Multiple Intelligence of the Fourth Year English Department Students of STKIP Abdi Pendidikan Payakumbuh

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Abstract: Multiple Intelligence (MI) is very important to modern education because its main point is that every individual has eight intelligences and they all work together in a unique way. This research belongs to Descriptive research analyzing students' MI of the fourth year English department of STKIP Abdi Pendidikan Payakumbuh. The data were collected through questionnaires which had been distributed to 20 students. Then it was analyzed by interpreting in each Intelligence. The finding shows that most of the students had good in Interpersonal Intelligence, Musical Intelligence, and Intrapersonal Intelligence. And they are good enough at Naturalist Intelligence, Bodily-kinesthetic Intelligence, and Spatial Intelligence. However, they are low at Linguistic Intelligence and Logical-mathematic Intelligence.

Key Words: Multiple intelligence, EFL Teaching, education

INTRODUCTION

Students' of STKIP Abdi Pendidikan Payakumbuh is prepared to be teacher later on. As a candidate of teacher, they have to pay particular attention to their education. Education plays a very crucial role in students' advancements to face job field in the future. They have to be able to choose excellent educations to increase their intelligence. Intelligence is the ability to solve problems or to create products that are valued within one or more cultural settings. A Psychologist and Harvard professor, Howard Gardner, proposed a much broader view of the definition of intelligence which is called Multiple Intelligences.

The Multiple Intelligences comprise some intelligences which will be described below:

Linguistic Intelligence:

Students' strength in linguistic intelligence exhibit the ability to use language to express their thoughts and to understand other people. They comfortably and easily manipulate words and languages to express themselves creatively, and use language as a means to remember information. They engage in active listening, fluent speaking and reading enjoy storytelling,

explaining and persuading, using humor and word play. They have the capacity to analyze language use and language elements in their first language as well as in second and other languages. These students tend to think in words more than in images.

Logical-Mathematical Intelligence

Students' exhibiting strong logical-mathematical intelligence have the capacity to see and understand the concepts and principles behind causal and numeric systems. They are able to use both deductive and inductive reasoning and logic to analyze and solve problems, and they enjoy manipulating numbers in number puzzles calculations and formulas. These learners can skillfully make connections among pieces of information, as well as recognize cause and effect and other patterns. They tend to employ classifying, sequencing, questioning and experimenting, and computing as strategies for analyzing and retaining information.

Spatial Intelligence

Students with high spatial intelligence have the ability to recognize, create, identify and contemplate deep questions about human existence; use mental questioning as a means to

situate and remember information and use images and patterns of wide space and confined space. Using images as a means to remember information, they can easily visualize and orient their bodies and other objects in space and understand maps, charts and graphic organizers. They enjoy puzzles and board games, appreciate detail and color, drawing, painting and plastic arts. They tend to think in images more than in words.

Musical Intelligence

Students' with high musical intelligence have the capacity to hear, recognize, and manipulate patterns found in music and rhythmic structures. They are skilled at composing, playing, or conducting music, recognizing tonal patterns, and utilizing the structure and rhythm of music and rhythms. They are good at remembering melodies and chants, and enjoy playing musical instruments, singing, whistling, and identifying environmental sounds. These learners use sound and rhythm to learn and remember information.

Bodily-Kinesthetic Intelligence

Students with high bodily-kinesthetic intelligence have the ability to use their whole bodies and parts of their bodies in optimal ways to retain information through touch and movement, to solve problem, to build, take apart, and make something, or to put on a production. They manipulate the body through controlled fine and gross motor skills and handle objects with dexterity. These learners enjoy dancing, playing sports, acting, miming, expressing emotions through body language, and hands-on experimenting. They use their mental abilities to coordinate body movements as a way to process and retain information.

Interpersonal Intelligence

Those exhibiting strong interpersonal intelligence have the ability to understand other people and social relationships. With a facility in communicating with and relating to other people, these learners engage in active listening and are skilled in receiving and identifying body language and facial expressions as signals. They

enjoy working collaboratively, social organizing and managing discussions and projects. They can sustain motivation in others and have the capacity for empathy. They often work more effectively with others, rather than individually, to learn and retain information.

Intrapersonal Intelligence

Learners strong in intrapersonal intelligence exhibit perceptive understanding of the self, and are knowledgeable about who they are, what they do, and their motives for doing so. They can consciously identify and control their own inner emotions and thinking processes, recognize their own strengths and weaknesses. Self-analyzing, they dissect their roles in relationship to others, are conscious of their desires, dreams and inner feelings. These learners tend to work independently, they use their strengths and self-reflection as a means to remember information.

Naturalist Intelligence

Learners strong in naturalist intelligence exhibit the ability to discriminate among, care for, and appreciate living things and other features of the natural world. They are able to understand and manipulate the environment, plants, and animals, and use nature-related analogies as a means to remember information. These learners are keen observers of the characteristics, behaviors, and habitats of living things as well as the characteristics of nonliving things. They enjoy gardening, hiking, and exploring nature, as well as caring for animals.

The current study seeks to uncover the students' multiple intelligence of the fourth year English Department at STKIP Abdi Pendidikan, Payakumbuh.

METHOD

This research was descriptive study to investigate students' multiple intelligence. Twenty students of the fourth year English Department at STKIP Abdi Pendidikan Payakumbuh in Academic Year 2013/2014 were the subject of this study. They were selected

randomly. The data were collected through questionnaires which were developed through *criterion, construct and content validity*. Its reliability was gotten through expert judgment. The questionnaires were arranged through the eight multiple intelligence. Each intelligence had 10 questions and they were distributed to the samples. Afterwards, the questionnaires were analyzed and classified to determine whether or not the students have the multiple intelligence.

RESEARCH FINDINGS

Research findings are presented under the eight sections based on the multiple intelligences.

Linguistic Intelligence

Frequencies and percentages of students' answer to this intelligence is shown in the table 1 below:

Table 1: Percentage of Linguistic Intelligence

No	Sub-Sections (questions)	N	%
1	I like to read books	13	65
2	I try to use words that I learned newly in my talking and writing	8	40
3	I am good at making points or explaining things	10	50
4	I am good at talking figuratively, using languages full of expressions	8	40
5	I make a good use of vocabulary in describing objects	12	60
6	I am good at persuading people to do things	6	30
7	I am highly interested in the meanings of words	16	80
8	I like to write	14	70

9	I like to go to the bookstore or library to look for a new idea	7	35
10	I am good at doing crossword puzzle and word games	15	75

It can be described that: 13 students (65%) like to read books, 8 students (40%) use words that they learned newly in talking and writing, 10 students (50%) good at making points or explaining thing, 8 students (40%) good at talking figuratively, using languages full of expressions, 12 students (60%) make a good use of vocabulary in describing objects, 6 students (30%) good at persuading people to do things, 16 students (80%) highly interested in the meanings of words, 14 students (70%) like to write, 7 students (35%) like to go to the bookstore or library to look for a new idea, and 15 students (75%) good at doing crossword puzzle and word games.

To make clear, it is shown in the following figure:

Figure 1: Students' with Linguistic Intelligence

Logical-mathematical Intelligence

Frequencies and percentages of students' answer to this intelligence are shown the table 2 below:

Table 2: Percentage of Logical-mathematical Intelligence

No	Sub-Sections (questions)	N	%
11	I try to sort out complex things in a logical way	12	60
12	I prefer to do math social studies or English	6	30
13	I am good at finding patterns or errors in a certain situation	6	30
14	I work well with numbers and data	8	40
15	I always look for patterns, regularities, and logical connections from my work.	7	35
16	I feel comfortable with abstract ideas	6	30
17	I am able to understand charts and diagrams easily	7	35
18	The topics and discussions on sciences interest me	8	40
19	I believe that there is a logical rule governing phenomena in the world	7	35
20	I enjoy doing games that require strategies and skills	10	50

From the table above, it can be summarized that 12 students (60%) try to sort out complex things in a logical way, 6 students (30%) prefer to do math social studies or English, 6 students (30%) good at finding patterns or errors in a certain situation, 8 students (40%) work well with numbers and data, 7 students (35%) always look for patterns, regularities, and logical connections from my work., 6 students (30%) feel comfortable with

abstract ideas, 7 students (35%) able to understand charts and diagrams easily, 8 students (40%) interest on topics and discussions on sciences, 7 students (35%) believe that there is a logical rule governing phenomena in the world, and 10 students (50%) enjoy doing games that require strategies and skills.

Figure 2: Students' with Logical-mathematical Intelligence

Spatial Intelligence

Students with spatial intelligence can be seen in the following table:

Table 3: Percentage of Spatial Intelligence

No	Sub-Sections (questions)	N	%
21	I like to draw a picture or sketch when I think	11	55
22	I know how to tell subtle differences in colors, lines, and shapes	7	35
23	I like to visualize certain ideas well	8	40
24	I can read maps easily	12	60
25	I visualize the story in my head when I read	16	80
26	I concentrate on what I watch more than on what I listen to	14	70
27	I am good at decorating things with colors	10	50
28	I can visualize the other angle without looking at it	9	45
29	I remember people's face rather than their names	17	85

30	I am good at finding picture dictionary and finding ways in a labyrinth	16	80
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It can be described that 11 students (55%) like to draw a picture or sketch when they think; 7 students (35%) know how to tell subtle differences in colors, lines, and shapes; 8 students (40%) like to visualize certain ideas well; 12 students (60%) can read maps easily; 16 students (80%) visualize the story in their head when reading; 14 students (70%) concentrate on what they watch more than on what they listen to; 10 students (50%) good at decorating things with colors; 9 students (45%) visualize the other angle without looking at it; 17 students (85%) remember people's face rather than their names; and 16 students (80%) good at finding picture dictionary and finding ways in a labyrinth. The figure of this finding can be seen as follow:

Figure 3: Students with Spatial Intelligence

Musical Intelligence

The percentage of this intelligence can be seen as follow:

Table 4: Percentage of Musical Intelligence

No	Sub-Sections (questions)	N	%
31	I like sing when I am alone	18	90
32	I often like to listen music	20	100
33	I often tap rhythmically on the table or deck	16	80
34	I play musical instruments well	11	55
35	I can tell when music	9	45

	sounds off-key		
36	I know many songs as if I had a good library of song titles in my head	14	70
37	I like to make up a new melody and sing a song	14	70
38	I am good at tapping out musical beats	12	60
39	I know the clear difference between the songs I like and those that I don't like	15	75
40	I enjoy listening to the top 20 music hits	18	90

The description are as follow: 18 students (90%) like sing when they are alone; 20 students (100%) often like to listen music; 16 students (80%) often tap rhythmically on the table or deck; 11 students (55%) play musical instruments well; 9 students (45%) can tell when music sounds off-key; 14 students (70%) know many songs as if they had a good library of song titles in their head; 14 students (70%) like to make up a new melody and sing a song; 12 students (60%) good at tapping out musical beats; 15 students (75%) know the clear difference between the songs they like and those that they don't like; 18 students (90%) enjoy listening to the top 20 music hits.

The clear figure is follow:

Figure 4: Students with Musical Intelligence

Bodily-Kinesthetic Intelligence

The result of this intelligence can be seen in the following table:

Table 5: Percentage of Bodily-kinesthetic Intelligence

No	Sub-Sections (questions)	N	%
41	I like to repair or make things for myself	16	80
42	I am good at balancing	12	60
43	I learn new dances and sports very easily	4	20
44	I often talk, making gestures with hands	20	100
45	I engage in physical activities even though they are physically demanding	10	50
46	I am easily bored when I sit quietly	20	100
47	I like to figure out how things operate by manipulating them with my hands	16	80
48	I am good at hand-crafting such as making wood crafts, making models, and needling	12	60
49	I prefer to engage myself in sports rather than watching them on TV	11	55
50	I am good at mimicking the physical actions of other people	10	50

The result of this point can be described as follow: 16 students (80%) like to repair or make things for themselves; 12 students (60%) good at balancing; 4 students (20%) learn new dances and sports very easily; 20 students (100%) often talk, making gestures with hands; 10 students (50%) engage in physical activities even though they are physically demanding; 20 students (100%) easily bored when they sit quietly; 16 students (80%) like to figure out how things operate by manipulating them with their hands; 12 students (60%) good at hand-crafting such as making wood crafts, making models, and needling; 11 students (55 %) prefer to engage themselves in sports rather than watching on TV; 10 students (50%) good at mimicking the physical actions of other people. The figure is as follow:

Figure 5: Students with Bodily-kinesthetic Intelligence

Interpersonal Intelligence

The percentage of this intelligence is in the following table:

Table 6: Percentage of Interpersonal Intelligence

No	Sub-Sections (questions)	N	%
51	I am good at making friends in school	19	95
52	I enjoy attending meetings or parties at the social clubs	15	75
53	I make it a rule to go to the party for fun	12	60
54	People like to make friendship with me	18	90
55	I look for opportunities through which I can make new friendships	20	100
56	I tend to ask other people when I need to make an important decision	20	100
57	I try to avoid conflicting situations and make efforts to get along, when they occur	17	85
58	I am born to make people around me feel comfortable	18	90
59	I often help my friends	20	100
60	I like to work well with other people through cooperation	20	100

It can be summarized as follow: 19 students (95%) good at making friends in school; 15 students (75%) enjoy attending meetings or parties at the social clubs; 12 students (60%) make it a rule to go to the party for fun; 18 students (90%) people like to make friendship with them; 20 students (100%) look for opportunities through which they can make new friendships; 20 students (100%) tend to ask other people when they need to make an important decision; 17 students (85%) try to avoid conflicting situations and make efforts to get along, when they occur; 18 students (90%) born to make people around them feel comfortable; 20 students (100%) often help their friends; 20 students (100%) like to work well with other people through cooperation. And also it can be seen from the following figure:

Figure 6: Students with interpersonal Intelligence

Intrapersonal Intelligence

The finding of intrapersonal intelligence had by the students can be seen in the following table:

Table 7: Percentage of Intrapersonal Intelligence

No	Sub-Sections (questions)	N	%
61	I like to spend time on thinking of things that are important to me	12	60
62	I think highly of my independence	16	80
63	I often talk to myself looking at a mirror	17	85
64	I often think of my self-worth and my responsibility	19	95
65	I like to think hard before I take certain actions	20	100
66	I like to spend time alone	16	80
67	I like to set up a certain goal for myself	20	100
68	I tend to rely on my own decision, not paying attention to other people's advice	8	40
69	I like to own a small business rather than work at the company	10	50
70	I like to play games such as computer games that I can do by myself	16	80

The table above can be described as follow: 12 students (60%) like to spend time on thinking of things that are important to them; 16 students (80%) think highly of their independence; 17 students (85%) often talk to themselves looking at a mirror; 19 students (95%) often think of their self-worth and their responsibility; 20 students (100%) like to think hard before they take certain actions; 16 students (80%) like to spend time alone; 20 students (100%) like to set up a certain goal for themselves; 8 students (40%) tend to rely on their own decision, not paying attention to other people's advice; 10 students (50%) like to own a small business rather than work at the company; and 16 students (80%) like to play

games such as computer games that they can do by themselves. It was figured in the following figure:

Figure 7: Students with Intrapersonal Intelligence

Naturalist Intelligence

The percentage of students with naturalist intelligence can be seen in the following table:

Table 8: Percentage of Naturalist Intelligence

No	Sub-Sections (questions)	N	%
71	I like to stay outside home as often as possible	8	40
72	I make a good prediction on weather changes	6	30
73	I am concerned with environmental problems such as beach pollution, park reservation	11	55
74	I did biology better than chemistry when I was a high school student	13	65
75	I like recreational activities such as hunting, fishing, watching birds, etc	18	90
76	I am good at raising plants and flowers	14	70
77	I like to draw or take a picture of natural objects	17	85
78	I like to go hiking and camping	16	80

79	I feel more comfortable outside than inside	18	90
80	I am good at finding my way by looking at the sun or stars in the deep forest	12	60

The table above can be described that 8 students (40%) like to stay outside home as often as possible; 6 students (30%) make a good prediction on weather changes; 11 students (55%) concerned with environmental problems such as beach pollution, park reservation; 13 students (65%) did biology better than chemistry when they were a high school student; 18 students (90%) like recreational activities such as hunting, fishing, watching birds, etc; 14 students (70%) good at raising plants and flowers; 17 students (85%) like to draw or take a picture of natural objects; 16 students (80%) like to go hiking and camping; 18 students (90%) feel more comfortable outside than inside; and 12 students (60%) good at finding their way by looking at the sun or stars in the deep forest. It was clearer in the following figure:

Figure 8: Students' with naturalist Intelligence

Students Multiple Intelligence

The explanations above draw the multiple intelligence that students' have based on sub-section of each intelligence. From that explanation, it can be summarized that the percentage of the fourth year English Department students of STKIP Abdi Pendidikan Payakumbuh of Multiple Intelligence had as follow:

Table 9: Students' Multiple Intelligence

No	Multiple Intelligence	Total	%
1	Linguistic Intelligence	109	55%
2	Logical Mathematical Intelligence	77	39%
3	Spatial Intelligence	120	60%
4	Musical Intelligence	147	74%
5	Bodily-kinesthetic intelligence	131	66%
6	Interpersonal Intelligence	179	90%
7	Intrapersonal Intelligence	154	70%
8	Natural Intelligence	133	67%

From the table above, it can be seen that most of the students had very good intelligence in Interpersonal Intelligence with percentage of students is 90%, then they are good in Musical Intelligence with 74% of the students, after that they are also good in Intrapersonal Intelligence with 70% of students. The students had good enough intelligence in Natural Intelligence with 67% of students, Bodily Kinesthetic Intelligence with 66% of students, and Spatial Intelligence with 60% of students. And at least they had low in Linguistics Intelligence with 55% of students and Logical Mathematical Intelligence with 39% of students.

It can be interpreted that the most of the students have capacity to understand the intentions, motivations, and desires of other people and, consequently, to work effectively with others. And some or less of the students had low Intelligence at their abilities with words and language. Since the students is English Department students, it should be concerned by

the lecturer to increase students ability in this intelligence. And they are also low at solve problems with logic, calculates math problems quickly, and prefers to see things categorized in a logical sense of order. At least, the percentage of Multiple Intelligence that students had can be seen in the following figure:

Figure 9: Students' Multiple Intelligence

DISCUSSION

The aim of the current study was to investigate Multiple Intelligences of the Fourth Year English department students of STKIP Abdi Pendidikan Payakumbuh. The result of the study showed that the student have various intelligences.

Most of the students had very good intelligence in Interpersonal Intelligence (90%), then they are good in Musical Intelligence (74%), after that they are also good in Intrapersonal Intelligence (70%). That means the students are very good in making friends, like to learn through music and also have good responsibility of their self management.

The students had good enough intelligence in Natural Intelligence (67%), Bodily Kinesthetic Intelligence (66%), and Spatial Intelligence (60%). They are good enough to do observation and experience and a little bit genuinely appreciate the intertwining of natural forces. They are also good enough in understand the world through their own body. Moreover, these students are good enough to create and manipulate mental images in order to solve problems.

And at least they had low in Linguistics Intelligence (55%) and Logical Mathematical Intelligence (39%). They may got barrier in mastery of language and think in words. And at least they are less good to detect patterns, reason deductively, and think logically, it may cause of the limitations skill in calculations.

CONCLUSION

From the finding it can be concluded that the students of the fourth year English Department of STKIP Abdi Pendidikan Payakumbuh had good in Interpersonal Intelligence, Musical Intelligence, and Intrapersonal Intelligence. And they are good enough at Naturalist Intelligence, Bodily-kinesthetic Intelligence, and Spatial Intelligence. And at least they are low at Linguistic Intelligence and Logical-mathematic Intelligence.

It implies then that lecturers need to be able to organize the process of learning with Multiple Intelligence to increase students' interest in their studies. Lecturers should identify the most preferable activities in the classroom so that they are categorized to see which ones help develop types of students' intelligences. Later on, an understanding of MI theory support the notion of the use of media, multimedia, technology, and method that has a significant role in the classroom because it surely helps lecturer to create better, logical, reflective and creative activities in the classroom.

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