DEVELOPING SPEAKING LEARNING MATERIALS ORIENTED TO MULTIPLE INTELLIGENCES: FROM THEORY TO PRACTICE

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Abstract

It is not unsafe to conclude that needs analysis is always crucial to a development study as it is the key to the successful and meaningful learning. In addition, learners’ individual strengths should also be taken into consideration in order to allow them to experience a joyful learning. In connection with this, a Research and Development study, of which aim is to develop the Multiple Intelligences (MI)-based English speaking activities, has been conducted with 30 students of a secondary school participated in the data collection. This paper is a manifestation of the initial stage of the study namely the needs analysis stage of which intention is to find out the students’ target needs, learning needs, and major intelligences and then develop the learning activities based on them. The conclusion drawn based on the analysis of the quantitative data from the questionnaire and MI test filling supported by the interview are that: (1) English speaking skills are considered important to be mastered by the students, (2) Science and Technology, also Arts and Culture, are the most preferred topics of discussions, (3) The students’ level of English proficiency is intermediate mid, (4) The students expect to improve their future-job-related vocabulary and confidence to communicate with English native and non-native speakers upon learning the materials. Regarding the MI theory, the students’ musical intelligence, bodily-kinesthetic, intrapersonal intelligences, and existential intelligence were well-developed. The realization of the individual strength of the students is an innovation in education practices in terms of the value of empathy.

**Keywords**: multiple intelligences, needs analysis, innovation, speaking activities, individual strength, English.

1. Introduction

Decades have witnessed the dramatic increase of the implementation of Multiple Intelligences (henceforth, MI) proposed by a professor at Harvard Graduate School of Education, Dr. Howard Gardner, in various fields. Up to this 21st century, the scheme continues to gain its popularity among scholars and educators, including those dealing with English instruction and research.

According to Ref. [1], before Howard Gardner in 1983 urged the notion of MI through his *Frame of Mind,* there are at least three influencing figures in the field namely (1) Robert Sternberg with his three forms of intelligence covered in the Triarchic Theory of Intelligences, followed by Daniel Goleman who proposed Emotional Intelligence, and (3) Robert Cole who brought along his Moral Intelligence. Ref. [2] added the name of J. P. Guilford who identified up to 150 intellectual capacities in his *Structure of Intellect* into the list. Today, scholar and educators are well acquainted with the nine MI namely (a) verbal-linguistic, (b) logical-mathematical, (c) visual-spatial, (d) bodily-kinesthetic, (e) musical, (f) interpersonal, (g) intrapersonal, (h) naturalist, and (i) existential intelligences.

Ref. [3] sums up the characteristics of students who develop each of the intelligences as the following: (1) students who are good in expressing themselves using spoken and written language and who like jokes, riddles, wordplay, and listening to stories are likely to develop their linguistic intelligence or ‘word smart’ well; (2) those who enjoy working with numbers, reasoning, logic, and problem solving are usually high in their logical-mathematical intelligence or ‘number/reasoning smart’; (3) those who develop their visual-spatial intelligence or ‘picture smart’ well tend to picture a situation, drawing mental images, enjoy illustrations, charts, tables, and maps; (4) bodily-kinesthetic intelligence or ‘body smart’ is displayed by those who experience learning best through body movement (mimicking, dancing, and role play); (5) those who love songs, patterns, rhythms, and musical expression and learn best through it are believed to develop their musical intelligence or ‘music smart’ well; (6) intrapersonal intelligence or ‘self smart’ is shown by those who are reflective, analytical, and intuitive about their identity and what and how to learn; (7) those who prefer pair and group works to individual works indicate that their interpersonal intelligence or ‘people smart’ have developed well; (8) the preference of working outside the classrooms and classifying and categorizing activities is an indication of the well-developed naturalist intelligence or ‘nature smart’; (9) students who develop the existentialist intelligence or ‘existence smart’ well need to see the whole picture or situation in order to be able to understand minor learning details and points.

Despite being one of the most important language skills to master by the participants of this study, according to one of the participants, English speaking skill is among the most difficult one to master, especially because the language is not the first or second language for Indonesians. As English is a foreign language, it is not widely used in every day communication. Therefore, in order to be able to speak English fluently and accurately, the students need to be familiar with speaking practices. Ref. [4] defines fluency as the ability to share ideas without thinking too much about what to speak or what is heard, while accuracy is the absence of grammatical or vocabulary errors in speaking. In conclusion, fluency, accuracy, vocabulary, and pronunciation are four crucial aspects of speaking. It can be concluded that English teachers, in this case, need to support the mastery of the skills of their students by providing the appropriate materials and activities.

The importance of textbooks and audio-visual aids in English teaching and learning in secondary school becomes the concern of Ref. [5]. Quoting Djojosoekarto, he believes that these 7 factors are crucial for a successful Teaching English as a Foreign Language in Indonesia (henceforth, TEFLIN): (1) adequate teachers quantitatively and qualitatively; (2) the existence of teachers who possess good control of English, personality and intellectual characteristics, and who are highly motivated to teach; (3) teacher education program which are expected to produce professional teachers; (4) a sufficient source of highly-qualified faculty members; (5) textbooks and audio-visual aids; (6) sufficient time to develop the students’ skills; and (7) social-psychological condition that encourages them to perform good communication skills.

Meanwhile, textbook developers across the globe have realized that doing needs analysis is always as essential and fundamental of importance to textbook development project as the needs of oxygen for every living thing. In line with this, Ref. [6] suggests that the purpose of doing a needs analysis is to find out what the learners know and can do, and what they need to learn and do. In addition to this, Nunan, as it is cited by Ref. [7], claims that “courses should be designed to fit the students”. It is not unexpected then, that in order to provide the best learning experience for the students, therefore, an analysis on their MI was done at the very beginning.

1. Method

This study, according to Thiagarajan in Ref. [8], is the initial stage of the ‘4D Steps’ model of Research and Development study aimed at developing the MI-based supplementary English speaking learning materials for grade XI students, namely the Define stage. Therefore, the participants of the study were XI grader students. Receiving the official letter to request for permission and cooperation to gather the data, the school instructed an English teacher who taught grade XI students to help with the process. She then agreed to permit the research to take place in one of her class, with a total of 30 students participated in the study. In order to gain the expected data, a test of MI proposed by Ref. [9] was filled in by each of them. Before the participants started filling in the test, a detailed explanation about the instruction and the purpose of the test was given. Moreover, this is also important to mention that they are expected to express their true selves and that their answers would not bring any consequences to their English score. It is also stated that the data would not be used for any other purposes rather than this study. The collected data were then analyzed using simple mathematical formula in Microsoft Office Excel 2017 in order to get a conclusion of what intelligences are possessed by most of the students.

1. Results

This section presents the findings of the research in the form of figures and tables, preceded by the explanation. Agreed to declare that English speaking skills are among the most important language skills to master, the students chose ‘Science and Technology’ and ‘Arts and Culture’ as the most expected topics to learn during the English class, followed by ‘Humanity’ and ‘Citizenship’, as it is shown in Fig.1.



Fig. 1 The students’ choice of topic of interest

Fig. 2 illustrates the self-assessment of the students. They were to value their own English proficiency level and the majority claimed that they are on the intermediate mid level.



Fig. 2 The students’ English proficiency level

Meanwhile, when asked to prioritize the goal they want to reach by being actively participated in the English learning activities, most of them pointed out ‘mastering the future-job-related vocabulary’ and ‘improving self-confidence to communicate with English native and non-native speakers’ as the most intended ones.

Meanwhile, as it is illustrated in Table 1., at the time the study was conducted, the students have already developed various types of intelligences. Some of them even have more than one type of it at a time.



Fig. 3 Goal of Learning

Table 1. The major intelligences of the participants

|  |  |  |
| --- | --- | --- |
| No. | Name | Major Intelligence(s) |
| 1. | Student 1 | intrapersonal |
| 2. | Student 2 | visual, bodily-kinesthetic, intrapersonal |
| 3. | Student 3 | visual-spatial, musical, intrapersonal, existential |
| 4. | Student 4 | musical |
| 5. | Student 5 | existential |
| 6. | Student 6 | verbal-linguistic, naturalist, existential |
| 7. | Student 7 | musical |
| 8. | Student 8 | verbal-linguistic, bodily-kinesthetic, interpersonal, intrapersonal, existential |
| 9. | Student 9 | musical |
| 10. | Student 10 | existential |
| 11. | Student 11 | visual, bodily-kinesthetic, musical, naturalist |
| 12. | Student 12 | interpersonal, intrapersonal |
| 13. | Student 13 | logical-mathematical, musical, existential |
| 14. | Student 14 | interpersonal |
| 15. | Student 15 | bodily-kinesthetic, musical, interpersonal |
| 16. | Student 16 | logical-mathematical, bodily-kinesthetic, musical |
| 17. | Student 17 | verbal-linguistic |
| 18. | Student 18 | verbal-linguistic, logical-mathematical |
| 19. | Student 19 | verbal-linguistic, intrapersonal |
| 20. | Student 20 | interpersonal |
| 21. | Student 21 | bodily-kinesthetic, existential |
| 22. | Student 22 | naturalist |
| 23. | Student 23 | verbal-linguistic, bodily-kinesthetic, musical |
| 24. | Student 24 | logical-mathematical, visual-spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, naturalist, existential |
| 25. | Student 25 | bodily-kinesthetic, musical |
| 26. | Student 26 | bodily-kinesthetic |
| 27. | Student 27 | verbal-linguistic, intrapersonal, existential |
| 28. | Student 28 | musical, intrapersonal |
| 29. | Student 29 | intrapersonal |
| 30. | Student 30 | visual-spatial |

Furthermore, the percentage of the majority of the intelligences is presented in Table 2.

Table 2. The percentage of major intelligences

|  |  |  |
| --- | --- | --- |
| Name of intelligences | Frequency (f) | Percent (%) |
| verbal-linguistic | 7 | 23.33 |
| logical-mathematical | 4 | 13.33 |
| visual-spatial | 5 | 16.67 |
| bodily-kinesthetic | 10 | 33.33 |
| musical | 12 | 40 |
| interpersonal | 6 | 20 |
| intrapersonal | 10 | 33.33 |
| naturalist | 4 | 13.33 |
| existential | 9 | 30 |

The interpretation of each datum is presented in the following section.

1. Discussion

As they are illustrated through figures and tables in the previous section, the results of the needs analysis of this study in general cover two things: the target needs and the MI.

Speaking of the important of needs analysis, Ref. [10] suggested two types of needs namely target needs and learning needs. Target needs include: (1) necessity, (2) lacks, and (3) wants. In this study, the ‘How important English is’ for the participants of the research has been answered by all the interviewees. They stated that English is very crucial for the students of grade XI of the major. It is because the subjects of the research have the potential to meeting English native speakers in the future. For those who are eager to look for a job in a multinational company, the chance to pass the interview session is expected to be bigger than other candidates who are lacking of speaking skills.

Meanwhile, the students who want to continue studying in a college may have even greater possibilities to use their English language skills. One of them is preparing for a group presentation. They need to read and look for the information about the topic of the presentation, which are usually produced in English.

In order to make it a joyful learning, the topics of the discussion should be able to draw the students’ attention. In the case of this study, as the students mostly chose ‘Science and Technology’ and ‘Arts and Culture, the learning activities and discussion are better about the chosen topics. Regarding arts and culture, the teacher can also insert some beneficial cultural tips whenever necessary.

The next aspect of target needs is the ‘lacks’, or the gap between the ideal image and the reality. Based on American Council on the Teaching of Foreign Languages (ACTFL), speaking ability are categorized into: (1) Intermediate high, (2) Intermediate mid, (3) Intermediate low, (4) Novice high, (5) Novice mid, and (6) Novice low. Majority of the students identified their ability as *intermediate mid* which means they are able to have a communication about their real life, or about the topics they are well-acquainted with, such as about themselves, family, home, daily activities, hobby, etc.

It is then revealed through the study that although the students have a tendency to like the topics of their interests, they were still unconfident about their personal strengths. For this reason, the English teacher and the students themselves admit that they have poor vocabulary mastery. Therefore, they expect to enrich it upon learning the materials. As a bonus, they also expect that once their vocabulary mastery getting better, their will gain confidence to communicate using spoken or written English, with English native or non-native speakers. To overcome the problem, the 3000 first frequently spoken English words are included in the developed textbook.

Another thing should not be put aside when preparing for our class is analyzing the MI of the students. It is compulsory because every student may have different intelligence; different way to respond to a similar case. Among the nine intelligences theory proposed by Gardner, four of them possessed by the majority of subjects of the research, there are musical intelligence, bodily-kinesthetic, intrapersonal, and existential knowledge.

According to Ref. [11], individuals with high score of musical intelligence will be able to perform speaking tasks well for the following reasons. First, they are able to identify the rhythmic of sound. Therefore, in the initial level, they will be able to imitate correctly. Also, they will be able to pronounce words correctly. For this reason, pronunciation drill is suitable for the students who belong to this group. Third, they are also able to recognize the stress in a word or sentence, so they are able to speak with the correct stress. Teachers can make use of this data, for instance by grouping those who possess high musical intelligence with the ones whose musical intelligences are not as high as them. Then, the students of this group will also be able to speak with appropriate speed and intonation. In other words, they can be the good examples in the dialog practices.

The next group consists of the students who score high in the bodily-kinesthetic area. They will also be able to handle the pronunciation tasks well as they are able to speak with clear pronunciation and articulation. Reading aloud some authentic learning materials will make them excited, before presenting their own spoken texts.

The students who are good in intrapersonal matters will be able to express their own thought and recalling the past learning experience. Teacher can accommodate the development of their individual strength by raising questions about their learning experience. This can help during the context building too. Then, at the end of the learning, the students can be asked to reflect their new learning experience. Grouping them with their peers whose intrapersonal intelligence has not been developed as excellent as theirs yet can help the two sides too.

Then, the students who are good in handling existential matters would be able to find the answer to difficult questions such as finding out reason of why certain language formula works that way. In contrary, tasks to raise questions from some provided answers are also suitable for them.

In conclusion, the awareness of the uniqueness of every student to perform the task in various ways helps the teachers to value their differences. Therefore, hopefully, there will be no more cases where learning English is not fun for the reason of teachers’ judgment and belittling of the students who perform the tasks differently. This innovation in language teaching will help the realization of best practices to improve the quality of education in the 21th century.

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