

LEARNING STYLE AMONG GRADE V PUPILS OF AN URBAN ELEMENTARY SCHOOL IN CAVITE, PHILIPPINES: A BASIS FOR CLASSROOM INSTRUCTION

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ABSTRACT

Generally learning style is a contributory factor in the teaching – learning processes. This study aimed to determine the learning style and its relationship to age, sex, monthly income and academic performance as basis to improve classroom instruction. It employed the descriptive research method utilizing frequency count, percentage, mean, standard deviation, spearman rank correlation and chi-square test of independence. The study found out the grade V pupils are generally auditory learners. Therefore, they could best learn through listening. It is therefore recommended that the grade V teachers provide classroom instruction like taking down notes, mapping, coupled with lecture and explanation or through listening to a recorded discussion.

Keywords: Learning Style, Classroom Instruction, Profile.

INTRODUCTION:

Learning styles vary from individuals. Each child is unique from the others. Each possessed a distinct characteristics, talents and skills. The learner learning style is a significant factor on his academic performance. In the teaching – learning process the academic performance of the child is an aspect to be given emphasis in the classroom.

Learning styles are patterns that provide direction to learning and teaching. It is also describe as the set of factors, behaviors, and attitudes that facilitate learning for an individual in a given situation. Generally, different learning styles influence the mode of learning, teaching and student – teacher interaction in the classroom. Every learner has a tendency toward particular learning styles.

Grantham as cited by Teope 2014, pointed out that students have their own way of learning or learning style, and they will learn best when there are varieties of learning opportunities that give them the chance to learn in their own way. Kizlik as cited by Abrantes 2013 further added that a student with a strong sense of self – efficacy, perceives challenging problems as a tasks to be mastered and builds a stronger sense of commitment to accomplish the task.

Learning styles have been consistently recognized as determining factor of successful educational output. Teaching and learning process become more satisfying when the learners absorb the lesson through their preferred learning styles.

In fact, one of the top concerns of education is the improvement of the achievement level of every learner. Thus, this study seeks to identify the learning styles of the grade V diamond pupils of Pasong Buaya III Elementary School as basis for classroom instruction to improve their level of performance. The study aimed to determine the profile of the respondents in terms of sex, monthly income, and general average. Identify the learning styles of the grade V pupils and find out if there is a significant relationship between the respondents' profile and learning style?

LITERATURE REVIEW:

Learning style according to some education psychologists, is one of the identified significant factors to students' performance. Each child learns new information in different ways. There are three cognitive learning styles developed by Fernald, Orton, Montesoori and other psychologists starting in the 1920's. They are Visual, Auditory, Kinesthetic or Tactile learning Style Model.

Whitely (2012) characterized verbal style as the combination of the use of speech and writing. Learners show confidence conversely, verbally and written form. Reading and scribbling are their pass time. Visual Style learners prefer using pictures, images and spatial understanding. They do extremely well in making use of images, pictures, colors, and maps to construct information and communication with others. They can visualize objects plans and outcomes through their eye. They also have high possess spatial sense which leads to better sense of direction. Auditory style, the learners prefer using sound and music to learn. They often have excellence sense of pitch and rhythm, hence, it is expected that they can sing and play musical instrument, or recognized the sounds of various instrument and songs. Kinesthetic Style, the learners prefer using their body, hands and sense of touch to learn and understand the world around them. They enjoy sports, exercise and other physical activities.

The need to identify the learning style preferences of the Grade V pupils diamond of Pasong Buaya III Elementary School is significant in the teaching learning process: learning style conveys how to perceive, interacts, and respect to their learning environment.

Thus, this research provides a better and clearer guide on what method of instruction is suited to the pupils.

Dun et. Al (2001) presented some benefits of using learning styles to improve classroom instruction, they are as follows: a. by using learning styles, students and teachers come to accept a broader view of intellectual ability. Many students are labeled as underachievers because they cannot access the verbal or linguistic knowledge. Research studies shows, however that the students often demonstrate a deep understanding of relevant concepts when they are engage in classroom activities that include artistry, dramatic, musical or athletic elements. b. by using learning styles, teachers can give students the opportunities for authentic learning that address the student's actual needs. In this sense, the classroom can replicate the real world, c. by considering different learning styles, teachers can use a wider range of assessment contexts. It is no longer necessary just to assess through pen – and - paper test, like multiple choice. Considering student's learning style, it encourages students to show what they know – making presentations in class, and produce portfolios of work and present it to a panel, and make artifacts and so on, d. using learning style can bring students of different strengths and preferences together. Giving them all the chance to share their expertise, and to develop their weaker intelligences by learning alongside with fellow students who are stronger. Learning in this way can

do wonders for student's self – steam, as they see themselves valued by their peers, e. learning style focus on teaching of understanding what students can do rather than highlight what they cannot do. This contribute to positive educational experiences, which are strong precursors learning in life.

METHODOLOGY:

Research Design:

The study employed the descriptive research method. According to Frankel (2006) descriptive research describes the present conditions, events or systems based on impressions and reactions of the respondents. It may also be concerned about distribution of existence of the variable, or the study maybe about the bi-variate relationships of one variable with another variable.

The method was used to determine the learning styles among the grade V pupils and its relationship to age, sex, monthly income of parents and general average to be used as basis for classroom instruction.

Respondents of the Study

The grade V pupils diamond of Pasong Buaya III Elementary School are the respondents of the study. No sampling technique was employed since all the grade V pupils were the subject of the study.

Research Instrument

Questionnaire. This was utilized to gather information needed for the study. The first part dealt on the profile of the respondents as to age, sex, monthly income of parents and general average. The second part contained the learning style inventory.

Interview. This was done to substantiate their answers in the questionnaire.

Focus Group Discussion. This was conducted to decipher indefinite learning style of some respondents and to make it sure that the written responses were accurate.

Class Observation. This was conducted to gather more information about the respondents' learning style and to validate the written and verbal responses of the respondents.

Research Procedure:

The researcher sought permission from the school principal. Since the researcher is the adviser of the respondents, he distributed and collected the questionnaire during the vacant period of the grade V pupils.

Before the distribution, the researcher explained well the purpose of the study to the respondents to make sure that the data gathered were genuine and authentic.

During his daily teaching to the grade V pupils diamond, he made an extraordinary way of observing them to validate their written and verbal responses.

The researcher also conducted one on one and group interview to confirm uncertain data gathered through the questionnaire.

Statistical Tool:

All the data collected were inputted and analyzed using Statistical Package for Social Sciences (SPSS v21) and the following statistical tools were used:

- Frequency, percentage, mean, and standard deviation were used to describe the profile and learning styles preferred by the respondents.
- Spearman rank correlation was used to test the relationship of age, monthly income, and average with the learning styles since the data collected are ordinal in terms of level of measurement.
- Chi-square test of independence was conducted to test the relationship between sex and the learning style since sex contains only two groups and the preference of learning styles are ordinal by nature.

FINDINGS AND DISCUSSION:

Profile:

Among the 45 respondents, 25 of them have ages 10 and below (55.6%), 16 are 11 years old (25.6%), and 4 have ages 12 and above (8.9%). From this, at least half of the respondents are 10 years old and below.

The youngest respondent is 9 years old and the oldest is 17. The mean age is 10.6667 years with a standard deviation of 1.2613.

Twenty one (21) out of 45 respondents are male (46.7%) while 24 are female (53.3%). This indicates that females are the majority of respondents.

From the 45 respondents, one of them didn't indicate their monthly income (2.2%). From the 44 who indicated their monthly income, thirteen (13) have income ranging from 1000 to 5000 (29.5%), seven (7) from 5001 to 10000 (15.9%), nine (9) from 10001 to 15000 (20.5%), seven (7) from 15001 to 20000 (15.9%), and eight (8) from 20001 or above (18.2%). Respondents with monthly income of 1000 to 5000 have the highest number.

Only 44 out of 45 (97.8%) respondents responded or indicated their average in different subject areas. Most of the respondents' average grade is 85 composing 27.3% of the sample followed by 83 and 84 which both makes up to one-fourth of them.

Since their averages are a bit widely spread, the mean is greatly affected. The mean of the respondents' averages is 84.6364 (SD = 2.74574).

Learning Styles:

The respondents more often *like to write down or to take note for visual review* (M = 4.16, SD = 1.09) than the other visual learning style indicators. Moreover, this indicator has the least spread. Following this is that they often *can easily understand and follow directions on a map* (M = 4.12, SD = 1.26). The lowest mean indicates that they sometimes *think that the best way to remember something is to picture it in their mind* (M = 2.69, SD = 1.59).

Moreover, the respondents *can remember best about a subject by listening to a lecture that includes information, explanations, and discussions* (M = 4.47, SD = .89) which only confirms that they are auditory learners. Moreover, they *can do best in academic subjects by listening to lectures and tapes* (M = 4.02, SD = 1.25). The indicator with the least mean indicates that they sometimes *require explanations of diagrams, graphs, or visual directions* (M = 3.36, SD = 1.37)

Interestingly, the respondents more often *enjoy working with their hands or making things* (M = 4.5, SD = 1.07) than the other tactile learning style indicators. Also, they often *remember things by writing it down* (M = 3.91, SD = 1.25). The indicator with the least mean indicates that they seldom *chew gum, smoke, or snack while studying* (M = 1.33, SD = .87).

Overall, the prevalent learning style present among the respondents is Auditory Learning Style (M = 30.09, SD = 4.73). This means that among the respondents, they prefer to use their sense of hearing in learning concepts *by listening to a lecture that includes information, explanations, and discussions*. Following auditory style is the Visual Learning Style (M = 28.67, SD = 4.83). Respondents who prefer this learning style make use of their sense of sight or vision to learn or acquire information, that is, they learn best when they see what they are learning. The least evident learning style is the Tactile one (M = 23.24, SD = 4.58). This means that some of the respondents are learning by manipulating or touching what is involved in the learning process. With this result, the respondents learn best by listening to teacher's lectures or collaborative activities. Also, they are not contented seeing illustrative examples thereby requiring someone, most probably the teacher, to explain. Although they like to take down notes for review, they might still need to have someone to collaborate with to understand what they have written down. On the other hand, their less preference to tactile style implies that the respondents cannot appreciate yet the application of the concept they are learning.

Relationship:

There exists a negative weak relationship when age is correlated to visual ($r = -.239, p = .113$) and auditory ($r = -.203, p = .181$) learning style. This means that when an individual becomes older, his preference to visual and auditory learning style might decrease or vice versa. On the other hand, when age is correlated to tactile learning style the relationship is positive yet still weak ($r = .138, p = .368$). And as oppose to the other learning styles, the preference to such learning style increases as age increases.

With the case of monthly income, high values on this variable is associated to low preference on visual ($r = -.034, p = .826$) and tactile ($r = -.019, p = .903$) learning style since these variables are negatively correlated. High values on auditory learning style, on the other hand, is associated on high values of monthly income ($r = .203, p = .186$) for these variables are positively correlated.

It is indicated that, there exists a weak, positive relationship between average ($r = .090, p = .561$) and visual learning style. This implies that when the average increases, preference to visual learning slightly increases, too, or when preference to visual learning increases, average increases, too. On the other hand, positive changes on average imply negative changes on the preference of auditory and tactile learning style since these variables are negatively related.

As with sex, only tactile learning style is significantly associated with this variable ($\chi^2 = 4.28, p = .04$). This implies that sex and tactile learning is dependent to each other unlike the other learning styles.

CONCLUSIONS:

Based from the findings the following conclusions were drawn.

1. Most of the respondents are 10 year – old and below, females, a monthly income of 1,000 to 5,000 pesos and proficient in academic performance.
2. The grade V pupils generally classified as auditory learners who could best learn through listening and when *writing down or to take note for visual review, can easily understand and follow directions on a map, can remember best about a subject by listening to a lecture that includes information, explanations, and discussions and can do best in academic subjects by listening to lectures and tapes as indicated in the finding.*
3. Only tactile learning style and sex are correlated.

RECOMMENDATIONS:

1. Since most of the respondents are 10 and below, female with low family income and proficient, classroom instruction should be based from their profile status to improve their academic performance.
2. The grade V pupils diamond are classified as auditory learners, it is recommended therefore that the teachers provide instruction on taking down notes, mapping, coupled with lecture and explanation or deliver the lesson through listening to a recorded discussion.
3. Subject – teachers are recommended to consider the sex of the pupils as predictor of learning style. They should allow male pupils to manipulate objects or anything as they are discussing the lesson because they could best and easily understand the lesson as manifested in the characteristics of tactile learning.

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TABLES

Table 1: The frequency and percentage of ages of the respondents.

	Frequency	Percentage
10 and below	25	55.6
11	16	35.6
12 and above	4	8.9
Total	45	100

Table 2: The statistics of ages of the respondents.

	N	Minimum	Maximum	Mean	Std. Deviation
Age	45	9	17	10.6667	1.2613

Table 3: The frequency and percentage of the respondents' sexes.

	Frequency	Percentage
Male	21	46.7
Female	24	53.3
Total	45	100

Table 4: The frequency and percentage of the monthly income of the parents of the respondents

	Frequency	Percentage	Valid Percentage
1000 – 5000	13	28.9	29.5
5001 – 10000	7	15.6	15.9
10001 – 15000	9	20.0	20.5
15001 – 20000	7	15.6	15.9
20001 or above	8	17.8	18.2
Total	44	97.8	100
No response	1	2.2	
Total	45	100	

Table 5: The average of the respondents' grades in terms of frequency and percentage

	Frequency	Percentage	Valid Percentage
80	1	2.2	2.3
81	1	2.2	2.3
82	1	2.2	2.3
83	11	24.4	25.0
84	11	24.4	25.0
85	12	26.7	27.3
86	2	4.4	4.5
87	1	2.2	2.3
88	1	2.2	2.3
89	1	2.2	2.3
90	1	2.2	2.3
98	1	2.2	2.3
Total	44	97.8	100
No response	1	2.2	
Total	45	100	

Table 6: The statistics to the respondents' average grade

	N	Minimum	Maximum	Mean	Std. Deviation
Average	44	80	98	84.6364	2.74574

Table 7: The visual learning style of the respondents as answered from the questionnaire

	Mean	SD	Qualitative Description
I prefer to see information written on a chalkboard and supplemented by visual aids and assigned readings.	3.49	1.49	Sometimes
I like to write things down or to take notes for visual review.	4.16	1.09	Often
I am skillful with and enjoy developing and making graphs and charts.	4.07	1.18	Often
I can easily understand and follow directions on a map.	4.12	1.26	Often
I can understand a news article better by reading about it in a newspaper that by listening to a report about it on the radio.	3.22	1.49	Sometimes
I think the best way to remember something is to picture it in your head.	2.69	1.59	Sometimes
I am good at working and solving jigsaw puzzles and mazes.	3.36	1.49	Sometimes
I prefer obtaining information about an interesting subject by reading about it.	3.93	1.10	Often

Table 8: The auditory learning style of the respondents as answered from the questionnaire

	Mean	SD	Qualitative Description
I can remember best about a subject by listening to a lecture that includes information, explanations, and discussions.	4.47	.89	Often
I require explanations of diagrams, graphs, or visual directions.	3.36	1.37	Sometimes
I can tell if sounds much when presented with pairs of sounds.	3.31	1.41	Sometimes
I do best in academic subjects by listening to lectures and tapes.	4.02	1.25	Often
I learn to spell better by repeating words out loud than by writing the words on paper.	3.84	1.31	Often
I would rather listen to a good lecture or speech than read about the same material in a textbook.	3.89	1.09	Often
I prefer listening to the news on the radio rather than reading the paper.	3.44	1.34	Sometimes
I follow oral directions better than written ones.	3.76	1.30	Often

Table 9: The tactile learning style of the respondents as answered from the questionnaire

	Mean	SD	Qualitative Description
I prefer to use posters, models, or actual practice and other activities in class.	3.77	1.31	Often
I enjoy working with my hands or making things.	4.50	1.07	Often
I can remember best by writing things down.	3.91	1.25	Often
I play with coins or keys in my pocket.	1.86	1.25	Seldom
I chew gum, smoke, or snack while studying.	1.33	.87	Seldom
I learn the spelling of words “finger spelling” them.	3.45	1.66	Sometimes
I grip objects in my hands during learning periods.	2.21	1.32	Seldom
I feel very comfortable touching others, hugging, hand shaking etc.	2.78	1.49	Sometimes

Table 10: The summary of the respondents’ preferred learning style

Learning Style	Mean	SD
Visual	28.67	4.83
Auditory	30.09	4.73
Tactile	23.24	4.58

Table 11: The spearman correlation matrix of the respondents' preferred learning style correlated with their profile (i.e. age, monthly income and general average).

Correlations				
		Age	Monthly Income	Average
Visual	Correlation coefficient	-.239	-.034	.090
	Sig. (2-tailed)	.113	.826	.561
Auditory	Correlation coefficient	-.203	.203	-.146
	Sig. (2-tailed)	.181	.186	.346
Tactile	Correlation coefficient	.138	-.019	-.240
	Sig. (2-tailed)	.368	.903	.117

Table 12: The chi-square table of relationship between the preferred learning style and sex of the respondents

		Sex
Visual	Ordinal χ^2	0.81
	Sig.	.37
	Decision	Not significant
Auditory	Ordinal χ^2	3.00
	Sig.	.08
	Decision	Not significant
Tactile	Ordinal χ^2	4.28
	Sig.	.04
	Decision	Significant
