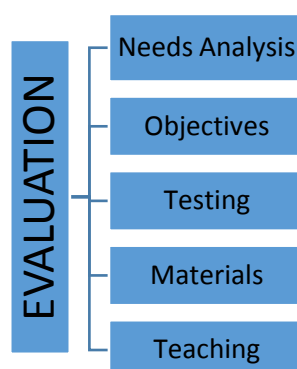

Figure 1: Systematic approach to designing language curriculum (Brown, 1995)

In line with the above theories, this study partly seeks to identify learning areas or sub-skills that students are still lacking. Such information is then used as the means to develop a training module to be used in the upcoming intensive program.

Teaching Strategies

Duckett and Tatarkowski (2005, p. 5) learning from Diamond's research (1999) argue that in their teaching, teachers of language should apply strategies which can:

> stimulate learning, provide an atmosphere free from undue pressure and stress, present a series of novel challenges that are neither too hard nor too easy, encourage social interaction for a percentage of activities, promote a broad range of skills and

interests, and encourage the learner to be an active participant rather than a passive observer.

Not less important than the above, teachers should also do whatever they can to help raise students' motivation, confidence and self-esteem. This can be done in a number of ways to achieve these including "finding something unique and positive about each learner and pointing it out to them, and taking an interest in their outside activities, as well as developing a culture of shared responsibility and emphasizing collective achievements" (Duckett & Tatarkowski, 2005, p. 46) According to Duckett and Tatarkowski, students can be more responsible with their own learning if they can demonstrate their feelings of confidence and motivation. In regard to this, teachers play a key role (Rosenshine, 2012).

Overview of Paper Based TOEFL
The first skill tested in a paper-based TOEFL is listening comprehension. This section of the test contains 50 multiple-test items and should be completed by the participants within 30-40 minutes. Secondly, the second skill measured is structure and written expression. In this second section of the test, participants or test takers are allocated only 25 minutes to complete 40 multiple-test items. Reading is the next skill which participants should complete. It contains 50 multiple-test items with 55 minutes time allocation. In the international version of paper-based TOEFL, participants are also required to write an essay within 30 minutes covering one topic in order to assess their English writing ability. However, in another version of paper-based TOEFL (i.e. ITP TOEFL), the writing test is not included (see ETS, 2015a for further details).

The test results are reported in numeric scores where each skill (except writing) will receive a score from 31 to 68 except for reading where the score range is from 31 to 67. Then, the total scores in which test takers will obtain are from 310 (the lowest possible score) and 677 (the highest score) (refer to ETS, 2015b for more details).

Methodology
To guide this study, the research questions were worded as follows:

1. How do students perform in a paper-based TOEFL test?
2. What sub-skills are commonly tested in a paper-based TOEFL test?
3. What sub-skills of listening, structure, written expression and reading in TOEFL do students find to be least and most difficult?
4. What teaching strategies do students feel would fit well with their learning styles?

Participants
This study involved 24 students (one class) who were in the first semester of their three-year diploma study in information and technology. They were voluntarily and conveniently recruited. They were also informed that their involvement would not affect their study in any way and they could cancel their involvement at any time. To maintain their identity, codes (pseudonyms) were used in replacement of their names.

Data Collection and Analysis

TOEFL paper-based tests (practice version) covering three skills (listening, structure and written expression, and reading) were used to assess participants' achievement in TOEFL. Although they were a prediction version, it could so far be used to predict ones' scores when taking the actual TOEFL test (e.g. ITP version). All the participants of this study had no idea what the test was like before being invited to be part of this research. In short, test items were not familiar to the participants as it was their first experience doing the test. The test was carried out the day in which students did not attend lectures and took place at a language center in a local university.

After the conclusion of the test, we calculated their scores and performed item analysis to identify what sub-skills were being measured . To facilitate this process, we adopted the sub-skills' name(s) formulated by Phillips (2003). Then, the participants' test results were analyzed to identify the sub-skills that the students found to be problematic. For this reason, the percentage of correct and incorrect answers from each item was displayed to identify the total number of participants who could get it correct or wrong.

Next, to identify students' preferred teaching strategies, focus groups were held with all students participating in this study. Data was recorded and subjected to content analysis (i.e. identification of themes based in the data).

Results

Students' Performance in TOEFL

The TOEFL test results prior to the intensive preparation program (see table 1) indicated that the majority of students still had a lot of hard work to do in order to improve their English proficiency. As the majority of

participants scored below 400 (N = 20), this proved that their English was still far below the desired level. Even for work purposes, such scores would not be considered at all since most companies and government offices in the country usually set a minimum TOEFL score of 450. Furthermore, working for companies overseas would not be possible for these students if they graduate with similar scores. Data also showed that there were only a few students (N = 3) who could achieve the scores of equal or above 400 but still below 450. The best score of the current testing event was 490 (N = 1). Overall, findings of this study suggested that a carefully arranged TOEFL training is essential to enable students achieve better scores.

Table 1:
Students' TOEFL Scores

No	Students' initials	Raw Score			Total Score
		Listening	Structure	Reading	
1	IB	12	11	15	353
2	HA	21	11	15	377
3	RE	13	11	20	373
4	RO	18	14	18	390
5	LA	14	7	11	330
6	FI	13	14	33	413
7	AL	15	12	17	373
8	TI	22	18	23	423
9	IN	18	9	23	387
10	FA	18	13	19	390
11	DB	11	12	17	360
12	SY	21	14	13	380
13	RS	15	24	24	433
14	MI	11	6	16	333
15	AO	23	11	21	400
16	MF	11	16	12	357
17	QN	14	10	27	390
18	LR	21	13	14	380
19	IM	13	6	18	347
20	TA	11	9	13	337
21	TN	10	9	18	350
22	RH	27	27	33	490
23	MW	11	15	21	383
24	MT	16	7	17	357

Sub-Skills Tested in The Current Test

Having administered the test to the research participants, we then underwent an items check to gain information about the sub-skills contained in the current test. Prior to doing so, we also compared this test with several other paper-based ones (including available resources

online) and came to a conclusion that the sub-skills of the current test also appeared in many other paper-based TOEFL test samples. Therefore, we argued that the sub-skills tested in the current test were the ones commonly measured in the actual paper-based TOEFL test.

The table below displays information about the sub-skills and number of items in the test measuring them.

Table 2:
Sub-skills tested in the current paper-based TOEFL test

Listening sub-skill	No of items	Structure & written expression sub-skill	No of items	Reading sub-skill	No of items
Part A:		Part A: Structure			
Focusing on the 2nd line	2	Object of preposition	1	Answer the main idea	3
Choosing answers with	1	Past participle	1	correctly	
synonyms		Coordinate connectors	1	Organization of ideas	2
Conclusion about who,		Adverb of time and		Answer stated detail	
what, where	7	cause connectors	3	questions correctly	12
Listen for who and		Other adverb		Find unstated details	
what with multiple	3	connectors	1	Pronoun referents	3
nouns		Reduced adjective	1	Answer implied detail	1
Listen for negative	6	clauses		questions correctly	10
expressions		Reduced adverb clauses	1	Answer transition	
Listen for almost	1	Invert subject and verb		questions correctly	1
negative expressions		with negatives		Find definitions from	
Skill with negative with	1	Part B: Written		structural clues	4
comparatives		Expression	1	Determining from word	
Expression of	1	Make verbs agree after		parts	2
agreement		prepositional phrases	3	Use context to determine	
Expression of		Parallel structure with		meanings of difficult	7
uncertainty and	1	coordinate conjunctions	2	words	
suggestion		Using the past with the		Use context to determine	5
Emphatic expression of	1	present	4	meanings of simple	
surprise	3	Using the correct tense		words	
Untrue condition	2	and	3		
Two and three-part	2	with time expressions	1		
verbs	1	Correct form of the			
Idioms	2	passive	2		
Part B:	3	Active and passive	1		
Conclusion about what		meaning			
Conclusion about when	6	Singular and plural	1		
Conclusion about	3	noun			
where	3	Countable and	1		
Conclusion about why		uncountable nouns			
Part C:		Distinguish the person	3		
Conclusion about what		form the thing	1		
Conclusion about why		Pronounce reference for	2		
Conclusion about how		agreement	1		
		Basic adjectives and	1		
		adverbs			
		Logical conclusion	2		

	Reported speech		
	Affirmative agreement		
	Question tag		
	Gerund		
	Infinitive		
Total of items	50	40	50

Sub-skills' names were adapted from Phillips (2003, pp. iii-vii)

It could be learnt from the sub-skills' table that certain sub-skills were allocated more items than other sub-skills. In section 1 of TOEFL, for example, listening for conclusion about who, what, where (part A), listening for negative expressions (part A), and listening for conclusion about what (part C) were allocated 7 and 6 items. Then, in section 2, adverb of time and cause connectors, parallel structure with coordinate conjunctions, correct form of the passive and basic adjectives and adverbs were allocated 3 items each while using the correct tense and with time expressions had 4 items. In section 3, answering stated detail questions correctly, answering implied detail questions correctly, using context to determine meanings of difficult words and using context to determine meanings of simple words were allocated from 7 to 12 items. All these sub-skills should be given more time proportion in the upcoming intensive training program since their good understanding could influence TOEFL score quite significantly.

The Least and Most Difficult Sub-Skills

Listening
Having seen students' abilities in the listening section of TOEFL (see table 3 for the details), it could be argued that most of them still had difficulty coping with some of the sub-skills tested. Areas or sub-skills that students found most difficult were mostly located in Part A (i.e. listening for short dialogues). For example, items related to the sub-skills of listening for negative expressions and comparative expressions were answered correctly by only 8% of students while the rest (82%) were incorrect. The next most difficult sub-skills were listening for idioms and listening for negative expressions of surprise where there were only around 21% who chose the correct response and more than two third (79%) selected the wrong ones.

Conclusion drawings were the next sub-skills that students found to be difficult to cope with. Results indicated that there were less than 25% of them who could respond effectively to the items. Then, listening for two and three part verbs and listening for who and what with multiple nouns were found to be less difficult by just around 30% participants and the rest (70%) considered the items rather difficult. Another sub-skill that

students had to struggle with was listening for expression of uncertainty and suggestion where there were only 8 students (30%) answered the items correctly. Then, the test results proved that the sub-skills that were found to be least difficult were listening for expression of agreement and listening for untrue condition since more than half of the participants could choose the correct answers.

Table 3:
Students' performance in each of the listening sub-skills

Sub-skills	No of participants with correct answer (in percent)	No of participants with wrong answer (in percent)
Part A:		
Focusing on the 2nd line	21	79
Choosing answers with synonyms	46	54
Conclusion about who, what, where	39	61
Listen for who and what with multiple nouns	29	71
Listen for negative expressions	22	78
Listen for almost negative expressions	8	92
Skill with negative with comparatives	8	92
Expression of agreement	50	50
Expression of uncertainty and suggestion	33	67
Emphatic expression of surprise	21	79
Untrue condition	54	46
Two and three-part verbs	29	71
Idioms	17	83
Part B:		
Conclusion about what	42	68
Conclusion about when	25	75
Conclusion about where	48	52
Conclusion about why	22	78
Part C:		
Conclusion about what	31	69
Conclusion about why	54	46
Conclusion about how	31	69

Structure and Written Expression

In this section of the test, there was only one sub-skill which was considered least difficult by the majority of students. That skill was pronoun reference for agreement. Results showed that items related to this skill could be dealt with easily by more than two third (71%) of the participants. Then, other sub-skills found to be less difficult by more than

half of the participants were countable and uncountable nouns, adverb clauses, and adverb connectors.

The participants of this study found the sub-skill of subject and verb with negatives to be the most difficult as there were over 90% of them who could not answer the items correctly. Using the correct coordinate connectors was also viewed as the second most difficult sub-skill by majority of the participants. Items associated with this sub-skill could only be well answered by 17% of the study participants. Details of the sub-skills which were considered by more than half of the participants could be viewed in table 4.

Table 4:
Students' performance in each of the structure & WE sub-skills

Sub-skills	No of participants with correct answer (in percent)	No of participants with wrong answer (in percent)
Part A: Structure		
Object of preposition	46	54
Past participle	33	67
Coordinate connectors	17	83
Adverb of time and cause connectors	36	64
Other adverb connectors	58	42
Reduced adjective clauses	25	75
Reduced adverb clauses	54	46
Invert subject and verb with negatives	8	92
Part B: Written Expression		
Make verbs agree after prepositional phrases	21	79
Parallel structure with coordinate conjunctions	26	74
Using the past with the present	27	73
Using the correct tense and with time expressions	30	70
Correct form of the passive	28	72
Active and passive meaning	21	79
Singular and plural noun	25	75
Countable and uncountable nouns	50	50
Distinguish the person form the thing	21	79
Pronounce reference for agreement	71	29
Basic adjectives and adverbs	31	69
Logical conclusion	38	62
Reported speech	25	75
Affirmative agreement	21	79
Question tag	33	67
Gerund	25	75
Infinitive	31	69

Reading

Reading skill was also still under the desired level where most of the students still experienced difficulty responding to the questions measuring their ability in identifying main ideas (22%); recognizing the organization of Ideas (23%); answering stated detail questions (38%); finding unstated details (29%); answering implied detail questions (35%); answering transition questions (46%); finding definitions from structural clues (49%); and using context to determine meanings of difficult words (32%). Then, the items measuring the sub-skills of determining meaning from word parts, using context to determine meanings of simple words, and pronoun referents were considered the least difficult sub-skills since they could be answered by half or more than half of the students (67%, 51%, and 50% respectively). Details of students' performance could be viewed in table 5 below:

Table 5:
Students' performance in each of the reading sub-skills

Sub-skills	No of participants with correct answer (in percent)	No of participants with wrong answer (in percent)
Answer the main idea correctly	22	78
Organization of ideas	23	77
Answer stated detail questions correctly	38	62
Find unstated details	29	71
Pronoun referents	50	50
Answer implied detail questions correctly	35	65
Answer transition questions correctly	46	54
Find definitions from structural clues	49	51
Determining from word parts	67	33
Use context to determine meanings of difficult words	32	68
Use context to determine meanings of simple words	51	49

Students' Preference of Teaching Strategies

All the participants preferred a stress-free training atmosphere. They seemed to have such a good understanding as to how a foreign language should be learnt. For example, most argued that language learning should be fun and filled with joyful activities. Such activities should be integrated with the targeted learning activities. Two students believed that even for the context of TOEFL training where although many of the activities

would be dealing with test items discussions, joyful learning activities were still a possibility.

Several participants also expressed their interest in learning from their peers and they wanted teachers to give them with such an opportunity. Having said this, a few of them then mentioned some possible learning activities including small group discussion, pair work and peer coaching. According to them, learning from peers through the said activities would make them acquire effective learning outcome.
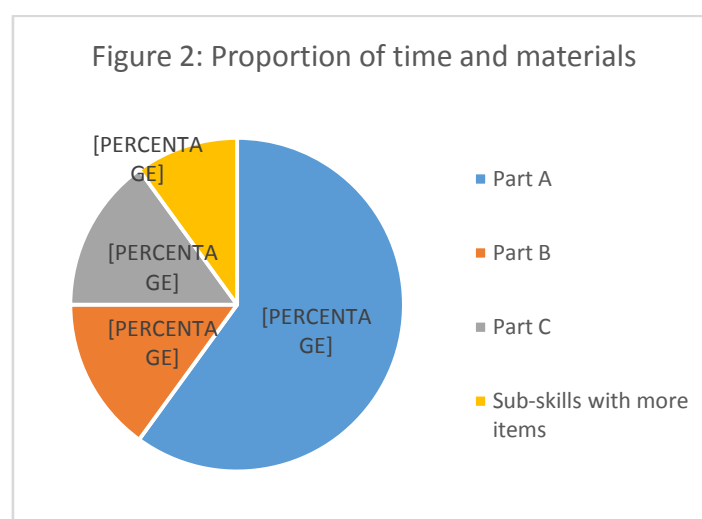
Overall, focus group discussions with the participants resulted an understanding that they preferred teaching strategies which focused on students (student-centered learning) rather than on teachers (teacher-centered learning).

Discussion

The main aims of this study were to identify sub-skills in the sections of listening, structure and written expression, and reading of the paper-based TOEFL which were still found to be problematic and examine teaching strategies preferred by students. This information is necessary since the next part of this research would be the development of training module and teaching strategies which was to be developed following the outcomes of this needs analysis stage. Results of the paper-based test, overall, showed that majority of the participants attained low scores ($\leq$ 400) with only 3 persons gaining the score of over 400. Mahmud (2014) points out that one of the main reasons affecting the Indonesian university students' poor performance in TOEFL is due to their poor English mastery. These findings also imply that students of this study did not learn English effectively during their 6-year-secondary education study. It was also identified in the study performed by Mahmud that university students majoring in non-English study programs were not motivated to acquire English. Thus, the current study argues that the upcoming intensive training program (i.e. to be carried out in the 2nd and 3rd year of this project) should also consider the inclusion of teaching strategies which can arouse students' learning interest. In other words, a well-designed module should be accompanied with attractive teaching approaches (Duckett & Tatarkowski, 2005). Rosenshine (2012, p. 17) argues that optimal learning outcome can be best reached if teachers perform attractive teaching (e.g. through hands-on activities) and "spend more time in guided practice, more time asking questions, more time checking for understanding, and more time correcting errors".

The findings of this study regarding the preferred teaching strategies also confirmed the concept of attractive learning proposed by Rosenshine and Duckett & Tatarkowski where students put a high expectation that the upcoming training would pay more attention to their learning preferences, that is, for example though peer coaching activities.

Next, analysis of listening test items revealed that part A of this section of TOEFL could not be coped with well by the participants. The reason that might account for this matter was because the students of this study were not used to listening to conversations performed by native users of English. They might argue that the two speakers spoke too fast. In fact, the dialogues were spoken at a normal speed like in their actual setting. Thus, the future developed training module should provide more weights, both in terms of time allocation and materials covered, for part A. Figure 2 illustrates the proportion of time and materials which should be considered in the module.

Figure 2: Proportion of time and materials

The above chart shows that part A of listening section should be given a higher proportion than the two other parts. This study also suggests that at least 30% of the time and materials to be allocated for part A should be for the sub-skills of listening for negative expressions, comparative expressions, idioms, and negative expressions of surprise, the sub-skills which found to be most problematic my majority of students. Then, 10% of the proportion should also be directed to deal with sub-skills which are allocated more items in this section of the test.

The results of items analysis of section 2 of the test indicate that most of the sub-skills excluding pronounce reference for agreement, reduced adverb clauses, other adverb connectors, countable and uncountable

nouns should receive priority in the training module. More weights certainly go to the sub-skills which students found most difficult including, for example, inverting subject and verb with negatives and coordinate connectors. The proportion of time and materials to be covered in the module might be shared according to the following figure.
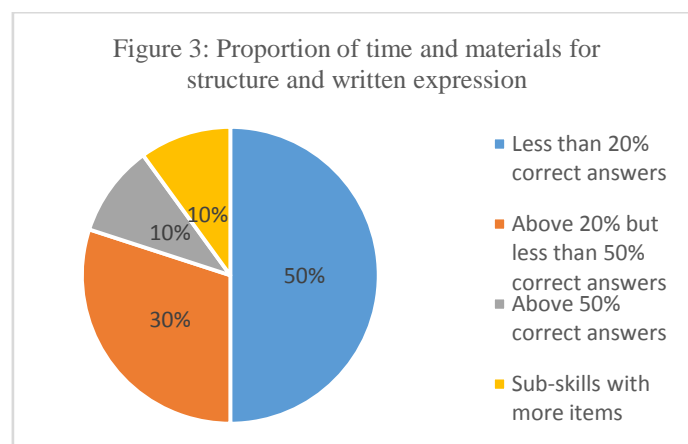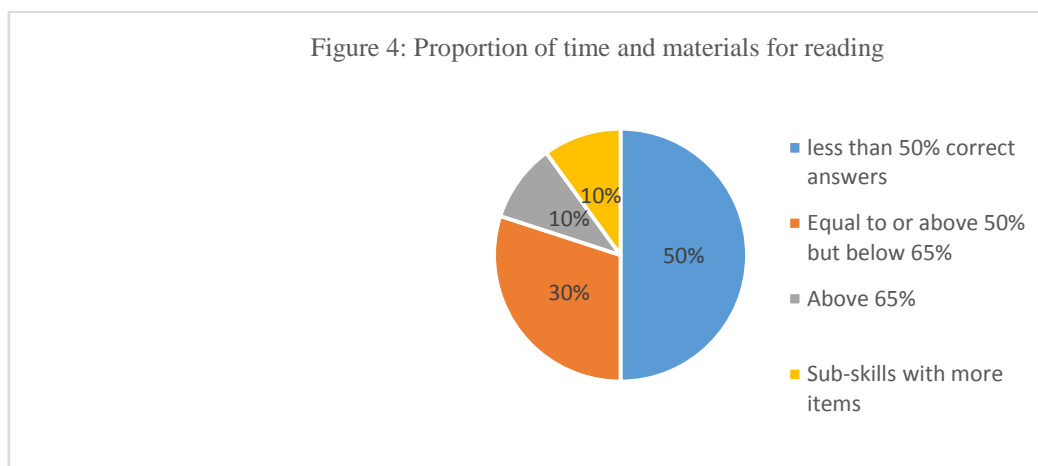

Figure 3: Proportion of time and materials for structure and written expression

Figure 3 explains that sub-skills with less than 20% of correct answers should be given a higher proportion or 50% from the total time and materials proportion while the ones with above 50% but less than 65% correct answers should receive around 30% of time and materials proportion. Then, other sub-skills gaining above 50% correct answers should be given the third priority or 10% from the total time and materials proportion. An additional 10% of proportion should be for sub-skills with more items in the test.

Finally, data from reading items analysis proved that there was only one sub-skill (i.e. determining from word parts) in which students of this research were quite good at while most others were found to be rather difficult. Therefore, majority of sub-skills in reading section needs to be given priority in the training module. The proportion of time and materials to be covered in the module might be shared according to the following figure.

Figure 4: Proportion of time and materials for reading

The figure indicates that sub-skills which attain less than 50% of correct answers should be given a higher proportion while the ones with above 50% and less than 65% must receive the second priority or 30%. One sub-skill considered the least difficult one might receive 10% of the total amount of training time and materials. Then, another 10% should be allocated for sub-skills with more items.

Overall, results of the current needs analysis work can then be used for the development of TOEFL training module and teaching strategies. Referring to language curriculum model proposed by Brown (1995), the effectiveness of the module and teaching strategies resulting from the current needs analysis research will be examined after the conclusion of the first cycle and second cycle of the upcoming intensive preparation programs.

Limitations

The present study has several limitations. Students' learning needs in terms of the sub-skills that students had particular problems with and their preferred teaching strategies were investigated. Other needs were not observed in this study. The second limitation is concerning the use of multiple choice test items. This type of test, to some extent, may provide incorrect information about the actual sub-skills that participants are still not good at since they can simply guess the answer by ticking one of the responses without knowing the reason why they choose this particular answer. However, guessing one response from four selections can give only a small chance or 25% that students can come up with the correct answer. But of course, there is such a probability.

Another limitation of this research is concerning the participating students. Since there were only 24 students from one study program involved in this research, results are not applicable to a larger population such as all students undertaking learning at this particular higher

institution. Thus, further research can be conducted involving more students coming from all study programs existing in the institution. Involving students from other similar polytechnic will also provide a better picture about students' ability in each of the TOEFL sub-skills.

The present research does not include writing component in its needs analysis work. As such, a further research can be directed to also include writing in addition to listening, structure and written expression and reading. This future study may also involve various approaches such as interview and observation in collecting information about students' learning need since this research only used information from students' test results to arrive at a conclusion about their TOEFL learning needs. The use of additional instruments may give better information about students' current language background, motivation level or learning interest and teaching strategy preference.

Conclusion and Implications

In conclusion, the results reveal that the identification of students TOEFL learning need can be done through the assessment of sub-skills that they are good or not good at and the examination of their preferred teaching approaches. Such an identification work will result in information about learning areas that TOEFL trainers can concern more when designing or developing a TOEFL training module and program. As Jordan (1997) pointed out, analysis or identification of skills that students are still lacking can be an effective way for developing language learning curriculum or module.

This study could also observe results which suggest that the upcoming intensive training program lasting for 20 weeks should be handled with care since students still demonstrated weaknesses in many of TOEFL sub-skills. Such weaknesses have to be dealt carefully, for example, by creating a friendly classroom atmosphere and by always praising students for their excellent work during the training sessions. Data from students' preferred teaching strategies also confirm the case where they are in need of a stress-free learning atmosphere. This also indicates that teachers or TOEFL trainers should come to the class with fun learning activities enabling students to acquire English skills more effectively. Next, correcting students' mistakes is also necessary but it has to be undertaken properly (e.g. through personal approach with an individual student rather than correcting him/her before their classmates). It is important that this be undertaken to ensure that students will not feel uneasy when corrected.

Acknowledgement

References

Akyel., S. A., and Ozek., Y. (2010). A language needs analysis research at an English medium university in Turkey. *Procedia Social and Behavioral Sciences, 2*(2), 969–975.

Al-Rawashdeh, H. (2010). *Difficulties that face graduate students during their TOEFL preparation program at Jordanian Universities.*: Abhath Al-Yarmouk Humanity and Social Science.

Berwick, S. (1996). *Needs assessment in language programming: from theory to practice*. Cambridge: Cambridge University Press.

Brown, J. D. (1995). *The elements of language curriculum: A systematic approach to program development*. Boston: Heinle & Heinle.

Duckett, I., & Tatarkowski, M. (2005). *Practical strategies for learning and teaching on vocational programmes*. London: Learning and Skills Development Agency.

ETS. (2015a). *TOEFL® PBT test content and structure*. Princeton, NJ: Educational Testing Service.

ETS. (2015b). *Understanding your TOEFL® PBT test scores* Princeton, NJ: Educational Testing Service.

Fahim, M., Bagherkazemi, M., & Alemi, M. (2010). The relationship between test takers' critical thinking ability and their performance on the reading section of TOEFL. *Journa of Language Teaching and Research, 1*(6), 830-837.

Fultcher, G. (1999). Assessment in English for academic purposes: Putting content validity in its place. *Applied Linguistics, 20*(2), 221-236.

Grier, A. S. (2005). Integrating needs assessment into career and technical curriculum development. *Journal of Industrial Teacher Education, 42*(1), 59-66.

Heffernan, N. (2006). Successful strategies: Test-taking strategies for the TOEFL. *The Journal of ASIA TEFL, 3*(1), 151-170.

Jordan, R. R. (1997). *English for academic purposes: A guide and resource book for teachers*. Cambridge: Cambridge University Press.

Ling, G., Powers, D. E., & Adler, R. M. (2014). *Do TOEFL iBT® scores reflect improvement in English-Language proficiency? Extending the TOEFL iBT validity argument (Research Report No. RR-14-09)* (Vol.). Princeton, NJ: Educational Testing Service.

Long, M., H. (2015). *Overview: A rationale for needs analysis and needs analysis research*. Cambridge: Cambridge University Press.

Mahmud, M. (2014). The EFL students' problems in answering the test of English as a foreign language (TOEFL): A study in Indonesian context. *Theory and Practice in Language Studies, 4*(12), 2581-2587.

Phillips, D. (2003). *Longman preparation course for the TOEFL test*. London: Pearson Longman.

Rosenshine, B. (2012). Principles of Instruction: Research-based Strategies that all teachers should kmjjnow. *American Educator*, 12-39.

Songhori, M. H. (2008). Introduction to Need Analysis. *English for Specific Purposes world*(4), 1-25.

Sung, P. J., Lin, S. W., & Hung, P. H. (2015). Factors affecting item difficulty in English listening comprehension tests. *Universal Journal of Educational Research, 3*(7), 451-459.

Wai, T., Kondo, K., Limm, S. J., D., R., E. G., , Shimizu, H., & Brown, J. D. (1999). Japanese language needs analysis. Available at: http://www.nflrc.hawaii.edu/Networks/NW13/NW13.pdf.

Watkins, R., Meiers, M. W., and Visser, Y. L. (2012). *A guide to assessing needs: Essential tools for collecting information, making decisions, and achieving development results*. Washington, DC: The World Bank.