A RASCH ANALYSIS ON STUDENTS’ ABILITY IN STRUCTURE AND WRITTEN EXPRESSION SECTION OF TOEFL TEST

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Abstract: TOEFL test has been used in the universities for many purposes, for instance, since 2021, Sharia Faculty has implemented this rule for graduation requirements. Therefore, Sharia International Center (SIC) has initiated TOEFL Training Batch 1 to analyse the students’ English ability since the students have never been exposed to the TOEFL test before. This research was carried out to analyze the students’ English proficiency and difficulty to answer questions in the Structure and Written Expression part of the TOEFL test so that they will get an insight about what should they emphasize to improve their score. Approximately 24 students’ answer sheets were collected and analysed using Winstep from Rasch Measurement Model. They answered 40 questions of the section. The findings of the study showed that many of the students (more than 50%) have low level of structure and written expression skills. Meaning that they have difficulties in answering some questions in this section. The results also reported that they still have difficulty to answer questions related to complex sentences and parallelism in a sentence. All these findings can be a valuable information for both students and English lecturers. Lecturers can help the students improve their English ability or TOEFL score by analysing types of question they cannot answer and then design the classroom teaching and learning focusing more on this aspect.

Keywords: Item Analysis, Structure and Written Expression, Rasch Measurement Model

1. INTRODUCTION

The Test of English as a Foreign Language (TOEFL) is one of the English standardized tests used in many countries. This kind of proficiency test is used to measure students’ English ability (Abboud & Hussein, 2011). It has many types of tests, such as the Institutional Testing Program, the Internet Based Test, the Paper Based Test and the Computer Based Test.

TOEFL test has also been used in many institutions in Indonesia for different purposes (Muhajir & Gani, 2018). For instance, several universities demand their students to take TOEFL test for graduation requirements. One of which is Faculty of Sharia in Salatiga State Islamic University. Starting In 2021, the faculty required the students to take the TOEFL test before graduating. The students are encouraged to learn and master English language because, nowadays, English proficiency has become a requirement to apply for job in many legal institutions as well as to apply for a scholarship to a higher degree. Therefore, Sharia International Center (SIC) in the Faculty of Sharia has initiated to organize the TOEFL ITP
training Batch 1 to help the students get prepared before taking the TOEFL test in the Language Center of UIN Salatiga.

The TOEFL ITP itself consist of three sections. The first section is listening comprehension with 50 questions, followed by the structure and written expression in section two with 40 questions, and reading comprehension in the last section with 50 questions.

Based on the initial interview with the students, the structure and written expression questions are the hardest section in the TOEFL test. This might happen because English is regarded as a foreign language therefore learning English grammar become a great challenge for them (Takelangi, 2020). This is in line with the findings from Ubaedillah (2020) that students reported that the second part of the test is the hardest, which examine their structure and written expression ability, is where they usually failed to get good score. This section evaluates the students’ ability to recognize incorrect English sentences. The examinee are asked to choose the correct answer to complete the sentences and after that they have to recognize the grammatical errors in the sentences (Abboud & Hussein, 2011).

Takelangi (2020) found that students’ competence in answering the questions in section two is low because they did not master the English grammar. Other researchers have also found that students still have difficulty in answering the TOEFL test questions because they are not familiar with it, especially the students from non-English departments. Some of the also failed in the test because they did not take a course in TOEFL before the test (Abboud & Hussein, 2011).

Therefore, this research is tempted to analyze the examinees’ English proficiency and difficulty in answering the second section of the TOEFL test. The findings of the study will give a valuable insight for the SIC members about the students’ competence so that they can design the suitable TOEFL training for the next batch.

2. RESEARCH METHOD

The study involved 24 students in the Faculty of Sharia, UIN Salatiga. They answered 40 questions in the structure and written expression section of the TOEFL ITP prediction test in 25 minutes. Section two is divided into two sections as well, the first is structure section and the second one is expression section. In the first section, the questions are in the form of multiple choice and the students should be able to choose the best answer. In the expression section, the students were asked to analyze the grammatically incorrect word in a sentence.

Their responses are then analyzed using Winstep from Rasch Measurement Model. The Person and Item Wright Map will be used to report the students’ English ability. It will also be used to show the difficulty level of the question according to the students’ ability. Furthermore, the item measure will also be used to analyzed the questions in the test.

3. RESULT AND DISCUSSION

The participants of the study have answered 40 questions in the second section of the TOEFL test. The collected data was analyzed using Rasch Measurement Model. Below is the Person Item Wright map that will show the distribution of students’ ability and items of the tests.
The Figure 1 above illustrated the distribution of the person and items in the research. The right side of the map showed the spread of the items (questions) based on its difficulty while the left side showed the students’ ability. Wright and Stone (1999) explained the spread of items is in line with the spread of person. It means that students with lower English ability were placed below those high ability students. Also, the easy questions were below the difficult questions.

**Table 1. Students’ Level of English Ability**

<table>
<thead>
<tr>
<th>Logit Measure</th>
<th>Students</th>
<th>Percentage</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;-.41</td>
<td>4</td>
<td>17%</td>
<td>High</td>
</tr>
<tr>
<td>-.41 - -1.53</td>
<td>16</td>
<td>66%</td>
<td>Intermediate</td>
</tr>
<tr>
<td>&gt;-1.53</td>
<td>4</td>
<td>17%</td>
<td>Low</td>
</tr>
</tbody>
</table>

It can be seen from the red line on the map that the mean score of the students (-1.02) is far below the mean score of the items (.00). Meaning that the difficulty of the items in section two of the TOEFL test is higher than the students’ ability. The Standard Deviation (SD) was used to categorize the students into three different level of ability, high, intermediate and low. Only
4 students who categorized as high ability students in this class, followed by 16 students with intermediate level and 4 students with low ability. The finding is similar to the findings from Takelangi (2020) who found that students’ competence in answering the questions in section two is low because they did not master the English grammar. Therefore, English teachers should help the students improve their English ability by carrying out the TOEFL training. Besides, the English 1 and English 2 course in the faculty should emphasize more on TOEFL test practice so that the students will be more familiar with various types of TOEFL test.

The student labeled as 5P (female students) with logit measure .10 is the highest ability student. However, despite her being the highest ability among others, she still has difficulty in answering many questions (as placed above her in the map). On the contrary, student number 7P (female student) was on the lowest place in the map which means that she has the lowest English ability.

<table>
<thead>
<tr>
<th>Logit Measure</th>
<th>Items</th>
<th>Percentage</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;.87</td>
<td>8</td>
<td>20%</td>
<td>Difficult</td>
</tr>
<tr>
<td>.87 - -.87</td>
<td>28</td>
<td>70%</td>
<td>Medium</td>
</tr>
<tr>
<td>&gt;-.87</td>
<td>4</td>
<td>100%</td>
<td>Easy</td>
</tr>
</tbody>
</table>

The table above described the items or questions difficulty level. Among 40 questions, about 8 questions are categorized as difficult, followed by 20 questions categorized as medium and only 4 questions are deemed as easy for them. This indicated that students were not familiar with the types of questions as they have not been exposed to the TOEFL test before and they still need to improve their ability through training and practicing.

Among the difficult questions are question number 7, 11 from the structure section and question number 20, 21, 23, 24, 25 and 29 from the written expression section. In the structure section, the students should be able to choose the correct answer from the multiple choices. While in the expression section, they should be able to identify one of the underlined words that is grammatically Incorrect.

For instance, question number 21 about parallelism is among the difficult questions. Students need to analyze the incorrect underlined word in a sentence “There are more than eighty-four million specimens in the National Museum of Natural History’s collection of biological, geological, archeological, and anthropology treasures”. Many students picked the wrong answer in this question. Ubaedillah (2020) in his study also reported that most of the students (90%) still have difficulty in parallelism.

Another difficult question is question number 20 which is about the degree of comparison. The question is “The neocortex is, in evolutionary terms, most recent layer of the brain”. The correct answer should be “most”. The word “most” in this sentence is grammatically incorrect because it should be preceded with “the”.

This finding reported that the students still struggle to answer the questions in the second section of the TOEFL test. Besides, teachers are also urged to encourage and motivate the students to learn English because of its importance (Halim & Ardiningtyas, 2018).
4. CONCLUSION

To sum up, the students’ English ability is still low. Many of them still have difficulty in answering the questions, for example questions about parallelism and degree of comparison. This can be a valuable insight for both the students and SIC members. Students should improve their English ability by taking TOEFL preparation class and also do more practice in order to improve their ability and be familiar with various types of TOEFL questions.

The SIC members can use the finding of this study to design the suitable TOEFL Preparation course for the students of Sharia Faculty so that they can pass the minimum score as required by the faculty. The TOEFL preparation course should be carried out in the next semester to help the students improve their English ability.

REFERENCES