Needs of Multiple Intelligences in EFL classroom Perceived by Business Students

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Abstract

The purposes of this research were 1) to study needs of Multiple Intelligences in EFL classroom and 2) to study needs of activities based on Multiple Intelligences. Research samples were 191 business students at Thai-Nichi Institute of Technology in 2016 academic year, derived through Simple Random Sampling Technique. The instrument used for gathering the data were the questionnaire with rating-scale and open-ended questions. Statistic used for analyzing the data were frequency, percentage, mean, standard deviation and content analysis.

Research findings were: 1) TNI students had high needs of Multiple Intelligences in EFL classroom. The highest needs were Linguistic. 2) The needs of students’ activities were presentation, contest, quizzes, and group and pair work.

Keywords: Multiple Intelligence Approach, English Teaching-Learning Process, EFL Classroom
1. Introduction

The theory of multiple intelligences provides eight approaches of teaching and learning styles to ensure that teachers deliver as many as activities for the students’ learning potential (Berman, 1998). On the basis of the theory of multiple intelligences, the students might be able to draw a picture while listening to a description, act out a nursery rhyme, follow instructions or make a shape or simple model while they listen to a description of it. The above examples draw on learning by the ear and eye which is good for those with bodily-kinaesthetic intelligence.

Gardner, (2000) defines the multiple intelligences theory as “a biopsychological potential to process information in certain ways, in order to solve problems or fashion products that are valued in a culture or community.” (p.33-34).

Furthermore, Nolen (2003) stresses that EFL teachers should select their lessons and activities which meet all the students’ intelligences. They have to look into the EFL students’ needs to encourage them to be active and successful students. In addition, most of the students who get the appropriate encouragement and instruction will be able to develop the eight multiple intelligences. According to Armstrong (2000) multiple intelligences are gates for a great number of teaching strategies which might be easily applied in the classroom. Moreover, multiple intelligences assist teachers to use modern teaching strategies through using various activities and exercises.

2. Research Purposes

The purposes of this research were

1) to study needs of Multiple Intelligences in EFL classroom, and
2) to study needs of activities based on Multiple Intelligences.

3. Population and Samples

Population of this research was 900 second year TNI students in 3 faculties of Engineering, Information Technology and Business Administration in the second semester of 2017 academic year. Samples of the research were 191 business students derived through Simple Random Sampling technique. The instruments used for gathering the data were the rating-scale and open-ended questionnaire. The statistics used for analyzing the data were frequency, percentage, mean, standard deviation, and content analysis.

Instrumentation

The instrument used in this study is a questionnaire. The first part of this questionnaire asks for the demographic information on their genders and academic year.

The second part concerns a study of needs of multiple intelligences in EFL classroom of business students. This part comprises 8 items of needs of multiple intelligences in EFL classroom. The five levels of opinions used in the questionnaire are “Strongly Agree”, “Agree”, “Neither agree nor disagree”, “Disagree” and “Strongly disagree”. Responses from the student questionnaires were subsequently coded. The data of the students’ coded responses were statistically calculated and analyzed. The computation of Cronbach’s Alpha as a measure of reliability was employed to indicate how reliable the research questionnaire results are. Reliability is defined as the proportion of the students’ responses to each item in the questionnaire and the reliability coefficient or calculated alpha is a lower bound of the true reliability of the research instrument, or the questionnaire. The descriptive statistics is also used to determine the individual summary statistics for each of the 8 items in the questionnaire.
The third part asks for activities based on Multiple Intelligences which based on open-ended questions.

Data Analysis
Data analysis from questionnaire both single item and whole questionnaire which presented a form of rating scale. These rating scales were calculated to find out mean and standard deviation and then translated based on criteria developed by Best (1981) as follows:

1.00 ≤ X < 1.50 refers to the lowest level.
1.51 ≤ X < 2.50 refers to a low level.
2.51 ≤ X < 3.50 refers to a moderate level.
3.51 ≤ X < 4.50 refers to a high level.
4.51 ≤ X ≤ 5.00 refers to the highest level.

The collected data was analyzed using a computer program. The statistics used for analyzing the data were frequency, percentage, mean, standard deviation, and content analysis.

4. Results
Phase 1 The results of demographic variable of TNI undergraduate students
The analysis of the data from the students’ questionnaire reported by TNI business students in the 2017 academic year is presented in the 2 section deals with the demographic variables from the students’ responses to Part 1 of the questionnaire: genders and academic year as following table.

Table 1: Table of the results of demographic data of respondents

<table>
<thead>
<tr>
<th>Demographic data of respondents</th>
<th>n=191</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Genders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Male</td>
<td>92</td>
<td>48.17</td>
</tr>
<tr>
<td>1.2 Female</td>
<td>99</td>
<td>51.83</td>
</tr>
<tr>
<td>Total</td>
<td>191</td>
<td>100</td>
</tr>
<tr>
<td>2. Academic year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; year</td>
<td>64</td>
<td>33.50</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; year</td>
<td>53</td>
<td>27.75</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; year</td>
<td>35</td>
<td>18.32</td>
</tr>
<tr>
<td>4&lt;sup&gt;th&lt;/sup&gt; year</td>
<td>39</td>
<td>20.43</td>
</tr>
<tr>
<td>Total</td>
<td>191</td>
<td>100</td>
</tr>
</tbody>
</table>

Table showed that percentages of TNI undergraduate respondents in genders ranged from 48.17% for male and 51.83% for female. For academic year, 33.50% were the 1<sup>st</sup> year students, 27.75 were the 2<sup>nd</sup> year students, 18.32% were the 3<sup>rd</sup> year students and 20.43% were the 4<sup>th</sup> year students.

Phase 2 The results of needs of multiple intelligences in EFL classroom perceived by business students
Table 2: Table of mean and standard deviation of needs of multiple intelligences in EFL classroom perceived by business students

<table>
<thead>
<tr>
<th>No.</th>
<th>Intelligence</th>
<th>X</th>
<th>SD</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Linguistic</td>
<td>4.53</td>
<td>0.49</td>
<td>Highest</td>
</tr>
<tr>
<td>2</td>
<td>Mathematic</td>
<td>4.27</td>
<td>0.51</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Musical</td>
<td>3.30</td>
<td>0.52</td>
<td>Moderate</td>
</tr>
<tr>
<td>4</td>
<td>Bodily-kinesthetic</td>
<td>3.42</td>
<td>0.67</td>
<td>Moderate</td>
</tr>
<tr>
<td>5</td>
<td>Spatial</td>
<td>4.11</td>
<td>0.64</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Interpersonal</td>
<td>4.32</td>
<td>0.77</td>
<td>High</td>
</tr>
<tr>
<td>7</td>
<td>Intrapersonal</td>
<td>4.29</td>
<td>0.78</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>Naturalist</td>
<td>3.08</td>
<td>0.65</td>
<td>Moderate</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>3.91</strong></td>
<td><strong>0.62</strong></td>
<td><strong>High</strong></td>
</tr>
</tbody>
</table>

The table above indicated that TNI students had a high level of needs of multiple intelligences in EFL classroom perceived by business students in overall (X=3.91). When considered in each aspect, it was found that the students had the highest level of item 1 “Linguistic.” Followed by item 6 “Interpersonal.” However, the least needs at a moderate level was item 8 “Naturalist.”

Phase 3 The results of opinions and suggestions strategies of Thai-Nichi Institute of Technology students

The suggestions from the respondents were listed as follows:
1) The majority of the students need presentation activity to support the presentation skills when they graduate.
2) Some of the students need contest and quizzes as these activities create positive learning environment.
3) The minority of the students need group work and pair work as they support collaborative learning.

5. Discussion and Conclusion

According to the findings, it was found that “Linguistic” was the highest needs of the students. This is related to the study of ZABITGİL (2013) who states that linguistic Intelligence refers to effective use of language and good knowledge of words. The students, therefore, are encouraged to express themselves in various forms of language through written or oral expression. However, the least intelligence at moderate needs was naturalist. This might be because this intelligence focuses on knowledge and care for nature such as learning about plant life and animal world. The students, then were inspired to be sensitive about environment, pollution and ecosystem. In this case, topics about environment, botany and animal life might not be recognized as interesting subjects in the language classroom.

6. References


**Bio Data**

Assistant Prof. Dr. Wipanee Pengnate is an English lecturer of College of General Education and Languages at Thai-Nichi Institute of Technology. She got Professional Doctorate in Trandisciplinary Studies from Central Queensland University, Australia. She also obtained double degrees for her master. One is Master of Arts Administration from Central Queensland University, Australia, and Master of Education in Educational Administration from Naresuan University.