The relationship between students’ learning styles and teachers’ teaching styles to students’ achievement

Ma. Rosa S. Caraballe

Faculty of College of Education, Carlos Hilado Memorial State College, Talisay City, Negros Occidental, Philippines

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Corresponding author: marosasamson@yahoo.com

ABSTRACT

This descriptive study utilizing a One-Shot Survey Questionnaire Method was conducted to determine the relationship between students’ learning styles and teachers’ teaching styles to students’ achievement.

The study revealed that the preferred learning style of students is Auditory while the teachers preferred the Facilitator Model Type of teaching. It was also found out that the achievement level of the student respondents for the second and third quarters of the academic year is good. Moreover, there was a significant difference between the learning styles of students and the teaching styles of teachers. Lastly, the result revealed that there was no significant relationship between the learning styles of students and their academic achievement while there was a significant relationship in the teaching styles of teachers to students’ achievement.

Keywords
Students’ Learning Style, Teachers’ Teaching Style, Students’ Achievement, Preferred Learning Styles, Preferred Teaching Styles

Introduction

Each person is born with certain tenderness toward particular learning styles to demonstrate that people learn in different ways. Styles influence how students learn, how teachers teach, and how the two interact.

According to Efiong (2005), it is believed that children all over the world have their own individual variations in modes of perceiving, remembering, and thinking ways of thinking ways of taking in, storing, transforming, and solving problems. They, too, have varied ways of learning. In the world of teaching and learning, learning should be the responsibility, but more responsibility for student learning is placed on the teacher. In this regard, different teaching strategies and techniques are needed to cater to the needs of students with varied learning styles.

Just as students have individual learning styles, teachers have preferred teaching styles that work best for them. It is important, however, that both teachers and students be aware of their preferences to affect learning. Moreover, identifying teachers’ learning styles, as differentiated from students learning styles, may be an effective means of matching instruction to students’ achievement and may help them improve academically.

In addition, John Dewey’s educational philosophy as to the principles of good teaching holds that teaching is good, when it is based on the psychology of learning (Acero, 2000). This stance is based on the concept that first, the child is made as the center of the educative process, the nature of the child and the nature of the learning process, and the laws that govern its operation determine the type of teaching to be done by the teacher. Second, teaching is good, when there is the provision to meet the individual differences, as based on the psychological principle that individuals differ from each other in their
learning potentials. To be effective, teaching must treat the learners as they are, but at the same time, with reference to what they might become (Acero, 2000).

As such, the researcher being an educator and a teacher herself, believes that with diverse teaching strategies and styles, the teacher could effectively teach the lessons of the day. Additionally, her day-to-day experience in the teaching-learning situations gives her the idea that teachers have their own teaching styles which seem to affect students’ performance. Comparably, students have their own learning styles which affect their academic achievement. Hence, the research sought to investigate the relationship of students’ learning styles and teachers’ teaching styles to students’ achievement.

**Statement of the Problem**

Purposely, this study determined the relationship of students’ learning styles vis-a-vis teachers’ teaching styles to students’ achievement.

Specifically, this study sought to shed light on the following questions:

1. What is the preferred learning style of students?
2. What is the preferred teaching style of teachers?
3. What is the achievement level of students?
4. Is there a significant relationship between the students’ learning styles and their academic achievement?
5. Is there a significant relationship between the teaching styles of teachers and the students’ academic achievement?

**Hypotheses**

The following hypotheses formulated were:

1. There is no significant relationship between the learning styles of students and their academic achievement?
2. There is no significant relationship between the teaching styles of teachers and the students’ academic achievement.

**Theoretical Framework**

Sets of ideas with which the study was undertaken guided its theoretical framework. These ideas included the students’ learning styles and teachers’ teaching styles in relation to students’ achievement.

Norland (2002), for instance, contended that teaching and learning styles are the behaviors or actions that teachers and learners exhibit in the learning exchange. Teaching behaviors reflect the beliefs and values that teachers hold about the learners’ role in the exchange. As to Lage, et. Al. (2000), learners’ behaviors provide insight into the ways learners perceive, interact with, and respond to the environment in which learning occurs.

There are varieties of ways that learning styles can be categorized: visual, auditory, or kinesthetic. Visual learners learn best if they see or watch a major component of the material or lesson. Among auditory learners, they learn best by focusing through oral component to the material being learned, while kinesthetic learners learn well when they touch or feel what they are learning about.

On the teachers’ part, they also employ varied teaching styles. There are those who employ the formal authority, others go for a demonstrator model, some utilize the facilitator type, and a delegator type of teaching for others (Mayer, 2002).

In formal authority type, teachers tend to focus on content and its generally
teachers-centered. The demonstrator or personal authority type of teaching also focuses on a teacher-centered class with emphasis on demonstration and modeling. In facilitator style, the teacher emphasizes a student-centered learning where much responsibility is placed on the students to take the initiative for meeting the demands of various learning ways. Lastly, teachers with delegator style of teaching teach by placing much control and responsibility for learning on individual or groups of students.

With the mission statement underscoring learner centeredness, understanding how learning and teaching styles influence student learning is increasingly important. Towards this end, teaching styles and learning styles may be identified to determine their relationship to students’ achievement.

Data Gathering Instruments

Three instruments were used in this study: the grade sheets for determining the students’ achievement, the Learning Style Checklist (LSC) of ten items, and the Teaching Style Checklist (TSC) nine items.

Content validity of LSC and the TSC

Three experts validated the checklists a director of Students’ Development and Placement Center and two English professors.

Reliability

The reliability of the LSC and TSC was established through a reliability testing to twenty-four high school students and eight teachers. The reliability coefficient of the LSC and TSC was computed through the Pearson Product Moment Coefficient of Correlation with an r value of 0.7952174 for TSC and 0.8424188 for LSC.

Data Gathering Procedure

The instruments were administered to students and teachers after permission was sought from the principal of HFHS-Bacolod. It took an average time of 20-30 minutes for answering the LSC and TSC. The students’ achievement was obtained from the grade sheets.

Statistical Analysis

For problems 1, 2, and 3, the mean was used, while the Pearson Product Moment for problems 4 and 5.

Results and Discussion

The findings of the study are discussed below:

Table 1 presents the mean score of the preferred learning style of students. The mean score is 1.73 which falls in the auditory category of students’ learning styles, a finding
indicating that the majority of the fourth year students prefer to learn best using it. This implies that students tend to learn in class where the teacher teaches through giving verbal instructions, having dialogues, discussions, and plays, solving problems by talking about them, and using rhythm and sounds as memory aids of students. Likewise, the finding implies that students prefer to learn the easy way through hearing compared to seeing and moving.

This finding is supported by the work of Doctors R. Bandler and J. Grinder (2006) who held that auditory learners learn best using audio tapes and videos, storytelling, songs, jazz, chants, memorization, and drills. Allowing the students to work in pairs and small groups regularly is also recommended to students who are auditory learners.

Another implication of this finding is on the learners’ inherent ability to learn. Since these students are influenced by the trends in today’s communication system, they could easily adapt to the situation inside the classroom. Nowadays, most teachers often use computer aided and audio-visual instructional materials, therefore, students learning, especially the auditory learners, is best achieved.

### Table 1
**On students preferred learning style**

<table>
<thead>
<tr>
<th>Learning styles</th>
<th>N</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory</td>
<td>46</td>
<td>1.73</td>
<td>Preferred</td>
</tr>
<tr>
<td>Visual</td>
<td>23</td>
<td>1.48</td>
<td>Preferred</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>0</td>
<td></td>
<td>Not preferred</td>
</tr>
</tbody>
</table>

Legend: 2.02 – 3.00 --Highly preferred, 1.01 – 2.00--Preferred, 0 – 1.00-- Not preferred

Table 2 shows the preferred teaching style of the fourth year teachers. The teachers utilized the facilitator style of teaching with a mean of 2.88 to imply that most teacher respondents are using the facilitator model type of teaching. This result is supported by Mallen (2001) who said that teachers who have a facilitator model teaching style tend to focus on activities. This finding further explains that most teacher respondents emphasize student-centered learning and more responsibility is placed on the students to take the initiative in meeting the demands of various learning tasks.

### Table 2
**On the preferred teaching style of teachers**

<table>
<thead>
<tr>
<th>Teaching Style</th>
<th>N</th>
<th>M</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Authority</td>
<td>0</td>
<td>0</td>
<td>Not preferred</td>
</tr>
<tr>
<td>Demonstrator</td>
<td>2</td>
<td>1.38</td>
<td>Preferred</td>
</tr>
<tr>
<td>Facilitator</td>
<td>6</td>
<td>2.88</td>
<td>Highly preferred</td>
</tr>
<tr>
<td>Delegator</td>
<td>0</td>
<td>0</td>
<td>Not preferred</td>
</tr>
</tbody>
</table>

Legend: 2.02 – 3.00 --Highly preferred, 1.01 – 2.00--Preferred, 0 – 1.00-- Not preferred

Table 3 shows the achievement level of the student respondents. The achievement level of auditory students was 85.19 and interpreted as good, while the visual learners had 86.72 which was also interpreted as good. With such finding, it was inferred that the students achieved a good academic performance during the specific quarters of the specified academic year.

### Table 3
**On the achievement level of students**

<table>
<thead>
<tr>
<th>Learning styles</th>
<th>N</th>
<th>Achievement level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory</td>
<td>46</td>
<td>85.19</td>
</tr>
<tr>
<td>Visual</td>
<td>23</td>
<td>86.72</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Total = 69, 85.96, Good

Legend: 94 up—Excellent, 88-93 — Very Good, 87 below -- Good

Table 4 shows the findings on the significant relationship between students’ learning styles and their academic achievement. Moreover, the data on the table reveal that the computed r is greater than the critical r (-1.33>-1.96), therefore, the computed r is not significant. The result implies that there is no significant relationship between the learning styles of students and their academic achievement.

Garrote’s study (1999) supported the findings of this research. She held that the preferred learning styles tend to move around the intermediate or the average stage, from concrete to abstract, passive to active, low to high self-esteem, and surface to deep
motivation. There are no significant relationship between the academic grades and learning styles, especially between the cognitive and affective domains, process and personality dimensions, and the four subject areas as English, Filipino, Mathematics, and Science.

Table 4
Correlation result on learning styles of students and their academic achievement

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>r</th>
<th>p-value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning styles</td>
<td>69</td>
<td>-1.96</td>
<td>-1.33</td>
<td>Not significant at 0.05</td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 discusses the relationship between teaching styles of teachers and the students’ academic achievement. After computing the r, the result shows that it has a moderate positive correlation (44.68%). The significance of r was also tested and the result showed that the computed r is greater than the critical r (3.90>1.96), therefore, the computed +r was significant.

Hence, the result implies that there was a significant relationship between the teaching styles of teachers and the students’ academic achievement. This finding was supported by Brown (2003) who held that many researchers supported the view that when students’ learning preferences match their instructors teaching styles, students’ motivation and achievement usually improved.

Moreover, Stitt-Godhes (2003), as cited by Brown (2003), reiterated that understanding how learning and teaching styles influence students’ learning is increasingly important. The relationship between teaching styles and learning styles is a factor in the success of college and university students.

Indeed, identifying the modes in which students learn best becomes useful in two ways – first, in helping students understand and become aware of how they themselves learn and study best (metacognition) and second, in helping instructors achieve a more holistic approach to selecting and designing teaching strategies, lessons, and activities that maximize students’ learning and understanding.

Table 5
Correlation result on teaching styles of teachers and the students’ academic achievement

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>r</th>
<th>p-value</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching styles</td>
<td>8</td>
<td>1.96</td>
<td>3.90</td>
<td>significant</td>
</tr>
<tr>
<td>Students’ Academic Achievement</td>
<td>69</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusion

In light of the findings of the study, the following conclusions can be drawn:

The preferred learning style of the student respondents was auditory which implies that students prefer to learn the easy way through hearing compared to seeing and moving. Furthermore, students tend to learn in class where the teacher teaches through giving verbal instructions, having dialogue, discussions, and plays, solving problems by talking about them and using rhythm and sounds as learning memory aids.

The preferred teaching style of the teacher respondents was facilitator which appears that teachers tend to focus on activities inside the classroom. Student-centered learning is being emphasized by most teachers and more responsibility is placed on the students to meet the demands of various learning tasks.

The achievement level of the student respondents was good during the specified quarters of the academic year.

There was no significant relationship between the learning style of students and their academic achievement.

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achievement; hence, matching students’ learning styles; with their teachers’ teaching styles will improve students’ achievement.

Recommendations

The study recommends that teachers should identify the preferred learning styles of students to be used in reviewing teaching-learning strategies in the classroom, and in assisting individual students.

Teachers adopt a teaching style that suits the preferred learning style of the students to deeply motivate them to learn through.

Programs and trainings be provided to teachers to encourage them to employ a variety of teaching styles.

Further studies need to find out the effect of matching learning styles with teaching strategies as well as the factors causing differences in learning styles of students.

References


