2024, Vol. 1, No.1, 16 – 32 | ISSN Online: 3028-1040 | ISSN Print: 3028-1059

DOI: https://doi.org/10.62718/vmca.pr-ijetas.1.1.0995





# Correlation Between English Teachers' Teaching Style and English 123 Performance of AIMS Maritime Students: Basis in the Strategic Development of Teaching and Learning Activities (TLA) in English

Marlyn A. Mamadod<sup>1</sup>, Victor M. Cajala<sup>2</sup>

<sup>1</sup>Faculty, Asian Institute of Maritime Studies, Pasay City, Philippines

#### **Article History:**

Received: 22 January 2024 Accepted: 31 January 2024 Published: 23 February 2024

#### Abstract

Many teachers widely apply teacher-centered methods than student-centered methods. However, in specialized writing classes, such as English 123, the former method is not a guarantee for students to learn the tenets of good and effective writing. Thus, this study aimed at determining if there exist a significant relationship between the present teaching styles of English 123 teachers and the English 123 course performance of the students of Asian Institute of Maritime Students (AIMS). Using the descriptive-correlation design, the study employed 273 freshmen maritime students and nine English 123 professors as respondents of the study.

Most of the students found their professors to possess an "Expert" and "Personal Model' teaching styles while majority of the professors have classified themselves to possess an "Expert" and "Formal Authority" teaching styles. Based on the frequently appearing style of teaching, it is equated that the professors have a teachercentered teaching style. With the reflected teaching styles, only few gained a very good grade of 91 and above. At the most, almost one third of them gained a low grade of 80 and below which warrants an improvement of achievement in English 123. Greater frequencies of high grades are seen from students under the "Expert" (grade range from 86 to 91 and above) as well as from "Personal Model" professors (grades from 86 – 90) while low frequencies of high grades are observed under the "Formal Authority" and "Delegator" professors. Hence, a significant relationship between students' English 123 performance and the professors' teaching styles exists.

Keywords: Education, pedagogy, andragogy, teaching style, correlation descriptive-correlational design, Philippines



Copyright @ 2024. The Author/s. Published by VMC Analytiks Multidisciplinary Journal News Publishing Services. Correlation Between English Teachers' Teaching Style and English 123 Performance of AIMS Maritime Students: Basis in the Strategic Development of Teaching and Learning Activities (TLA) in English © 2024 by Marlyn M. Mamadod, Victor M. Cajala is licensed under Creative Commons Attribution (CC BY 4.0).

# INTRODUCTION

Every teacher has a unique style of teaching. There is no single style but it can be varied based on individual situations. Teaching styles can be modified to meet the situation and adapt when necessary to provide a better outcome. To facilitate the modification, the teacher should apply appropriate teaching method that best suit with specific objectives. Traditionally, many teachers widely applied teacher-centered methods to share knowledge to learners than student-centered methods. As a result, questions about the effectiveness of teaching methods to student learning have raised considerable interests in the field educational research.

The poor academic performance of students is related to the application of ineffective teaching methods by teachers (Adunola, 2011). Substantial research on the effectiveness of

teaching methods indicates that the quality of teaching is often reflected by the achievements of learners. Adunola (2011) also mentioned that teachers need to be conversant with numerous teaching strategies that take recognition of the magnitude of complexity on the concepts to be covered. Since teaching is interesting and exciting, teachers must develop within the students their confidence and develop their own learning power. The readiness to assist and to guide the students must be evident to the teachers. The patience to facilitate learning to the students who learn as well as to those who have the difficulty to do the task is necessary. This is when and where teaching styles matter for this becomes paramount in the successful performance of the students.

There are many ways how students learn. They learn from their sensory experiences like seeing, hearing, feeling, visualizing, reflecting

<sup>&</sup>lt;sup>2</sup>Research Dean, Asian Institute of Maritime Studies, Pasay City, Philippines



and analyzing. That's why teaching methods differ. Some instructors focus on principles, others emphasize memory and understanding, some do lectures and some lead students to self-discovery of their skills and talents. If the teaching style of the instructor doesn't match with the students' learning styles, the students' learning is affected. Some may get inattentive and bored in class, do poorly on tests and get discouraged about the subject and themselves (Felder & Henriquez, 1995). The student's learning styles and classroom diversity and complexity must be recognized because these will help and guide them to build the independent teaching style of instructors. Classroom setting depends on teacher's ability to maintain student's interests. Thus, teacher and teaching styles play a vital role in effective classroom changes.

The researchers believe that studying teaching styles will help the Asian Institute of Maritime Studies (AIMS) professors in enhancing their strategies and methods to improve learning vis-a-vis will benefit the AIMS students in various tests and assessments in English that are external to the institution.

One of the course waterloos of many students today is in the English language. Though Philippines was adjudged as one of the proficient English-speaking countries in Asia, still, many students are having difficulties to communicate in English. And maritime students are not exempted on this aspect. In the randomly acquired grades of 200 Maritime Transportation (MT) student of AIMS under the school year 2014-2015, 43.5% of them "Needs Improvement" in English 123 as they acquired a grade of 80 and below. Only a meagre 4% earned a "Very Good" grade of 90 and above. In general, an average grade of 81.37 represented the 200 MT students. Hence, majority of them "needs improvement" in the course (Summary of Class Records, SY 2014-2015, CLASS).

Likewise, in the randomly acquired grades of 200 Marine Engineering (MarE) students, 27.5% of them "needs improvement" in English 123 having a grade of 80 and below while 29% have earned a "Good" grade of 81 to 85. A bit higher

than the MT students, 13.5% of the MarE students earned a "Very Good" grade of 90 and above. In general, an average grade of 84.27 ("Good") represented the 200 MarE students (Summary of Class Records, SY 2014-2015, CLASS). Basing on the average grades reflected in the Class Records of MT and MarE students, improvement in their learning of the course is required. This is on the premise that they should be well-taught and trained in the English language for majority of them go onboard with foreign vessels.

The performance of maritime students in English 123 course may reflect the same performance during board examinations. One best scenario is the recently concluded Maritime School Assessment Program (MSAP) which was conducted last February 2016. The examination was attended by top 106 MarE students and top 199 MT students. In the 50-item English Achievement Test, MarE students earned an average score of 25.32 while MT students gained an average score of 26.80%. Both scores represent below-average to average achievement in English. This alone indicates the deficiency of maritime students in their learning of English (MSAP Report, 2016).

The deficiency of many students in the English language, as reflected above, can be accounted from two major factors: the learning styles of the students and the teaching styles of teachers. However, the learning style of students is a major determinant for teachers in planning and implementing their teaching styles and strategies. As a matter of fact ("Teaching and learning English") "teachers do have their own preference for specific learning styles, and that influences their teaching styles. If they want to make their teaching more effective, they need to understand their students' learning styles and adapt their teaching strategies accordingly." Hence, teachers should know and learn the specific learning styles of their students to make effective of their teaching.

It is therefore timely that this study seeks to determine if there exist a significant relationship between the present teaching styles of English 123 teachers and the English



123 course performance of the students of Asian Institute of Maritime Students (AIMS).

Statement of the Problem. The primary purpose of this study is to assess the teaching styles of English 123 professors of AIMS and how relative are these in the English 123 course performance of the AIMS maritime students during the academic year 2014–2015. Specifically, the researchers sought answer to the following questions:

- 1. What is the profile of the English 123 professors in terms of:
  - 1.1. Gender
  - 1.2. Highest Educ. Attainment
  - 1.3. Age
  - 1.4. Years of Teaching Experience
- 2. What are the teaching styles applied in the respective English 123 classes of the English 123 professors as assessed by the professors themselves and their respective maritime students?
- 3. What is the English 123 course performance of the maritime students during the academic year 2014-2015?
- 4. Is there a significant relationship between the teaching styles of English teachers and the English 123 course performance of the maritime students during the academic year 2014-2015?
- 5. Is there a significant relationship between the perception of the English 123 teachers' own teaching style and the perception of maritime students on their English 123 teachers' teaching style?
- 6. Is there a significant difference on the perception of the English 123 teachers' own teaching style and the perception of maritime students on their English 123 teachers' teaching style?
- 7. What teaching and learning activities (TLA) can be developed based on the outcome of the study?

Hypotheses. At 0.05 level of significance, the following hypotheses will be tested if:

Ho<sub>1</sub>. There is no significant relationship between the teaching styles of English teachers and the English 123 course performance of the maritime students during the academic year 2014-2015.

 $Ho_2$ . There is no significant relationship between the perception of the English 123 teachers' own teaching style and the perception of maritime students on their English 123 teachers' teaching style.

Ho<sub>3</sub>. There is no significant difference on the perception of the English 123 teachers' own teaching style and the perception of maritime students on their English 123 teachers' teaching style.

Significance of the Study. The results of this study may be beneficial to administrators, teachers, syllabus developers, parents, students, and future researchers.

- Administrators. The result of this study will give administrators a basis for planning projects, workshops, and seminars on the different teaching methods and strategies in order to attain and maximize the results of teaching.
- Teachers. Through this study, English teachers will learn the different teaching styles and methodologies and apply the best practices for them to become efficient and effective teachers.
- 3. Syllabus Developers. The study will yield specific data on the strengths and weaknesses of teaching English. Hence, syllabus developers can be provided with the vital inputs for use in proposing revisions in the teaching and learning activities (TLA) of the English curriculum.

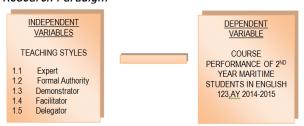


- 4. Parents. The parents will be guided upon as to the proper and most applicable teaching styles used by English teachers. This could be a basis for them to properly guide their sons or daughters in order to attain a better academic performance.
- 5. Students. With the different teaching styles explored in this study, students can identify various teaching styles applied by their respective teachers and may result to a better achievement in English. Moreover, students will definitely enjoy their classes given the right kind of teaching styles used by their English teachers.
- Future Researchers. This study can become a reference for future researchers with studies that delve with various teaching styles and academic performances especially in the English language.

# Conceptual Framework

Figure 1

Research Paradigm



The study's paradigm, as reflected in Figure 1 above, presents the scheme to be used in this study. The input variables are the demographic profiles of the English instructors. This includes the gender, highest educational attainment, age, and years of teaching experience. The independent variables are the four teaching styles of which the English professors are to be assessed from. These are the Formal Authority: Facilitator; and Demonstrator: Delegator teaching styles. The dependent variable will be the English course performance of the secondyear maritime students represented by their final grade in English 123. Relationship will then be determined between the maritime students' teaching style perception and teachers' own teaching style evaluation as well as the relationship between maritime students' teaching style perception and their English course performance.

Theoretical Framework. The study has posited on the theory of Dr. Anthony Grasha, an awardpsychologist winning and distinguished professor at the teaching University of Cincinnati ("Type of teaching styles," 2011). His career focused on finding and implementing ways to improve the teaching process. In 1976, the "Grasha-Reichmann Teaching Style Survey" was created. The survey identifies five teaching styles that represent typical orientations and strategies college faculty use in the classroom. These are the following (Grasha, 1994, p.143):

- Expert. Possesses knowledge and expertise that students need. Strives to maintain status as an expert among students bν displaving detailed knowledge and by challenging students enhance their competence. Concerned with transmitting information and ensuring that students are well-prepared.
- Formal Authority. Possesses status among students because of knowledge and role as a faculty member. Concerned with providing positive and negative feedback, establishing learning goals, expectations, and rules of conduct for students. Concerned with the "correct, acceptable, and standard ways to do things."
- Personal Model. Believes in "teaching by personal example" and establishes a prototype for how to think and behave. Oversees, guides, and directs by showing how to do things, and encouraging students to observe and then to emulate the instructor's approach.
- 4. Facilitator. Emphasizes the personal nature of teacher student interactions.



Guides students by asking questions, exploring options, suggesting alter natives, and encouraging them to develop criteria to make informed choices. Overall goal is to develop in students the capacity for independent action and responsibility. Works with students on projects in a consultative fashion and provides much support and encouragement.

5. Delegator. Concerned with developing students' capacity to function autonomously. Students work independently on projects or as part of autonomous teams. The teacher is available at the request of students as a resource person.

Scope and Limitations of the Study. This study covered the assessment of the teaching styles of the AIMS English 123 professors in relation to the English 123 course performance of their respective maritime students during the school year 2014-2015.

The study was conducted at Asian Institute of Maritime Studies (AIMS) with 273 freshmen Maritime Transportation students, freshmen Marine Engineering students, and 9 English 123 professors as respondents of the study. Specifically, the identified student respondents have taken the English 123 course in the school year 2014-2015. Further, it was also limited to the responses of English 123 professors from the CLASS Department who handled English 123 classes during the school year 2014-2015.

A standardized questionnaire adapted from Grasha and Riechmann was used for the self-evaluation of the English teachers' teaching style while a modified version of the same questionnaire was used to determine the students' perception on their English 123 teachers' teaching style. This study commenced last November 2014 and culminated in June 2016.

# **LITERATURES**

The English 123 Course. English 123 is one of the English language courses of AIMS which intends to develop the composition skills of students in the English language (Cajala, 2014). The course will facilitate in discovering the students' strengths and weaknesses both in oral and written communication and provide training for the enhancement of their basic skills. The course encompasses lessons in writing effective sentence and paragraph, composition of various business letters and reports, the use of survey and questionnaire as a tool in gathering data, and the rudiments of conducting research. At the end of the course, students are expected to: construct effective sentences and paragraphs according to use; utilize the ways of developing various business and reports: letters prepare survey questionnaire and/or interview questionnaire as tool/s in gathering data for research; and, implement the steps involved in conducting research (Cajala, 2014).

Just like in other schools, this writing course was created not only to comply with the necessary requirements of the Memorandum Order (CMO) on curriculum compliance but also to address the needs of future Filipino seafarers in building their capacities to write better compositions that will make them at par within their industry. Because writing is complementary to reading and understanding contents, rudiments of writing should be one of the paramount learning that students should focus on during the writing formation stage. Teachers have known the fact that a writing class is very different from the regular classes that hold basic lectures and quizzes. Educators on this type of class have to go the extra mile to get the interest of students. In most instances, students get bored in listening to lectures of writing procedures as well as in the tedious construction of essays and long compositions during class writing applications. Applebee and Langer (as cited in Waring, 2007, p.10) reported that "Students are spending less time on writing that in 2005, 48% of students spent 11-40% of time on writing instruction, with 11% spending less. Students are being set up for failure in high school and



college since they do not possess the skills needed for writing at these levels." Perhaps, one of the reasons why students nowadays fail to exhibit effective writing is due to the fact that many forms of technology have already surfaced where acquisition of knowledge can be virtually acquired through the use of gadgets. Hence, writing as a form of knowledge acquisition became an optional means for many of the students of today.

The nobleness of teachers who teach in writing classes is unprecedented. By going the extra mile to seek students' interests, they even double the miles in patiently checking long essays and compositions of students. Just reading the works of students is already a timeladen stage. Checking on the errors and writing notations is another tedious phase that teachers undergo just to address the need for students to learn. According to Waring (2007, p.11), "Teachers in all content areas see writing, or rather the process of grading student writing, as a laborious chore. Although the majority of the time it cannot be browsed over, quick checked, it does have the ability to increase student learning in all content areas resulting in increased student achievement."

Because of these specialized procedures in writing classes, syllabus and instructional materials for this type of class are given due importance and consideration. Bromley (as cited in Waring, 2007, p.11), stated that "writing instruction, in any school, must be comprised of the following key components for it to be reliable: 1) Standards and assessments that guide teachers and students; 2) Large blocks of time for reading, writing, talking, and sharing; 3) Direct instruction in composing conventions; and, 4) Choice and authenticity in writing for a variety of purposes and audiences.

Correlates of Teaching Style. Teaching is a "noble job." It is noble for teaching is imparting knowledge, values, and wisdom to a multitude number of individuals. It is also noble for it does not make one a millionaire nor make one a popular icon within a society. Lastly, teaching is noble for it reflect one's true intention in sharing his thoughts and ideas in its truest sense.

However, the nobleness of teaching becomes unwarranted when a teacher isn't practicing the ways a true teacher should be. Hence, there are various factors to determine the effectiveness of a teacher. One can be his attitude towards teaching. Another one can be the extent of his know-how within his own field. But one great factor that a teacher should always possess is his teaching style. Very akin to teaching strategy, teaching style is one of the best determinants for a teacher's nobleness.

According to Gill (2013), "no two teachers are alike, and any teacher with classroom teaching experience will agree that their style of teaching is uniquely their own." This is very true especially when teaching style is assessed based on a regional context. Though teaching styles and strategies can be generic in terms of types and procedures, a teacher's regional background do matter due to differences in culture, beliefs, values, and norms. American teachers, for example, may differ from that of Nigerian educators. Another factor to be considered in teaching style is its approach. A basic approach in teaching is the traditional style. However, due to the fast-changing environment, such as the presence of technology, learners today have also changed in terms of their approach in assimilating knowledge. Whittington and Raven (1995) label students that are 25 years or older as "nontraditional" age students. Hence, "traditional teaching styles have evolved with the advent of differentiated instruction, prompting teachers to adjust their styles toward students' learning needs" (Gill, 2013). But what is a differentiated instruction? This is a method of "keeping all students in mind when developing lesson plans and workbook exercises. lectures interactive learning. These student-focused differences necessitate instructional styles that embrace diverse classrooms for students at all learning levels and from various backgrounds without compromising the teacher's strengths" (Gill, 2013). When applied to course-specific contents, this can be exemplified by developing modules and assessments that caters to various types of learners. One consideration can be based on the student's level of intelligence to which they belong. For example,



in an English class, lectures in basic sentence pattern can be best approach using a diagrammatic sentence format for middle to low learners.

On the other hand, a number of studies in teaching style has been produced from various parts of the world. And because of the innate differences of each region, several correlates of teaching style were also presented. However, one of the most presented in the teaching style its correlation student's studies is to performance. This was so because student's performance is one of the prime determinants if a teacher is performing. Presumably, effective teaching style do contribute in a teacher's performance. However, Dunn and colleagues (as cited in Tulbure, 2012) declared that "we can no longer afford to assume that all students will learn through whichever strategy the teacher prefer to use." Therefore, teachers should identify the most effective teaching style amongst the roster of strategies available. "Upto-date, one of the major concerns of the educational researchers is to find the best matching between instructional strategies and students' learning preferences in order to improve the academic outcome" (Tulbure, 2012).

The relationship between teaching style and academic performance has been tested in numerous studies. For instance, "the poor academic performance of students in Nigeria has been of much concern ...... that it has led to the widely acclaimed fallen standard of education in Delta State and Nigeria at large" (Akiri & Ugborugbo, 2009). This situation led to a study to identify whether a significant relationship exist between the poor academic of the students performance and effectiveness of the teachers. As a result, it was revealed that (Akiri & Ugborugbo, 2009) "there is a significant negative relationship between teachers' effectiveness and students' academic performance in public secondary schools in Delta State, Nigeria. It is noteworthy that 99.7% the variance in students' achievement in this study is attributed to nonteacher effects." Hence, it can be concluded that other factors may well be the cause of the poor student performance. However, one study had shown a contradicting result as to the value of teaching style with students. In Malaysia, lecturers' of Universiti Utara Malaysia (UUM) "were found to use variety of teaching styles in their lesson and found that each teaching style dimension has high mean value. The methods used by lecturers were found to have helped the students to understand their subject matter" (Shaaria, Yusoffb, Ghazalic, Osmand, & Dzahire, 2014). Interestingly, the type of teaching style used in this scenario has something to do with the positive result of the study. This teaching style is derived from Dr. Anthony Grasha who proposed five different styles of teaching. These are expert style, formal authority, personal model, facilitator and delegator. Grasha stressed that these five teaching styles are grouped into four clusters. The first cluster encompasses an expert style and formal authority style; Second cluster includes personal model style, expert style and formal authority style; Third cluster includes facilitator style, personal model style and expert style and the fourth cluster includes delegator style, facilitators and experts. In the above study, results revealed that, "nevertheless, many lecturers were found using personal model teaching styles followed by expert teaching styles. Personal modeling style of teaching is very important when delivering lessons to students to learn. Teachers, who have the vision and deliver good content, will inspire students to strive for more" (Shaaria et al., 2014). This result supports the view that personal model teaching style has great influence to students' attitude to participate in the process of teaching and learning in the classroom. It is therefore apt that good lessons come with good style in imparting the lesson. Such style is something a teacher should continuously discover applying diverse methods and strategies to eventually identify the best style suited for a specific group of students. In addition, the OECD Program for International Student Assessment (2000) found that "there is a relationship between students' engagement and teachers' teaching style. The study found that the culture of a school can affects student participation and academic achievement. Culture which the school includes dedicated group of teachers, effective discipline and a healthy learning environment.



The study also found that students who felt accepted will affect his in class or at school." Significantly, this study has posited on Grasha's theory of teaching style as reflected in the theoretical discussion of this paper. However, when determined if there exist a relationship between the teaching style and academic engagement of the students in UUM, it revealed that there is a positive relationship between teaching styles with academic engagement but on a weak level. There were only two teaching styles that seem to be significant in the result of this study. Aside from personal model teaching style, the style facilitator teaching also became significant to the UUM students as they found this helpful in their academic engagement. Through facilitator teaching style, teachers can use problem-solving strategies. This strategy does help the students to work with others. The study is supported by Faris (2008), when he found that by using problem solving teaching strategy, it has improved students' attitudes toward science. Adesoji (2009) too, when explaining his findings, saying that students will lead to positive direction if the lecturers use problem solving method in their teaching.

## **METHODOLOGY**

Research Design. This study used descriptive-correlation design. A descriptive method is concerned with conditions that are prevailing, processes that are going on, and effects that are felt in trends that are developing. According to Goods and Scates (1985), descriptive research includes studies that purport to present facts that are going on such as information about a group of persons, a number of objects, sets of conditions, a class of events, or a system of thought. Variables of the study that required a descriptive result are the teaching styles of the English instructors as perceived by themselves and their students in English 123. In addition, the final grade of the sophomore students in English 123 was also used as descriptive data in determining their performance of the stated course. On the other hand, according to Calmorin and Calmorin (2012), "correlational survey is designed to determine the relationship of two variables (X and Y)." As applied in the study, the English 123 course performance of the maritime students was correlated with the teaching styles of the English instructors of AIMS. Further, the teaching style perception of the maritime students was correlated with the teachers' own teaching style evaluation.

Respondents of the Study. The respondents of the study were 273 freshmen Maritime Transportation (MT) students and freshmen Marine Engineering (MarE) students who have taken English 123 courses during the academic year 2014-2015. On the other hand, the professor respondents were composed of 9 English 123 professors from the Center for Languages, Arts, and Social Sciences (CLASS) Department who handled English 123 classes on the same school year.

Research Instrument. The instrument utilized for this research is the standardized "Teaching Style Inventory" adapted from Anthony F. Grasha and Sheryl Riechmann-Hruska. The inventory is a 40-item questionnaire consists of situations and scenarios that represent the five-teaching style theory of Grasha and Riechmann. A standardized version of the inventory was used for the professors and a modified version was utilized for the students. For identification purposes, the proponents followed the categories of questions, as reflected in Grasha-Reichmann inventory, according to what specific teaching style each professor represents. For the specific number code of each question and its corresponding teaching style, please refer to Table 2.3.

Table 1
Distribution of Teaching Style Codes Reflected in the Inventory

Teaching Styles	Number Codes in the Inventory
Expert	1, 6, 11, 16, 21, 26, 31, 36
Formal Authority	2, 7, 12, 17, 22, 27, 32, 37
Personal Model	3, 8, 13, 18, 23, 28, 33, 38
Delegator	4, 9, 14, 19, 24, 29, 34, 39
Facilitator	5, 10, 15, 20, 25, 30 35, 40

However, questions were presented randomly and uncategorized in the data gathering instrument to avoid bias and knowledge



construct of respondents to a particular teaching style.

A five-point Likert scale was used for respondents to gauge their teachers' application of the above stated teaching styles. A sample question from the Teaching Style Inventory which states, "Students would describe my standards and expectations as somewhat strict and rigid," was answered using the choices of 1 - strongly disagree to 5 - strongly agree.

The initial part of the questionnaire for professors has determined their demographic details as to their gender, highest educational attainment, age, and years of teaching experience. On the other hand, name, gender, and corresponding professor in English 123 were the preliminary questions presented in the student questionnaire.

The Cronbach Alpha Test of the Grasha-Reichmann Teaching Style Inventory is .88 (Grasha, 1996). Hence, the reliability of the instrument is high leading the proponents to rely wholly on the instrument's capability to yield the necessary teaching styles possessed by the English 123 professors.

Data Gathering Procedure. The survey proper was done in June 2015. Prior to the scheduled survey, the proponents forwarded a letter addressed to the Department Head of the Center for Languages, Arts, and Social Sciences (CLASS) asking permission to conduct a survey to English teachers. Likewise, the same type of letter was forwarded to the Department Heads of Maritime Transportation Department and Marine Engineering Department asking permission to conduct a survey to maritime students. Upon approval, the proponents administered the questionnaire to the identified respondents.

Primary data was gathered from the professors using a standardized questionnaire adapted from Anthony F. Grasha and Sheryl Riechmann-Hruska. Likewise, a modified version of the same questionnaire was utilized to gather data from the maritime students. The questionnaire

yielded the teaching styles of the English 123 teachers of AIMS.

The performance of the maritime students was based from the final grade they earned in English 123 course during the second semester of the school year 2014-2015. This was outsourced from the CLASS Department of which repository of general education course grades is kept. Because the total population of both English 123 teachers and maritime students who have taken English 123 course were considered for this study, the proponents made sure that all teachers and students identified had participated in the survey to ensure a higher rate of participation. Upon completion of the survey, each questionnaire was retrieved and compiled for treatment.

Statistical Treatment. All the data gathered were consolidated, evaluated and interpreted appropriately. They were also subjected to statistical treatment to help the proponents in answering the problems reflected on the study. The following statistical tools were used to yield the necessary data:

- Percentage. This was used in determining the profiles of the teacher respondents as reflected in problem 1 of the study as well as in determining the English 123 performance of the students reflected in problem 3.
- Weighted Mean. This was utilized to determine the teaching styles of the English teachers as perceived by themselves and the maritime students. This is reflected in problem 2 of the study.
- Analysis of Variance. This was applied to test if significant difference on the perception of English teachers' own teaching style and the perception of maritime students on the English teachers' teaching style exists. This is reflected in problem 6 of this study.
- 4. *Pearson r.* This was used to test if significant relationship on the variables



reflected in problems 4 and 5 of this study exist.

# **RESULTS AND DISCUSSION**

Table 2
Frequency and Percentage Distribution of English 123
Professors in terms of Gender, Highest Educational
Attainment, Age, and Teaching Experience.

Variable	Classifications	Frequency	Percent
Gender	Male	3	33.33
Gerider	Female	6	66.67
	College Graduate	0	0.00
101 (51 0 1	Masteral Undergraduate	1	11.11
Highest Educational Attainment	Masteral Graduate	3	33.33
	Doctoral Undergraduate	2	22.22
	Doctoral Graduate	3	33.33
	25 years old-below	0	0.00
Age	26-35 years old	2	22.22
	36-45 years old	2	22.22
	46-55 years old	2	22.22
	55 years old-above	3	33.33
	5 years-below	1	11.11
	6-10 years	0	0.00
Teaching Experience	11-15 years	3	33.33
reacting Experience	16-20 years	2	22.22
	21-25 years	1	11.11
	26 years-above	2	22.22

Two thirds (66.67%) of the respondent English professors are female. Based on the present (SY 2016-2017) roster of English professors of AIMS, there are only 3 males out of the 12 English professors of AIMS. With this figure, 3 (female) is to 1 (female) ratio is the present gender counterpart of the English professors, hence, the result of the gender data of this study.

One third (33.33%) of the respondent English Professors are doctoral graduate while 22.22% are doctoral undergraduate. Likewise, 33.33% are masteral graduate and only 1 (11.11%) is masteral undergraduate. Based on their educational achievement, it can be inferred that majority of the professors are educationally equipped, hence, knowledgeable of their own field of specialization.

In terms of age, 33.33% of the respondent English professors are 55 years old or older while 22.22% are 46-55 years old and 22.22% are 36-45 years old. The remaining 22.22% are 26-35 years old. Because majority of the respondents are within middle to old age levels, it can be inferred that most of them are

seasoned teachers. Further, their age levels can also be an indicator of being a matured and knowledge-enriched individual that can translate to a better knowledge transfer.

As to teaching experience, it can be assumed that majority of the respondent English professors are seasoned ones as 33.33% of them have 11-15 years of teaching experience, 22.22% have 16-20 years teaching experience and 22.22% have 26 or more years of teaching experience. Having taught for a considerable number of years, the respondents have basically adopted their own sense of teaching style.

Table 3
Teaching Styles of English Professors as Assessed by the Students and the Professors Themselves

English	Students		Professors		
Professors	Mean Teaching Style		Mean	Teaching Style	
Professor A	3.92	Expert	4.88	Expert	
Professor B	4.46	Facilitator	4.25	Expert/Personal Model/Delegator	
Professor C	4.06	Expert	4.50	Expert/Formal Authority	
Professor D	3.77	Expert	4.88	Formal Authority	
Professor E	4.29	Delegator	4.38	Expert	
Professor F	3.96	Personal Model	4.75	Delegator	
Professor G	4.27	Formal Authority	4.88	Personal Model	
Professor H	4.22	Personal Model	5.00	Personal Model/Formal Authority	
Professor I	4.20	Personal Model	4.63	Formal Authority	

Table 3 presents the teaching styles of the English professors as assessed by themselves and their respective English 123 students. Based on the assessment of the students. Professors A, C, and D are categorized under "Expert" teaching style. This means that the respective students of these three professors found their class to be a teacher-centered classroom in which information is presented and knowledge is received (Grasha, 1994). On the other hand, professors F, H, and I are classified under "Personal Model" teaching style. Hence, respective students of these three professors discovered that their teachers "teach by personal example" and establishes a prototype for how to think and behave.



They oversee, guide, and direct by showing how to do things, and encouraged them to observe and then emulate them (Grasha, 1994). The last three professors were spread through from the remaining teaching styles: professor B under "Facilitator" teaching style; professor E belongs to "Delegator" teaching style; and, professor G with "Formal Authority" teaching style.

Based on the assessment of their own teaching blended style has been style, a characteristics of four professors in this study. However, it is more indicative that a common teaching style is possessed by the four professors. Professors A, B, C, and E have classified themselves to possess an "Expert" teaching style. On the other hand, professors C. D. H. and I account themselves to have a "Formal Authority" teaching style while professors B, G, and H claim to have a "Personal Model" teaching style. Only two of the professors assert that they possess a "Delegator" teaching style. They are professors B and F. According to Grasha (1994), this teaching style is "Concerned with developing students' capacity to function autonomously. Students work independently on projects or as part of autonomous teams. The teacher is available at the request of students as a resource person. None of the professors claim to have a "Facilitator" teaching style.

Combining the teaching style assessments from the students and the professors themselves, three professors came out to have the same teaching style evaluation. According to the two groups of respondents, professor A purely possesses an "Expert" teaching style. Likewise, professor C possesses an "Expert" teaching style, however, this was blended with "Formal Authority" style when taken under the professor's self-assessment. Lastly, professor H was similarly assessed to have a "Personal Model" teaching style.

Based on the frequently appearing style of teaching from the English 123 professors, which is "Expert," "Formal Authority," and, "Personal Model," majority of them have a teachercentered teaching style. This is according to Grasha (1994) of which the above stated

teaching styles belong to clusters 1 and 2. Hence, based on Dupin-Bryant's definition (as cited in Behnam & Bayazidi, 2013), the professors' style of instruction is formal, controlled, and autocratic in which they direct how, what, and when students learn. Based on these findings, a number of teaching and learning activities were proposed under cluster 1. These are lectures, term papers, tutorials, guest presentations, video-audio presentations of content, guest speakers, teacher-centered class discussions. standards/requirements. and grades/tests emphasized (Grasha, 1994). On the other hand, the proposed teaching and learning activities cluster 2 are the following: demonstrating ways of thinking/doing things, coaching/guiding students. illustrating alternatives, sharing personal viewpoints, sharing thought processes involved in obtaining answers, using personal examples to illustrate content points, and having students emulate the teacher's example (Grasha, 1994).

Table 4
English 123 Performance of the Maritime Students (N=273)

Grade	Description	F	%
91-above	Very Good	27	9.89
86-90	Good	81	29.67
81-85	Fair	80	29.30
80-below	Needs Improvement	85	31.14

Table 4 presents the English 123 performance of the respondent maritime students. Performance wise, only few students (9.80%) gained a very good grade of 91 and above in English 123. A good grade of 86 - 90 was earned by 29.67% of the respondents while a fair grade of 81 - 85 was received by 29.30% of the respondents. Almost one third of the respondents (31.14%) need improvement of their grade as they gained a low grade of 80 and below.

The grade reflected above indicates that further development on the aspects of the course is needed to improve the performance of the students as only about one tenth of them have performed well. Though a considerable number

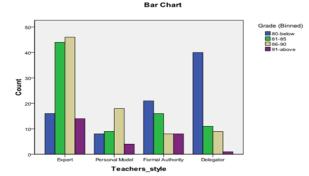


of the respondents (29.67%) earned a grade of 86 - 90, still, improvement is needed to elevate their stakes of better writing. Hence, both student factor and teacher factor should be the premise to improve their performance. On the students' side, Applebee and Langer (as cited in Waring, 2007, p.10) reported that "Students are spending less time on writing that "in 2005, 48% of students spent 11-40% of time on writing instruction, with 11% spending less. Students are being set up for failure in high school and college since they do not possess the skills needed for writing at these levels." With the advancement of technology, more and more students of this century are no longer practicing the virtue of writing since information gathering and collection can be virtually acquired through various technological platforms. Gone are the days where students use pen and paper in jotting down lectures, notes, instructions, and alike. Inculcating the discipline of writing across all courses should still be instilled to students them to achieve a better writing performance.

Teachers, on the other hand, should look into the proper ways and strategies to impart a better writing lesson including more serious assessment methods. According to Waring (2007, p.11), "Teachers in all content areas see writing, or rather the process of grading student writing, as a laborious chore. Although the majority of the time it cannot be browsed over, quick checked, it does have the ability to increase student learning in all content areas resulting in increased student achievement." More so, Bromley (as cited in Waring, 2007, p.11), stated that "writing instruction, in any school, must be comprised of the following key components for it to be reliable: 1) Standards and assessments that guide teachers and students; 2) Large blocks of time for reading, writing, talking, and sharing; 3) Direct instruction in composing and conventions; and, 4) Choice and authenticity in writing for a variety of purposes and audiences.

Figure 2.

Relationship between Teaching Style (Average) and English 123 Performance



Based on Figure 2, greater frequencies of high grades are seen from students under the "Expert" and "Personal Model" professors. Specifically, the "Expert" professors have 47 students (gray bar) with grades from 86 – 90 while 14 students (purple bar) has 91 and above grades. On the "Personal Model" professors, around 18 students (gray bar) have grades from 86 – 90.

Those who are under the "Formal Authority" and "Delegator" professors, traces of low frequencies of high grades could be observed. Specifically, only 8 students (gray bar) have earned grades from 86 – 90 and another 8 students (purple bar) have earned grades from 91 and above under the "Formal Authority" professors. Only about 9 students (gray bar) earned a grade from 86 – 90 and a meager 1 student (purple bar) earned a grade of 91 and above under the "Delegator" professors.

Table 5
Relationship between Teaching Style and English 123
Performance

Teaching Style	Grades				Total
reaching Style	80-below	81-85	86-90	91-above	Total
Expert	16	44	46	14	120
Personal Model	8	9	18	4	39
Formal Authority	21	16	8	8	53
Delegator	40	11	9	1	61
Total	85	80	81	27	273

Table 6
Chi-Sauare Results

Variables	Chi-Square Value	p-value	Interpretation
Teaching Style vs. Students' Grades	64.499	0.000	Significant



The test of relationship results revealed that the computed Chi-square value is 64.499 with a p-value of 0.000. Since the p-value is less than 0.05, the null hypothesis is rejected. This means that there is a significant relationship between students' English 123 performance and the professors' teaching styles.

A contradictory result was revealed in the study of Velasquez and Tan (2013) where no significant relationship appeared between the teachers' teaching styles and the academic performance of the students in English, Science, and Technology. However, significant relationship existed (Velasquez & Tan, 2013) between the teachers teaching styles and the academic performance of the students in Mathematics. On a more specific teaching method, Romero, Rosa, Corcoles & Ponce (2015) observed that the methodologies used in teaching were statistically significant with the marks obtained by the students. This finding is also aligned with Felder (1993), who reported that an association exists between a student's learning preference, teaching style and academic performance.

Table 7
Relationship between the Teaching Styles Assessed by the
Students and by the Professors Themselves

addition and by the Frencescope memberses				
Pearson r	Strength	p-value	Interpretation	
0.828	Very Strong	0.084	Not Significant	
0.590	Substantial	0.295	Not Significant	
0.904	Very Strong	0.035	Significant	
0.244	Low	0.693	Not Significant	
-0.684	Substantial	0.237	Not Significant	
0.382	Moderate	0.525	Not Significant	
-0.028	Negligible	0.964	Not Significant	
0.274	Low	0.655	Not Significant	
0.564	Substantial	0.322	Not Significant	
	Pearson r 0.828 0.590 0.904 0.244 -0.684 0.382 -0.028 0.274	Pearson r         Strength           0.828         Very Strong           0.590         Substantial           0.904         Very Strong           0.244         Low           -0.684         Substantial           0.382         Moderate           -0.028         Negligible           0.274         Low	Pearson r         Strength         p-value           0.828         Very Strong         0.084           0.590         Substantial         0.295           0.904         Very Strong         0.035           0.244         Low         0.693           -0.684         Substantial         0.237           0.382         Moderate         0.525           -0.028         Negligible         0.964           0.274         Low         0.655	

The results of the correlation test showed that a very strong positive correlation between the students' assessments and the professors' assessments were seen from Professor A (r=0.828) and Professor C (r=0.904). These results have been consistent with the results revealed in Table 4.2 wherein the same two professors were assessed under similar teaching styles. Specifically, the two professors' own self-assessments are consistent with the students' assessment of their respective

professor wherein both are under the "Expert" teaching style. However, as to the significance of the relationships, only the assessments to Professor C were seen to have significant positive correlation as reflected by the p-value of 0.035. Hence, the relationship denotes that what the teacher reflect as a teaching style is significantly perceived to be the same with that of the students. Thus, Professor C's "Expert" teaching style is significantly manifested inside her classroom. Substantial positive correlation was seen on Professor B (r=0.590) Professor I (r=0.564) while a negative substantial relationship was seen from the assessments to Professor E (r=-0.684). The other results revealed moderate to negligible relationships.

Table 8

Difference between Teaching Styles Assessed by the Students and by the Professors Themselves

Professor	t-value	p-value	Interpretation
Professor A	-19.33	0.00	Significant
Professor B	2.12	0.10	Not Significant
Professor C	-2.04	0.11	Not Significant
Professor D	21.18	0.00	Significant
Professor E	-0.68	0.54	Not Significant
Professor F	-3.11	0.04	Significant
Professor G	-3.04	0.04	Significant
Professor H	-1.42	0.23	Not Significant
Professor I	-2.35	0.08	Not Significant

The test of difference between the students' assessments and the self-assessments of the professors showed that Professor A (t= -19.33, p-value=0.00), Professor D (t=21.18, value=0.00), Professor F (t=-3.11, p-value=0.04) and Professor G (t=-3.04, p-value=0.04) have significant differences in their teaching styles as revealed by the p-values that are less than 0.05. Hence, what the professors perceive to possess as a teaching style is significantly different from what the students think are manifested in their respective classrooms. Two inferences can be drawn from these results. First, it can either be assumed that the professors were tempted to respond in the survey as to what they believe should think or behave, or in terms of what they believe is the expected or proper thing to do inside the classroom. On the other hand, it can also be



presumed that the students have wrong or insufficient perception of their teachers' teaching styles. This premise can be accounted from the fact that students may generally perceive their teachers to be someone with a particular teaching style but manifestation of such might have only been shortly exhibited. A common teaching style may either be the once regularly manifested by the professors but students fail to distinguish such due probably to some factors. All other student and professors' self-assessments showed no significant differences.

Conclusions. In the light of the findings, the following conclusions are drawn:

Majority of the respondent English 123 professors are female, with post graduate degrees, and have experienced considerable number of years of teaching from 11 to more than 26 years. One third of them are 55 years old and older while the rest are between 26 to 54 years old.

The respective students of Professors A, C, and D find their professors to be teacher-centered (Expert teaching style) where information is presented and knowledge is received while students of professors F, H, and I discovered that their teachers "teach by personal example" (Personal Model teaching style) and establishes a prototype for how to think and behave. Students of professor B have perceived their teacher to be someone who guides them by asking questions, exploring options, suggesting alternatives, and encouraging them to develop criteria to make informed choices (Facilitator teaching style) while students of professor E have observed that their professor implements autonomy in the class where they work independently on projects and their teacher is available upon their request (Delegator teaching style). Lastly, students of professor G have identified their instructor to be someone who possesses status among the students because of their knowledge and role as faculty member (Formal Authority teaching style).

On the other hand, professors A, B, C, and E have classified themselves to possess an

"Expert" teaching style while professors C, D, H, and I account themselves to have a "Formal Authority" teaching style. Professors B, G, and H claim to have a "Personal Model" teaching style. Only professors B and F assert that they possess a "Delegator" teaching style of which they are available at the request of their students as resource persons. Combining the teaching style assessments from the students professors themselves. professors came out to have the same teaching style evaluation. According to the two groups of respondents, professor A purely possesses an "Expert" teaching style. Likewise, professor C possesses an "Expert" teaching style, however, this was blended with "Formal Authority" style when taken under the professor's selfassessment. Lastly, professor H was similarly assessed to have a "Personal Model" teaching style.

Based on the frequently appearing style of teaching from the English 123 professors, which are "Expert," "Formal Authority," and, "Personal Model," it is equated that majority of them have a teacher-centered teaching style. Hence, the professors' style of instruction is formal, controlled, and autocratic in which they direct how, what, and when students learn.

Only few gained a very good grade of 91 and above in English 123 while a considerable number of grades ranging from 86 - 90 and a fair grade of 81 - 85 were earned by the students. At the most, almost one third of them gained a low grade of 80 and below which warrants an improvement in English 123.

Greater frequencies of high grades are seen from students under the "Expert" professors with grade range from 86 – 90 and 91 to above as well as from "Personal Model" professors with grades from 86 – 90. On the contrary, traces of low frequencies of high grades are observed under the "Formal Authority" and "Delegator" professors. Hence, a significant



relationship between students' English 123 performance and the professors' teaching styles exists.

Professors A and C's self-assessment of teaching style are positively correlated from that of their students' assessments. However, only professor C is seen to have significant positive correlation between assessments of the two parties. Hence, what professor C reflects as a teaching style is significantly perceived to be the same with that of the students. Substantial positive correlation is seen on professors B and I while a negative substantial relationship was seen from the assessments to Professor E. The other results revealed moderate to negligible relationships.

The teaching styles perceive to possess by Professors A, D, F and G are different from what the students think are manifested in their respective classrooms. All other student and professors' teaching style assessments showed no differences.

Recommendations. Based on the conclusions drawn, the following are the recommendations:

Frequencies of high grades were seen mostly from the "Expert" and "Personal Model" professors. Hence, it is recommended that the teaching and learning activities under the above stated teaching styles should be adapted, if not, continued. These are lectures, term papers, tutorials, guest presentations, video-audio presentations of content, guest speakers, teacher-centered class discussions, strict standards/requirements, and grades/tests emphasized.

In addition, writing instructions must comprise of the following key components for it to be reliable: a) Standards and assessments that guide teachers and students; b) Large blocks of time for reading, writing, talking, and sharing; c) Direct instruction in composing and conventions; and, d) Choice and authenticity in writing for a variety of purposes and audiences.

Employment of a more specialized teaching program on writing is recommended to

students with low to very low grades. Perhaps a separate writing class similar to English 123 but with more intense content and activities can be adapted to improve the writing skills of the students. A review of the basic sentence structure, basic sentence pattern, paragraph development, qualities of a good paragraph among others can be a starting point of the program. Teachers on this specialized writing class should implement stricter rules and disciplinary measures to make sure students are assimilating the lessons provided. Hence, the "Expert" and "Formal Authority" teaching styles are suited for the above writing class.

Multiple numbers of writing classes have students with varied learning abilities. Hence, teachers should be flexible enough to adjust and tailor-fit the right teaching style needed to maximize the learning of each section. However, teachers must adapt, if possible, one of the most effective teaching styles that came out from this study where good achievement was reflected. These are "Expert" teaching style, "Personal Model" teaching style, and "Formal Authority" teaching style.

Further studies on the teaching style in English 123 can be conducted as other factors affecting the performance of the students can be the focal points. Teaching style preference of the students, educational background of the teachers, types of assessment tools in writing classes among others can be some of the factors to be considered for further study.

Teaching style studies in other courses of the institution can also be undertaken to identify specific styles required in order for students to gain higher achievement and excellent performance on their respective courses. An interesting study can be conducted on classes with laboratory and hands-on activities where delivery of lessons and assessment tests are totally different from the traditional lecture and paper quiz format.

The following teaching and learning activities (TLA) in English 123 are recommended for development: content lecture using teachercentered class discussions; graphical mapping



of paragraph components; and, one-on-one coaching and tutorial writing. In the lecture phase, large blocks of time for reading, writing, talking, and sharing are encouraged. Also, direct instruction in composing and conventions as well as choice and authenticity in writing for a variety of purposes and audiences is recommended. In terms of assessment, the following activities are recommended for application: mapping various elements of paragraph thru board work; intensive writing and composition exercises; and, submission of a "term paper" as a final requirement of the course.

# Funding

This work was funded by the management of Asian Institute of Maritime Studies (AIMS) of Pasay City, Philippines through allocated budget from the Research Development Office (RDO).

### Disclosure Statement

The author/s declared no potential conflicts of interest with respect to the research, authorship, or publication of this article.

#### REFERENCES

- Adesoji, F. A. (2009). Managing students' attitudes towards Science through problem-solving strategy. Anthropologist, 10 (1), 21-24.
- Akiri, A.A. and Ugborugbo, N.M. (2009).
  Teachers' effectiveness and students' academic performance inpublic secondary schools in Delta State, Nigeria. Journal of Educational and Social Research. Retrieved May 7, 2015, from http://www.mcser.org/journal/index.php/jesr/article/viewFile/548/573.
- Behnam, B. & Bayazidi, M. (2013). The relationship between personality types and teaching styles in Iranian adult TEFL context. Global Journal of Foreign Language Teaching. 2, 21-32.

- Cajala, V.M. (2014, June 9). Writing in the discipline. Course Specification. Center for Languages, Arts, and Social Sciences, Asian Institute of Maritime Studies, Pasay City.
- Calmorin, L.P. and Calmorin, M. (2012). Research methods and thesis writing. (3rd Ed.). Manila: Rex Publishing.
- Faris, A. (2008). The impact of PBL on the student's attitudes towards Science among nine graders in Hamza Independent School. Unpublished project paper.
- Felder, R. M. (1993). Reaching the second tier: Learning and teaching styles in college science education. Journal of College Science Teaching, 23 (5), 286 – 290.
- Felder, R.M. & Henriques, E.R. (1995). Learning and teaching styles in foreign and second language education. Foreign Language Annals, 28 (1), 21-31.
- Grasha, A.F. (1996). Teaching with style: A practical guide to enhance learning by understanding learning and teaching style. College Teaching, 48, 1-12.
- Gill, E. (2013, January 5). 5 Types of effective teaching styles for 21st-century classrooms. Retrieved May 7, 2015 from http://education.cu-portland.edu/blog/teaching-strategies/5-types-of-classroom-teaching-styles/
- Grasha, A.F. (1994). A matter of style: The teacher as expert, formal authority, personal model, facilitator, and delegator. Retrieved June 19, 2016, from http://www.jstor.org/stable/27558675.
- Maritime School Assessment Program Report. (2016). Training, Assessment, and Placement Office. Maritime College, Asian Institute of Maritime Studies, Pasay City.



- McGeown, K. (2012, November 12). The Philippines: The world's budget English teacher. Retrieved May 11, 2015 from http://www.bbc.com/news/business-20066890.
- McKay. (2007). Maritime school assessment program. (2011). Retrieved March 9, 2015 from www.aboutphilippines.ph/filer/Maritime -School-Assessment-Program-MSAP.pdf
- Shaari, A.S., Yusoff, N.M., Ghazali, I.M., Osman, R.H., & Dzahir, N.M. (2014). The relationship between lecturers' teaching style and students' academic engagement. Retrieved May 7, 2015 from http://www.sciencedirect.com/science/article/pii/S1877042814015328
- Summary of class records in English 123. (SY 2014-2015). Center for Languages, Arts, and Social Sciences. Asian Institute of Maritime Studies, Pasay City.
- Teaching styles inventory. (n.d.) Retrieved May 12, 2015 from http://docushare3.dcc.edu/docushare/d sweb/GetRendition/Document2395/hm
- Tulbure, C. (2012). Investigating the relationship between teaching strategies and learning styles in higher education. Retrieved May 7, 2015 from http://dppd.ubbcluj.ro/adn/article\_5\_1\_7. pdf
- Type of teaching styles. (2011). Retrieved March 9, 2015 from http://www.csn.edu/pages/2358.asp
- Velasquez, J. V. and Tan, D.G. (2007). Teaching and learning styles and academic performance of high school students in Mathematics, English, and Science and Technology. Published dissertation. Central Luzon State University, Cagayan, Philippines.

- Waring, J.W. (2007). The impact of writing on student achievement. Unpublished master's thesis. Watson's School of Education, University of North Carolina, Wilmington.
- Whittington, S. & Raven, M.R. (1995). Learning and teaching styles of student teachers in the Northwest. Retrieved May 7, 2015 from http://pubs.aged.tamu.edu/jae/pdf/Vol3 6/36-04-10.pdf