MULTIPLE INTELLIGENCES AMONG EDUCATION STUDENTS

Ethel P. Junco
Jocyl Caber
Julieta G. Infante

ABSTRACT

This study was conducted during the first semester, Academic Year 2013-2014 at Guimaras State College - Mosqueda Campus. The respondents were the Education students. This study used descriptive co relational research design. Results revealed that the majority of the respondents were female belonging to age bracket 16-25 years old. Most of them were First year BEEd students. When grouped according to the parents' educational attainment, most of their parents were high school level and whose family income is below the minimum wage (1,301-6,900). The study further revealed that only the respondents' major field of concentration was the factor which affects their academic performance. Verbal-linguistic, musical, interpersonal, bodily-kinesthetic and logical-mathematical intelligence have a significant relationship with the academic performance. This means that the respondents were good in some aspects of intelligence but not so good in others. It was also found out among the Education students that Verbal linguistic is the dominant intelligence.

KEYWORDS: Multiple Intelligences, Education, Guimaras State College

INTRODUCTION

Background of the study

The traditional assumption about intelligence is that it is a single, unchanged, inborn capacity. These intelligences can be measured using tests like Stanford-Binet with results showing the traditional idea of IQ. "Those tests measure only logic and language, leaving out a whole lot of other capacities that the human brain has to offer," (Richards & Rodgers, 1986).

Gardner's theory argues that intelligence, particularly as it is traditionally defined, does not sufficiently encompass the wide variety of abilities humans display. This theory led to the concept of multiple intelligences (Gardner, 2000).

The Multiple Intelligences Model is one of a variety of learning style models that have been proposed in general education with follow-up inquiry by language educators. (Alcantara, et al., 2003) The following are the intelligences: (1) Logical-Mathematical Intelligence is the ability to detect patterns, reason deductively and think logically. Most often associated with scientific and mathematical thinking. (2) Linguistic Intelligence is the ability to use language masterfully to express oneself rhetorically or poetically. Also allows one to use language as a means to remember information. (3) Spatial Intelligence is the ability to manipulate and create mental images in order to solve problems. Not limited to visual sight, Gardner noted that blind children can possess spatial intelligence. (4) Musical Intelligence is the ability to read, understand, and compose musical pitches, tones, and rhythms. (Aural functions are required for a person to develop this intelligence in relation to pitch and tone, but it is not needed for the knowledge of rhythm.) (5) Bodily-Kinesthetic Intelligence is the ability to use one's mind to control one's bodily movements. 6) Interpersonal Intelligence is the ability to apprehend the feelings and intentions of others. (7) Intrapersonal Intelligence is the ability to understand one's own feelings and motivations. Meanwhile, (8) Naturalistic has to do with nature, nurturing and relating information to one's natural surroundings. Those having it are said to possess greater sensitivity to nature and their place within them.

Several studies were conducted based on the multiple intelligences. In the study of Fisher (2000), participants in the multiple intelligence program performed just as well as those who have been in the traditional program.

The studies of Laruan (2006) and Judith (2013) revealed that multiple intelligences of the respondents vary when grouped according to sex, course, and family income.

Foreign studies revealed that verbal, logical, and intrapersonal intelligence were significant predictors for self and parents overall IQ estimations. Males were more likely to believe in sex differences in intelligences than females. (Neto, F., Ruiz, F., and Furnham, A., 2008) In addition, Kunkel (2007) in his study included significant time in the musical, spatial and bodily-kinesthetic intelligences, as well as the traditional areas of logical-mathematical and linguistics. Saban and Ahmet (2007) proved that there has been a significant increase in the number of multiple intelligences (MI) studies in Turkey.

The challenge therefore, for the Guimaras State College as a teaching-learning institution is to determine the multiple intelligences among their college students. In that way, the faculty and those in the administration will be given direction on the formulation of teaching-learning strategies that can help build students' academic performance.

Statement of the problem

This study was conducted to determine the multiple Intelligences among the Education students at Guimaras State College -Mosqueda Campus for the first semester of the academic year 2013-2014.

Specifically, it sought to answer the following questions:

1. What is the profile of Education students as to age, sex, year level, parents' educational attainment and monthly income?
2. What is the academic performance of Education students?
3. What are the multiple intelligences among Education Students?
4. Are there significant differences in the academic performance among Education Students when they are classified according to age, sex, year level, educational attainment of parents, and monthly in come?
5. Are there significant relationships between multiple intelligences and academic performance?

Null hypotheses

Based on the preceding questions, the following hypotheses were drawn in the study:

1. There is no significant difference in the academic performance among Education students when grouped according to age, sex, major field of concentration, year level, parents' educational attain ment and monthly income.

2. There is no significant relationship between multiple intelligences and academic performance?

Research paradigm

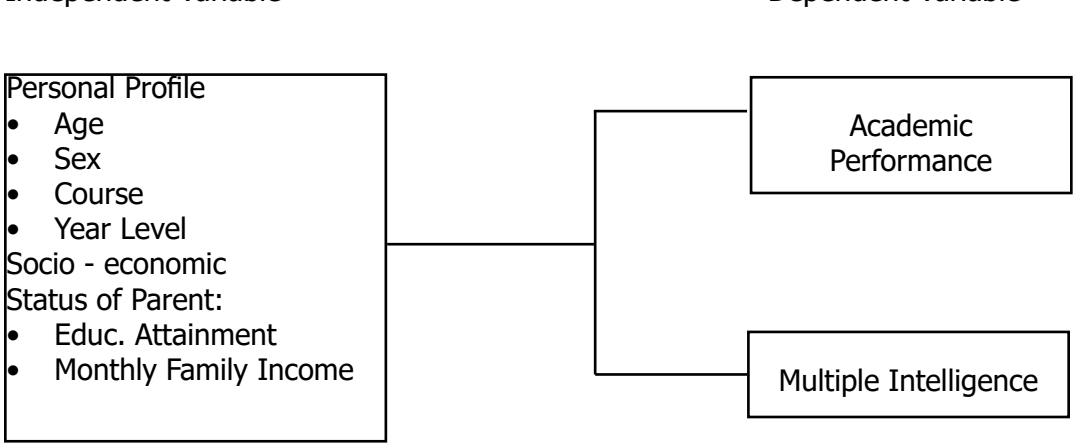

Figure 1: A schematic Diagram Showing the Difference in Multiple Intelligences among Education students of the Guimaras State College - Mosqueda Campus

METHODOLOGY

This research employed both qualitative and quantitative methods in order to determine the multiple intelligences among Education students of Guimaras State College - Mosqueda Campus. Furthermore, one shot survey only design was used since the data were gathered from the respondents once. Total enumeration was used in the study. The respondents of the study were the Education students from first year to fourth year enrolled at Guimaras State College - Mosqueda Campus during the first semester of academic year 2013-2014. The researchers prepared a questionnaire for students who were the respondents. The questionnaire is composed of four parts which includes the personal profile of the respondents, the socio-economic status of the family, the Academic performance, and the multiple intelligences assessment. The draft of the questionnaire would be presented to the panel of experts for comments and suggestions. The same instrument was presented to the panel of examiners during the proposal defense which was approved with suggestions to further refine its organization and content. With the suggestions, the survey questionnaire was reproduced and was personally distributed to the respondents. Validity assured the researchers that each item measured what it intended to measure.

The researchers asked permission from the College President to conduct simultaneously the study on Multiple Intelligence to all Education students of Guimaras State College - Mosqueda Campus. The researchers coordinated with the Dean of Education to schedule for the conduct of this study. The researchers administered the questionnaire to the respondents using a researcher-made questionnaire. Filled-up questionnaires were immediately collected from the respondents. The statistical tools used were frequency count and percentage, mean, t-test, and Analysis of Variance (ANOVA).

RESULTS AND DISCUSSIONS

Profile of the respondents

Results show that out of 167 respondents, there were 158 or 94.6% belonging to age bracket 16-25 and 7 or 4.2% belonging to age bracket 26 and above; while there were 2 or 1.2% who did not indicate their age. When grouped according to sex, 19 or 11.4% were male while 148 or 88.6% were female. Lastly, when grouped according to their field of specializations, 111 or 66.5% were BEEd students and 56 or 33.5% were BSEd.

In view of the year levels of the Education students, results show that 59 or 35.3% were first year, 30 or 18.0% were second year, 39 or 23.4% were third year, 38 or 22.8% were fourth year students while 1 or .6% of students did not indicate their year levels.

When grouped according to the educational attainment of the respondents' mothers, there were 23 or 13.8% elementary level, 25 or 15.0% elementary graduates, 57 or 34.1% high school level, 30 or 18.0% high school graduates, 14 or 8.4% college level, 15 or 9.0% college graduates, while the remaining 3 or 1.8% were vocational.

When grouped according to the educational attainment of the respondents' fathers, there were 32 or 19.2% elementary level, 22 or 13.2% elementary graduates, 53 or 31.7% high school level, 32 or 19.2% high school graduates, 11 or 6.6% college level, and 13 or 7.8% college graduates, 1 or .6% had a vocational education while the remaining 3 or 1.8% did not indicate their educational attainment.

Table 2. Profile of the respondents

Categories	f	%
Age		
16-25 year old	158	94.6
26 year old and above	7	4.2
Did not indicate	2	1.2
Total	167	100.0
Sex		
Male	19	11.4
Female	148	88.6
Total	167	100.0
Course		
BEEd	111	66.5
BSEd	56	33.5
Total	167	100.0
Year Level		
First Year	59	35.3
Second Year	30	18.0
Third Year	39	23.4
Fourth Year	38	22.8
Did not indicate	1	0.6
Total	167	100.0

Table 3. Parents' education and monthly family income

Categories	f	%
Educational Attainment of Mother		
Elementary Level	23	13.8
Elementary Graduate	25	15
High School Level	57	34.1
High School Graduate	30	18
College Level	14	8.4
College Graduate	15	9
Vocational	3	1.8
Total	167	100.0
Educational Attainment of Father		
Elementary Level	23	19.2
Elementary Graduate	22	13.2
High School Level	53	31.7
High School Graduate	32	19.2
College Level	11	6.6
College Graduate	13	7.8
Vocational	1	0.6
Did not indicate	3	1.8
Total	167	100.0

In terms of annual family income, 43 or 25.7% indicated to receive a wage of 1,300 or below, 67 or 40.1% whose income were below minimum wage (1,301-6,900), there were 17 or 10.2% who annually receives minimum wage or (6,901-7000), 10 or 6.0% indicated to have received 7,000-10,000, 11 or 6.6% whose income is between 10,001-15,000, 8 or 4.8% has an income of 15,001-20,000, 3 or 1.8% has an income of 20,001-30,000, 2 or 1.2% has 30,001-40,000, 3 or 1.8% of which annually receives 40,001-50,000 while 3 or 1.8 did not indicate their family income per year.

Table 4. Monthly family income

Categories	f	%
Family Income		
1,300 and below	43	25.7
Below minimum wage (1,301-6,900)	67	40.1
Minimum wage (6,901- 7000)	17	10.2
7001-10,000	10	6.0
10,001-15,000	11	6.6
15,001-20,000	8	4.8
20,001-30,000	3	1.8
30,001-4,000	2	1.2
4,0001-5,000	3	1.8
Did not Indicate	3	1.8
Total	167	100.0

Academic performance

Table 5 shows that there were 10 or 6.0% students who had a failing grade point average of 2.5-2.1, 146 or 87.4 got a good grade point average which range from 2.0-1.6, 11 or 6.6 respondents, performed very good obtaining a grade point average of 1.5-1.1. The total mean of the grade point average of the respondents was 1.82, categorized as good.

Table 5. Academic performance of education students

Average performance	f	%
Fair (2.5 to 2.1)	10	6
Good (2.0 to 1.6)	146	87.4
Very Good (1.5 to 1.1)	11	6.6
Total Mean = 1.82, SD = .181 (Good)		
Total	167	100

Multiple intelligences among education students

Results showed that the three highest multiple intelligences are: Verbal-linguistic with a mean of 3.44, Musical with a mean of 3.41, Interpersonal, and Intrapersonal having the same mean of 3.39; This implies that education students primarily are verbally intelligent which speaks to their profession or chosen field. Furthermore, the result shows that musical, interpersonal, and intrapersonal intelligences closely followed musical intelligence. This means that education students of Guimaras State College-Mosqueda Campus are not only sensitive to language, meanings, and relationships of words, sensitive to rhythm but are also sensitive to others; feelings and have a sense of self. While the lowest four are: Bodily-Kinesthetic with a mean of 3.37, Visual-spatial having a mean of 3.34, Naturalistic closely followed with a mean of 3.33, and Logical-Mathematical having a mean of 3.27. This implies that are less motivated or less interested with works involving abstract thinking, ecological issues, and mental abilities to coordinate body movements.

Table 6. Summary of multiple intelligences' mean

Multiple Intelligences	Mean	Interpretation	Rank
1. Verbal-Linguistic	3.44	Very Good	1
2. Logical-Mathematical	3.27	Good	8
3. Visual-Spatial	3.34	Good	6
4. Musical	3.41	Very Good	2
5. Bodily-Kinesthetic	3.37	Good	5
6. Interpersonal	3.39	Good	3.5
7. Intrapersonal	3.39	Good	3.5
8. Naturalistic	3.33	Good	7

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Verbal-linguistic intelligence

Table 7 presents the summary of assessment for verbal-linguistic. Results show that Education students of Guimaras State College-Mosqueda Campus tend to learn fast when listening to lectures and discussions. Furthermore, results show that they are good in explaining and they are very good expressing themselves either oral or written. The overall mean is 3.44 interpreted as very good.

Table 7. Summary of assessment for verbal-linguistic intelligence

Category	Mean	SD	Interpretation
Verbal-Linguistic			
1. I enjoy word play. Making puns, tongue-twisters, limericks.	3.28	.948	Good
2. I can easily express myself either orally or in writing, i.e. I'm a good story-teller or writer.	3.43	.972	Very Good
3. I can easily express myself either orally or in writing, i.e. I'm a good story-teller or writer.	3.43	.972	Very Good
4. I pepper my conversation with frequent allusions to things I'm read or heard.	3.22	.888	Good
5. I like to do crosswords, play Scrabble or have a go at other word puzzles.	3.69	1.097	Very Good
6. People sometimes have to ask me to explain a word I've used.	3.35	.924	Good
7. In school, I preferred subjects such as English, history and social studies.	3.40	.925	Very Good
8. I can hold my own in verbal arguments or debates.	3.29	.995	Good
9. I like to talk through problems, explain solutions, ask questions.	3.68	.964	Very Good
10. I can readily absorb information from the radio or audio cassettes.	3.76	.880	Very Good
Total	3.44	.574	Very Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Logical-Mathematical intelligence

Table 8 shows that the respondents cannot easily perform well when it comes to scientific and mathematical thinking. The respondents are very good in balancing their school allowance, and for the rest of the items they exhibit well. The overall mean for this was 3.27 interpreted as good in this kind of intelligence. This simply shows that the respondents exhibit good in logical-mathematical intelligence.

Table 8. Summary of assessment for logical-mathematical intelligence

Category	Mean	SD	Interpretation
Logical-Mathematical			
11. I enjoy working with numbers and can do mental calculations.	3.04	1.132	Good
12. I'm interested in new scientific advances.	3.22	1.014	Good
13. I can easily balance my school allowance; do the school budget.	3.93	1.05	Very Good
14. I like to put a detailed itinerary together for vacations or business trips.	3.01	1.021	Good
15. I enjoy the challenge of brain teasers or other puzzles that require logical thinking.	3.33	1.009	Good
16. I tend to find the logical flaws in things people say and do.	3.15	.862	Good
17. Mathematics and science were among my favorite subjects in school.	3.02	1.180	Good
18. I can find specific examples to support a general point of view.	3.29	.838	Good
19. I take a systematic, step-by-step approach to problem-solving.	3.37	.959	Good
20. I need to categorize, group or quantify things to appreciate their relevance.	3.37	.847	Good
Total	3.27	.626	Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Visual-spatial Intelligence

The result shows that the respondents are very good in art appreciation, visual records of things, and also very good in geometry lessons, while the rest of the items they exhibit well. For the overall mean was 3.34 which means that the respondents are good in this kind of intelligence.

Table 9. Summary of assessment for visual-spatial intelligence

Category	Mean	SD	Interpretation
Visual-Spatial			
21. I have an appreciation of the arts.	3.90	1.019	Very Good
22. I tend to make a visual record of events with a digital camera or cell phone camera.	3.53	1.074	Very Good
23. I find myself doodling when taking notes or thinking through something.	3.29	.894	Good
24. I have no problem reading maps and navigating.	2.89	.963	Good
25. I enjoy visual games such as jigsaw puzzles and mazes.	3.38	1.063	Good
26. I'm quite adept at taking things apart and putting them back together.	3.34	0.986	Good
27. In school, I liked lessons in art and preferred geometry to algebra.	3.56	1.079	Very Good
28. I often make my point by providing a diagram or drawing.	3.02	1.044	Good
29. I can visualize how things look from a different perspective.	3.31	1.044	Good
30. I prefer reading material that is heavily illustrated.	3.16	.996	Good
Total	3.34	.606	Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Musical Intelligence

The result shows that the respondents are sensitive with sounds or musically inclined, but they are fairly good in playing an instrument and manage to singing on keys. Since the respondents are very good in musical intelligence, they tend to learn faster with lectures. The overall mean was 3.41 which mean that the respondents are very good in this intelligence.

Table 10. Summary of assessment for musical intelligence

Category	Mean	SD	Interpretation
Musical			
31. I can play a musical instrument.	2.45	1.269	Fairly Good
32. I can manage to sing on key.	2.45	1.18	Fairly Good
33. Usually, I can remember a tune after hearing it just a couple of times.	3.25	1.273	Good
34. I often listen to music at home and even in jeepney.	4.02	1.212	Very Good
35. I find myself tapping in time to music.	3.90	1.144	Very Good
36. I can identify different musical instruments.	3.34	1.040	Good
37. Theme music or commercial jingles often pop into my head.	3.31	1.13	Good
38. I can't imagine life without music.	3.85	1.235	Very Good
39. I often whistle or hum a tune.	3.35	1.252	Good
40. I like a musical background when I'm working.	4.15	1.051	Very Good
Total	3.41	.800	Very Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Bodily-kinesthetic intelligence

The result shows that the respondents are very good in sports and other physical activities and expressing themselves through gestures while the rest of the items the respondents exhibit good. The overall mean was 3.37 which mean that the respondents exhibit good quality in this intelligence.

Table 11. Summary of assessment for bodily-kinesthetic intelligence

Category	Mean	SD	Interpretation
Bodily-Kinesthetic			
41. I take part in a sport or regularly perform some kind of physical exercise.	3.54	1.074	Very Good
42. I'm quite adept at 'do-it-yourself.'	3.35	.938	Good
43. I like to think through problems while engaged in a physical pursuit such as walking or running.	3.11	1.169	Good
44. I don't mind getting up on the dance floor.	2.75	1.185	Good
45. I like the most thrilling rides at the fun fair.	3.3	1.154	Good
46. I need to handle something to fully understand it.	3.49	0.981	Very Good
47. The most enjoyable classes in school were PE and any handicrafts lessons.	3.69	1.170	Very Good
48. I use hand gestures or other kinds of body language to express myself.	3.46	1.107	Very Good
49. I like rough and tumble play with children.	3.41	1.093	Very Good
50. I need to tackle a new learning experience 'hands on' rather than reading a manual or watching a video.	3.62	1.062	Very Good
Total	3.37	.628	Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Interpersonal Intelligence

The respondents showed very good in working effectively with others, giving pieces of advice, and having several close friends imply that they are interested in socializing to others; while the rest of the items they exhibit good. The overall mean was 3.39 is interpreted as good.

Table 12. Summary of assessment for interpersonal intelligence

Category	Mean	SD	Interpretation
Interpersonal			
51. I enjoy working with other people as part of a group or committee.	4.02	1.07	Very Good
52. I take great pride in being a mentor to someone else.	3.19	1.096	Good
53. People tend to come to me for advice.	3.62	1.040	Very Good
54. I prefer team sports—such as basketball, softball, soccer, football—to individual sports such as swimming and running.	3.3	1.320	Good
55. I like games involving other people—bridge, Monopoly, Trivial Pursuit.	2.96	1.043	Good
56. I'm a social butterfly. I much to be at a party rather than home alone watching television.	2.68	1.394	Good
57. I have several very close personal friends.	3.82	1.132	Very Good
58. I communicate well with people and can help resolve disputes.	3.55	.961	Very Good
59. I have no hesitation in taking the lead; showing other people how to get things done.	3.37	.953	Good
60. I talk over problems with others rather than trying to resolve them by myself.	3.42	1.105	Very Good
Total	3.39	.612	Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Intrapersonal Intelligence

The respondents show very good in self-reflection. Thus, the result implies that they tend to work or solve problems by themselves. The respondents exhibit good in keeping diaries, private hobbies, spending vacation in a hilltop cabin, etc. while they show fairly good in fishing alone. The overall mean 3.39 shows that they are good in this type of intelligence good.

Table 13. Summary of assessment for intrapersonal intelligence

Category	Mean	SD	Interpretation
Intrapersonal			
61. I keep a personal diary or log to record my innermost thoughts.	3.14	1.07	Very Good
62. I often spend 'quiet time' reflecting on the important issues in my life.	3.81	1.096	Good
63. I have set my own goals—I know where I'm going.	3.98	1.04	Very Good
64. I am an independent thinker—I know my own mind, make up my own mind.	3.75	1.32	Good
65. I have a private hobby or interest which I don't really share with anyone else.	3.19	1.043	Good
66. I like to go fishing by myself or take a solitary hike. I am happy with my own company.	2.53	1.394	Good
67. My idea of a good vacation is an isolated hilltop cabin rather than a five-star resort and lots of people.	2.94	1.132	Very Good
68. I have a realistic idea of my own strengths and weaknesses.	3.84	0.961	Very Good
69. I have attended Self-improvement Workshops or been through some kind of counseling to learn more about myself.	3.32	0.953	Good
70. I work for myself—or have seriously contemplated 'doing my own thing.'	3.37	1.105	Very Good
Total	3.39	0.612	Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Naturalistic Intelligence

The result shows respondents are very good in keeping pets, recognizing names of plants, understanding of global and human issues as well as conservation of natural resources while they exhibit good in topics concerning about environmental issues and subjects related to environmental science.

Table 14. Summary of assessment for naturalistic intelligence

Category	Mean	SD	Interpretation
Naturalistic			
71. I keep or like pets.	3.41	1.322	Very Good
72. I can recognize and name many different types of trees, flowers and plants.	3.59	1.120	Very Good
73. I have an interest in and good knowledge of how the body works—where the main internal organs are, for example, and I keep abreast on health issues.	3.32	.920	Good
74. I am conscious of tracks, nests and wildlife while on a walk and can 'read' weather signs.	3.24	1.019	Good
75. I envision myself as a farmer or maybe I like to fish.	2.68	1.147	Good
76. I am a keen gardener.	3.23	2.638	Good
77. I have an understanding of, and interest in, the main global environmental issues.	3.55	.986	Very Good
78. I am reasonably informed about developments in astronomy, the origins of the universe and the evolution of life.	3.04	1.097	Good
79. I am interested in social issues, psychology and human motivations.	3.46	1.085	Very Good
80. I consider that conservation of resources and achieving sustainable growth is two of the biggest issues of our times.	3.77	.988	Very Good
Total	3.33	.712	Good

Scale: 1-1.79 (Poor); 1.80-2.59 (Fairly Good); 2.60-3.39 (Good); 3.40-4.19 (Very Good), 4.20 (Excellent)

Difference in the academic performance of the respondents when grouped according to profile

Table 15 presents the t-test results for the difference in multiple intelligence when grouped according to age. Results showed that there is no significant difference in the multiple intelligences among Education students of Guimaras State College-Mosqueda Campus when grouped according to variable age. This implies that their age does not affect to their academic performance. The academic performance of the respondents is independent with their age.

Table 15. Difference in the academic performance and age

	t	df	Sig. (2-tailed)
Equal variances assumed	-1.832	163	.069

Table 16 shows that the t-test result for the difference in multiple intelligence when grouped according to sex showed that there is significant difference in the multiple intelligences among Education students of Guimaras State College-Mosqueda Campus when grouped according variable sex and therefore did not affect the academic performance of students. The academic performance of the respondents does not vary whether they were male or female.

Table 16. Difference in the academic performance and sex

	t	df	Sig. (2-tailed)
Equal variances assumed	1.631	165	.105

Table 17 presents the T-test result for the multiple intelligence when grouped according to the major field of concentration. The result shows that there is a significant difference in the multiple intelligences and academic performance when grouped according to the respondents' major field of concentration. This implies that BSEd students of Guimaras State College-Mosqueda Campus excel on their academic aspect than the BEEd students. With this, their academic performance varies when it comes to variable course.

Table 17. Difference in the academic performance and course

Course	N	Mean	Std. Deviation	Std. Error Mean
BEED	111	1.85	.15425	.01464
BSED	56	1.77	.18850	.02519

	t	df	Sig. (2-tailed)
Equal variances assumed	2.929	165	.004*

*<.05 significance

Table 18 presents the ANOVA result for the multiple intelligence when grouped according to year level. With F= 1.157(p=.328), the result shows that there is no significant difference in the academic performance of the Education students when grouped according to year level. This implies that the year level is independent variable. Thus, it does not affect the academic performance of the respondent.

Table 18. Difference in the academic performance and year level

	Sum of squares	df	Mean square	F	Sig.
Between Groups	.101	3	.034	1.157	.328
Within Groups	4.708	162	.029		
Total	4.809	165			

Table 19 presents the ANOVA result for the difference in the academic performance when grouped according to educational attainment of the mother. With F=1.361(p=.234), the result shows that there is no significant difference in the academic performance when grouped according to educational attainment of the mother. This implies that the education of the mother does not affect the academic performance of the respondents.

Table 19. Difference in the academic performance and educational attainment of mother

Educational Attainment of Mother	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.234	6	.039	1.361	.234
Within Groups	4.576	160	.029		
Total	4.809	166			

Table 20 presents the ANOVA result for academic performance when grouped according to educational attainment of the father. With F=.735(p=.622), the result shows that there is no significant difference in the academic performance when grouped according to educational attainment of the father. This implies that the education of the father does not affect the academic performance of the respondents.

Table 20. Difference in the academic performance and educational attainment of the father

Educational Attainment of Father	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.128	6	.021	.735	.622
Within Groups	4.545	157	.029		
Total	4.672	163			

Table 21 presents relationship of family income to their academic performance. With F=.641(p=.742), the result shows that there is significant difference in the academic performance when grouped according to Family income. This implies that academic performance will not vary when grouped according to independent variable family income.

Table 21. Difference in the academic performance and family income

Income	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.151	8	.019	.641	.742
Within Groups	4.566	155	.029		
Total	4.717	163			

Relationship between respondent's academic performance and multiple intelligences

Table 22 presents the relationship between the multiple intelligences. The result shows that Verbal-Linguistic, Musical, Interpersonal, Bodily-Kinesthetic, and Logical-Mathematical have a significant relationship when paired with one another. This means that the respondents were good in some aspects of intelligence but not so good in others.

Table 22. Relationship between academic performance multiple intelligences

Multiple Intelligence		Sum of Squares
Verbal-Linguistic	Pearson Correlation	.254
	Sig. (2-tailed)	.001*
	N	167
Musical	Pearson Correlation	.336
	Sig. (2-tailed)	.000*
	N	167
Interpersona;	Pearson Correlation	.175
	Sig. (2-tailed)	.024*
	N	167
Intrapersonal	Pearson Correlation	-.075
	Sig. (2-tailed)	.337
	N	167
Bodily-Kinesthetic	Pearson Correlation	.177
	Sig. (2-tailed)	.022*
	N	167
Visual- Spatial	Pearson Correlation	.092
	Sig. (2-tailed)	.235
	N	167
Naturalistic	Pearson Correlation	.083
	Sig. (2-tailed)	.288
	N	167
Logical-Mathematical	Pearson Correlation	.242
	Sig. (2-tailed)	.002*
	N	167

* <0.05 significance

CONCLUSIONS

1. Majority of the respondents belong to age bracket 16 to 25 years old and the majority of them were female. BEED has the biggest population students. Most of the respondents' parents were not able to finish high school and the majority of the family income is below the minimum wage.
2. Majority of the respondents performed good in their classes.
3. The respondents showed strong inclination for verbal-linguistic, musical, interpersonal and intraper sonal intelligence.
4. The major field of concentration of the respondents is the only significant variable which affects the academic performance of the respondents. Therefore, the null hypothesis which states "There is no significant difference in the academic performance among respondents when grouped according to age sex, year level parents educational attainment" is rejected.
5. Verbal linguistic, musical, interpersonal, bodily kinesthetic and logical-Mathematical intelligences have a significant relationship with the academic performance of the respondents. Thus, the state ment "There are no significant relationship between the multiple intelligences and academic perfor mance" is rejected.

RECOMMENDATIONS

1. The school of education must encourage more male students to take Education course because it was found out that the majority of the students are female. The government should support students who have a monthly income below the minimum wage, example scholarship grants, and financial assistance.

2. The school of Education must give importance on engaging students actively in what they are studying or "learning by doing". Teachers should make their lessons more engaging to learners in that way that students will be able to use what it is they have learned. Lastly, teachers should put in mind that: "The student may have a good grade on the exam, you might think that he/she is learning, but once they leave the school, everything is forgotten."

3. Facilitators of learning should provide activities for the learners which fall to visual-spatial, bodily, kinesthetic, naturalistic, and logical intelligences since it was found out that the respondents are less interested in these intelligences. Lastly, facilitators of learning should not only focus on the strength of a student, but also give enrichment activities for his/her weak areas/subjects.

4. The school of education must design a curriculum which would help the BEEd students improve their academic performance. Studies showed that, BEEd respondents got lower mean in their academic compared to BSEd respondents.

5. Facilitators of learning must rediscover and encourage the vast array of capabilities that have a value in life of a learner, and then seek about valuing themselves for whom they are, what they can be, and guide them to nurture and fulfill their potentials.

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