Instructional Policy and Students' Academic Performance: A Case Study in Marikina Science High School and Parang High School

An Undergraduate Thesis
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PROF. ANABELLE BUENAOBRA RAGSAG

DEPARTMENT OF SOCIAL SCIENCES
College of Arts and Sciences
University of the Philippines, Manila

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Presented by:
BERNADETTE M. RUIZ
99-85025
Bachelor of Arts in Political Science

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This thesis entitled,

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has been prepared and submitted by

Bernadette M. Ruiz

Professor Anabelle Buenaobra Ragsag
THESIS ADVISER

Accepted in partial fulfillment
of the course requirements for the
Degree of Bachelor of Arts in
Political Science

Prof. Benjamin Mangubat
Chair
Department of Social Sciences
University of the Philippines Manila

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Abstract

This study was conducted primarily to determine the differences of instructional polices and the level of students' academic performance, particularly in Marikina Science High School and Parang High School, secondary schools both located in the City of Marikina, Philippines.

Instructional policies, the independent variable are: the classroom curriculum, the instructional behaviour of teachers, and instructional approaches. Meanwhile, the dependent variable, academic performance was measured in terms of the Marikina Science High School (MSHS) and Parang High School (PHS) students' performance in the summative test and in the college placement exam- UPCAT. Parang High School was then chosen as the representative of all regular public secondary high school because the school is the second top achievers among secondary schools in the City of Marikina (DECS Office, Division of City Marikina).

The UPCAT was chosen because it is one of the tough college placement exam in the Philippines.

The researcher used the content-analysis method to present the different curriculum tracks employed by both schools also, a survey of the students on the instructional behaviour of teachers was conducted among the two institutions, the

MSHS and PHS- as the representative of all regular public secondary schools. The sample included 167 students, 88 students from the MSHS and 79 students from PHS. Further, the researcher personally administered a semi-structured interview of the teachers concerning different instructional approaches used in both schools.

The following are the findings of the study:

1. In Marikina Science High School, they employed different curriculum tracks in each year level. For freshmen students', the school used the Science Curriculum; for sophomore and junior students, the Basic Education Curriculum, and the New Secondary Education Curriculum is used for the senior students.

   Further, additional time is allotted for the teaching of two major subjects: science and mathematics. An additional one-hour was spent on more laboratory activities, mathematical analysis and problem solving.

   As such, the periodical tests result of students in MSHS is twice as higher than the periodical test results of PHS students. (See Appendices E & F- Periodical Tests Results of Marikina Science High School and Parang High School.

2. There is no significant difference concerning the instructional behaviour of teachers in MSHS and PHS. The survey results revealed that selected teachers to be evaluated in Marikina Science

High School have the same teaching behaviour among the selected teachers in PHS.

3. The researcher found out that instructional approaches used by the teachers in Marikina Science High School have shown significant effects on students' academic performance. The use of direct instruction, as opposed to the methods of instruction used in Parang High School, provides a positive result for the academic learning of the students.

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Introduction

The introduction of the public school system opened the educational floodgate to the Filipino masses, which constitute the majority in Philippine society.

We often hear from our grandparents that during their time, being in a public school was prestigious. In fact, high school graduates, then, can already teach. Rep. Carlos Padilla, a representative of the lone district of Nueva Viscaya and chairman of the Congressional Committee on Education in 1992 argued that, the early education he received in public school is comparable to, if not better than, what his children received in exclusive schools like Ateneo and Holy Spirit. He further argued that he already mastered the multiplication table in Grade 3 whereas his son sometimes has to use his fingers!

So high was the quality of education in the public school system then, as exemplified by by the following Philippine luminaries who are the products of the public school system: the former President of the Philippine Republic President Ramon Magsaysay, among others.

Until now, the public school system accommodates a total of 20 million students at all levels (DECS Office, Division of Marikina City).

However, the quality of education in the public schools continuous to be criticized. The Congressional Commission to Review and Assess Philippine

Education was created by a Joint Resolution of the Eight Philippine Congress on June 17, 1990. The commission composed of 5 senators and 5 congressmen for the purpose to assess the performance of public schools in the country, the quality of educational programs and services and suggestions for educational reform and improvement.

The results of research studies and national surveys were the following:

1. The Philippine Education shows a high dropout rate at the grade and high school level.
2. The average academic achievement of elementary school pupils consistently fall below 55 percent or even the less of what is to be learned at every grade level. Studies show that pupils' average achievement tends to decline as they go up to grade levels.
3. There is a deterioration of achievement levels in Mathematics and Science in both elementary and secondary schools. Secondary schools show a poor performance in science education and in science and technology development.
4. Teachers are generally inadequately prepared and many do not have the required teaching competencies as revealed by the results of the Professional Board of Examination for Teachers (PBET).
5. The objectives of elementary and secondary education lack articulation of the subject required for every grade and high school level which in turn is deficient in contextualization, i.e., relating the content to the learner's first hand experiences. The curriculum is not

too clear on the learning outcomes for every grade. It only specifies the knowledge, attitude, and skills that should demonstrate at the end of each grade and high school level.

This study to assess the performance and relevance of public school system is also supported by Rep.Carlos Padilla who is then conducted a comprehensive evaluation of the education sector in 1992.

As Rep. Carlos Padilla put it " the quality of education in public schools produces inferior product, because of public schools high proportion of graduates who are functionally illiterate, and of falling test scores". The quality of education in our public schools has deteriorated and private schools are better. This is a qualified observation, based on the tools that measure quality education like NSAT (National Secondary Assessment Test, and NEAT (National Elementary Assessment Test). The NSAT and NEAT results revealed that the performance of students in public schools was generally far below the acceptable level of performance at 75% (DECS Office, Division of City Marikina).

The numerous criticisms and proposals regarding the Philippine Educational system ranging from the methods of instruction to the lengthening of the schooling period should be taken into consideration. This is because education in our country is seen almost exclusively as a passport to individual success.

The idea that instructional policies make or break the educational system and its quality is validated by a number of studies. This study shows that

instructional policies affect learning and are frequently used as standards in determining the level of students' academic performance.

Instructional policies specifically, the classroom curriculum, instructional behaviour of teachers, and instructional approaches and techniques that used in schools affect what students learns. The importance of these policies, which are necessarily to the levels of students' academic performance, have been long acknowledged.

Statement of the Problem

The researcher intends to answer the following questions:

General Question

1. What are the differences in instructional policies and students' academic performance in Marikina Science High School and Parang High School?

Specific Questions

1. What are the instructional policies employed by Marikina Science High School and the Parang High School?

2. Among the three, which manifest a greater significance to the students' level of academic performance?

3. What are the levels of the students' academic performance in the Marikina Science High School and Parang High School?

Objective of the Study

General Objective

1. to determine the differences in instructional policies and students' academic performance in Marikina Science Public High School and Parang High School

Specific Objective

1. to present the instructional policies in Marikina Science Public High School and in Parang High School;
2. to determine which among the three manifest a greater significance to the students' level of academic performance;
3. to determine the levels of students academic performance in the Marikina Science High School and Parang High School.

Significance of the Study

This study is significant because it represents the condition of public secondary high schools in our country. Primarily it presents the level of students' academic performance receiving public education.

The instructional policies employed by other public secondary high schools that register-increasing levels of students' academic performance can also be followed through by other secondary schools.

This study is also significant for the improvement of instructional policies employed among secondary schools. The instructional policies practice by secondary schools needed a continuous evaluation to determine its significance on the academic performance of the students.

Discussions about instructional policy made this research relevant because it focuses on the instructional variables employed in Marikina Science High School and Parang High School. Then, eventually instructional policies employed in both schools was then used to measure the performance rating of students in summative tests and in the college placement exam- UPCAT.

Review of Related Literature

Several studies paid more attention to the variables within the classroom or to the different components of instruction that could greatly affect student academic achievement. Reynolds and his colleagues (1985), showed curriculum, instructional behaviour of teachers and instructional approaches as components of instruction contribute to students' academic achievement.

CURRICULUM

Reynolds et al., explained that a strong curriculum has the following qualities:

1. a restricted set of objectives is formulated and ordered hierarchically;
2. The content of the curriculum material should be ordered along the lines of the objectives- the structure of the content should be clear and should correspond with the hierarchical order of the objectives;
3. The structure of the content makes use of advanced organisers, in which the objectives of a learning task and the way it is structured are given;
4. The evaluation of pupils' learning which includes but is not limited to oral and written tests;
5. Corrective feedback based on evaluation.

Another author, Van den Akker (1988) shows in his research that the characteristics of curriculum are also components of teaching behaviour. He further posits that a structured curriculum provides more time for instruction instead of organising, and also more time for learning.

INSTRUCTIONAL BEHAVIOUR OF TEACHERS

Following in this vein, Glicerio P. Aguila, a retired district supervisor of DECS in San Juan, Batangas, puts forward in his research that teaching behaviour is another component that could greatly affect the academic achievement of students. He argued that the teacher is the key component in the instructional process.

The research by Cortes meanwhile, (1991) has shown that teacher behaviour in its turn is influenced by other components of instruction viz., classroom curriculum. Curriculum material is important but the way teachers use it is responsible for the results.

The research of Brophy and Good (1986) meanwhile, has the following findings:

The academic learning time or student- engaged time is an important variable, and it can be enlarged if the teacher provides as much as learning material as possible in a proper way so that the learning of pupils will be promoted. Teachers' emphasis on the academic learning will influence their own behaviour and the behaviour of students. Further, the academic learning tile will be enhance if the teacher uses advance organisers in which the objectives and

content material is presented during classroom instruction, and the seatwork or homework assignments given by the teacher, is even more important which can enlarge the academic learning time.

Next to teaching behaviour, the management behaviour of teachers is deemed another important variable affecting students' academic performance. Management, as noted by Valle (1995), is an art of organizing the classroom so that academic learning go forward without unnecessary loss of time and energy due to poor arrangement of equipment, poor manipulation of materials, and the failure of the students to be cooperative in whatever type of activity mat be undertaken for the academic achievements of the students. This behaviour also contributes to creating a quiet learning situation in which pupils can learn. Time provided for learning is especially important device teachers have at their disposal to improve pupils' learning.

A research study conducted by Valle (1995) indicates that, the teacher is the planner, the over-all coordinator and the one who brings about the factors all together to contribute effective teaching-learning situations- termed as the "situation approach" to teaching and learning. The teacher should always be in search of better ways to do his/her job and of preventing disciplinary- related problems through control mechanisms that could interfere with normal classroom progress.

Making students aware of the burden of self-discipline and independent work should characterise rules and regulations in the classroom, so that pupil will develop an interest in their work and achieve maximum academic development.

INSTRUCTIONAL APPROACHES

At the school level, decisions about the allocation of resources, involves the allocation of different classes or subject areas, curriculum resources in relation to the time allocated to each subject, material resources in the form of teaching aids and curriculum tracks (Reynolds et al., 1985).

At the class level, teachers make decisions about the variation in and level of instructional input available for individual pupils in the class.

For example, studies conducted by Barr and Dreeben (1983) revealed that formal teaching methods based on lectures and copying of notes allow for less variation in the distribution of teacher inputs to individual pupils, than group and task oriented teaching methods, although the former may allow a higher average level of input to all pupils. However, even within formal teaching methods, some variation in the total resource input to learning will occur, due to the variation in the resources input from the pupils themselves, as a result of differing abilities of the pupils to interact with respect to the compositional and contextual milieu of the classroom. In other words, pupils are expected to be differentially affected by teaching practices, which influence the public visibility of performance levels across pupils in the class.

In particular, the research conducted by Reynolds et. al (1985) noted that, different teaching methods produce different rates of progress in pupils of different entry ability. The learning, which takes place in a classroom, is

dependent on the interaction of teacher and pupil inputs within an emergent framework and organization of the school and classroom.

The research study conducted by Reynolds and his colleagues looked into different teaching behaviours and attempted to select those that are effective. One of those approaches was called "active, direct, effective, teaching instruction". In active teaching strategies, the teacher actively teach and actively supervise students during classroom activities rather than leaving them alone to work on their own. The teacher provides personally the content for the students and uses monitoring techniques such as seatwork or homework assignments for greater students' achievement. It is serious, important classroom business so that student are kept on task.

Barak Rosenshine (1983) argued that direct instruction requires that teachers make explicit instructional decisions, but it also demands that teachers know what they are going to assess and whether students adequately acquire the requisite skills taught by the teacher.

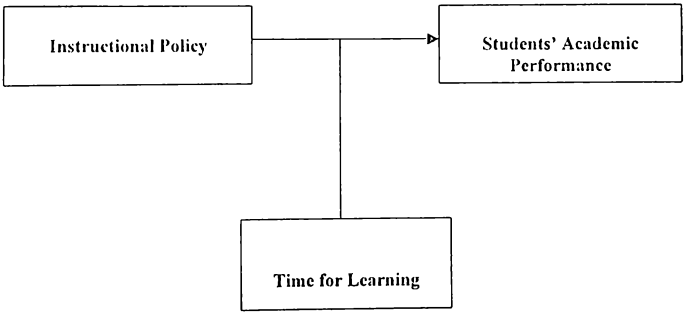
Teachers make decisions about what to teach. If what they plan to teach is a concrete skill, then direct instruction is the most appropriate strategy to ensure maximal student achievement. If the teacher is planning to teach content concepts, then direct instruction still has applicability, though the teacher will rely a bit more on the literature regarding lecturing and explaining (Lasley et al., 1997). In essence, the primary responsibility of the teacher is to determine what skill to teach and then teach that skill in a step-by-step process. And the teacher must check whether students have learned what has been taught.

Rosenshine defined the technique to a six-step instructional functions model (offer daily review, present new material, initial student practice, offer weekly reviews). As many educators argued, direct instruction suggests that the model have the most power in teaching basic skills. In several different studies, the use of the direct instruction model greatly enhances student academic performance.

A critical examination reveals that direct instruction contains effective teaching factors such as, structuring, questioning behaviour, feedback and corrective measures. Direct instruction depends completely on teaching behaviour but its success is also influenced by curriculum material. These components of instruction facilitate direct teaching (Reynolds et al., 1985).

According to Reynolds, aside from active effective instruction, mastery learning can be viewed as another instructional approach. It is not just a way to organise students within the classroom but also a way of teaching. The advantage of this is that an explicit idea is developed about pupil's learning, such as ability (time that is required for mastering a specific task), motivation, perseverance and the time allowed for learning.

Theoretical Framework



Conceptual Framework

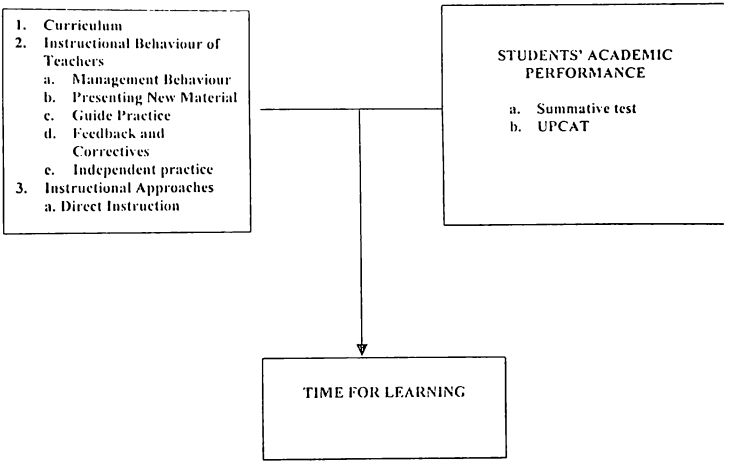


Figure 1. A Conceptual Design of Instructional Policy and Students' Academic Performance

The instructional variables used throughout this study are the classroom curriculum, instructional behaviour of teacher, and instructional approaches. The researcher regarded the instructional variable presented as the most important factor for learning to takes place, however they are placed in this category in order to demonstrate how each variable affect the other.

INDEPENDENT VARIABLE

As we have seen in this model, ultimately the teacher is of most importance but of course, other variables should also be considered. There is much evidence that curriculum material is important but the way teachers use it is responsible for the results. The curriculum at the school level does not create the instructional process alone but are conditional for the performance of teachers.

The instructional behaviour of teachers when used in a positive light may allow engagement of students in a variety of learning activities, their involvement to their lessons, and the integration of their learning into useful intellectual patterns.

The management behaviour of teachers does not only correspond to the teachers' responsibility to manage classroom discipline and behaviour. It also shows that management behaviour also corresponds during instructional activities and in presentations. Guided practice is the behaviour of teacher when he/she directly supervises the students' work and academic learning. Then, feedback that comes from the teachers is a necessary factor to help students' recognize new ideas and understand them. The feedback and corrections of the teacher during actual learning produces student understanding, rather than simple recall; and the feedback of teachers to student ideas and/or works enable them to link their previous knowledge and experiences to present ones. And independent practice i.e. homework assignments given by the teacher provide added depth to the topics being studied.

The instructional behaviour of teachers must, of course, be coupled with the use of instructional approaches. Specific teaching strategies produce student learning and also indicate how teachers can produce greater gains in student achievement.

Direct instruction is considered as the most effective instructional approach if one's purpose is to boost students' academic performance. This instruction is presented in sequenced, linear, defined way, and involves questioning, recitation, and feedback on students' ideas. Further, direct instruction provides for student practice (over learning) to have a success rate of 90-100 percent and become rapid, confident and firm to the new material presented.

INTERVENING VARIABLE

Furthermore, the time for learning is considered as the intervening variable. Again, how students' learning takes place. Also the IQ ability of the student is also important. The natural ability of the student to excel on academic activities.

DEPENDENT VARIABLE

Further, it cannot be expected that one single instructional variable contributes substantially to the academic performance of students, because it is only a small part of the whole.

In this research, the academic performance is measured through the students' performance rating in summative tests and the University of the Philippines College Aptitude Tests (UPCAT). The summative tests are forms of

assessment at the end of each grading period to determine the level of students' academic performance, and UPCAT is the college placement exam being administered by - the University of the Philippines.

Definitions

1. **Academic Performance**.

Conceptual Definition: Refers to the academic ratings of students, and sometimes referred to us as the achievement of students. The actual exercise of the academic skill that has been learned.

(Thornburg, Hershel. Introduction to Educational Psychology. New York: West Publishing Company., 1984).

Operational Definition. The researcher used the test result of summative tests and UPCAT to measure the general academic performance of the students.

a. Summative Test. Refers to the periodical tests results conducted as a form of assessment at the end of each grading period. In this study, the average periodical test result of students in both schools is used to compare the level of students' academic performance. The periodical test results are presented into 3 sections: Mean Score (MS), Percentage of Mastery (PM), and Standard Deviation (SD). (Refer to Appendix E & F).

b. UPCAT For this study, passing the UPCAT is the measurement of academic performance i.e. 80% of UPCAT examinees in a particular school who

are able to pass this college aptitude test means an increase of students' academic performance.

2. **Instructional Behaviour of Teachers.**

Conceptual Definition. The term refers to the effective teaching practices employed during classroom activities that affect the performance of the students academically. As such, teaching behaviour focused primarily upon classroom organization and management behaviour of teachers, time management, teacher planning and presenting new material, teacher feedback and correctives, and academic practice given for the students.

(Myers, Charles & Myers, Lynn. The Professional Educator: A new Introduction to Teaching Schools. Washington: Wadsworth Publishing Company., 1995)

Operational Definition

In this study, the instructional behaviour of teachers is measured through the use of a survey questionnaire (See Appendix D). The questionnaire tries to measure five components of teaching behaviour such as: the management behaviour of teachers, presenting new material, guided practice, feedback and correctives and independent practice given by the teachers for the students. The rating scale was used to identify the difference of teaching behaviour in MSHS and PHS. It has five categories: SA, S, D, SD, and NA.

a. **Management Behaviour.** The following statements intends to identify the teachers' ability to manage lessons, learning activities, materials, time, etc., that will result in the most learning.

b. Presenting New Materials. Statements 6 to 10 present the behaviour of teachers in the presentation of new materials.

c. Guided Practice. The behaviour of teachers in directly supervising student's practice recent learning is presented on statements 11 to 15.

d. **Feedback and Correctives**. The statements 16 to 20 presented tries to identify the behaviour of teachers in providing their students an opportunity to express their idea, which in turn the teacher also made an effort in reviewing and building the skills that have not been learned.

e. Independent Practice. The teacher's behaviour in practicing what student has been learned is presented in statements 20 to 25.

3. **Direct Instruction**.

Conceptual Definition This refers to a type of instruction that is highly structured. A teaching pattern that emphasises the teachers' telling the students what to do and the students following these directions; after conducted in lessons that have several rather small parts that fall in a set of sequence.

(Orlich, Donald et al., Teaching Strategies: A Guide to Better Instruction. (2nd Ed) Massachusetts: D.C. Heath and Company. 1985)

Operational Definition

The difference of instructional approaches employed in MSHS and PHS was measured through a semi-structured interview conducted by the researcher. The researcher tries to identify the differences of the methods of instruction used in both schools, the time spent for lectures and demonstrations, elaborating and reinforcing ideas through feedback to students, and preparing for seatwork or homework assignments through demonstrations and presentations of examples.

a. **Lectures or Demonstrations.** The time spent on the presentation of materials i.e., 20 minutes, or sometimes extended lectures; giving detailed and repeated demonstrations and explanations.

b. **Feedback.** The teachers' ability to provide or not to provide feedback or assistance for the students to master the new lesson.

c. **Independent Practice**. The teacher made use of a seatwork or homework assignments to fully understand a skill or concept, and reteaching if necessary.

Scope and Limitation

This study is limited only to two institutions, namely; the Marikina Science High School and Parang High School located in the City of Marikina. This may reflect the condition of the other public secondary schools in the country.

Only fourth-year high school students were selected as sample.

There are only three instructional policies presented: curriculum, instructional behaviour of teachers, and instructional approaches. This research has relied mainly on the content-analysis method for curriculum, survey questionnaire for teaching behaviour and a semi-structured interview for the instructional approaches used in both schools.

Because of a very limited time to conduct a structured interview in both schools concerning their curriculum, the researcher used the content-analysis method to analyse the curriculum tracks practice in both schools.

In this study, the researcher conducted only a semi-structured interview for the selected teachers in both schools concerning their use of instructional approaches because of time constraints in initiating a formal, structured interview.

Research Hypothesis

As conceptualised in the paradigm, the following hypothesis as empirically tested:

There is a difference in the instructional policy and the level of students' academic performance in MSHS and PHS.

Methodology

Method and Design

This study is a combination of a descriptive and cross-sectional design. The main purpose of the research is to describe, compare and contrast the instructional policy employed in Marikina Science High School and other regular public secondary high schools represented by Parang High School. It also looks into the differences of students' academic performance in both schools.

This study is cross- sectional because the data are collected at one point in time from a random sample of a general population that contains two or more subpopulation, with the intention of comparing the data from the sub samples or noting trends across such sub samples.

The design made use of a qualitative and quantitative method, which consists of structured questionnaires, interviews and observation methods.

Further, the researcher made use of a content analysis method concerning both schools curriculum. The systematic analysis of the content being taught during instruction.

Permission to conduct the study was sought from the heads of the sample institutions. The formal communication however, explained the nature and objectives of the study. The researcher personally administered the instrument to

the subjects. The survey questionnaire was administered to the student respondents, and was retrieved after they filled up the questionnaire.

The researcher formulated a comprehensive scale to determine the effects of teaching behaviour on students' academic performance. The questionnaire that intended to evaluate the instructional behaviour of teachers in both MSHS and PHS was administered to the 167 students.

Measuring Instrument

Data for this were gathered mainly trough the use of rating scale for the instructional behaviour of teachers, curriculum handbook and interview of selected teachers for instructional approaches. To keep the discussion focused on the difference of instructional policy employed in Marikina Science High School with other public secondary high schools, the researcher gathered necessary information and made use of a likert scale, which was then administered to the students. Likert scale is a scaling procedure that requires a grade response to each item or statement presented.

In this study, the likert scale is used to determine the instructional behaviour of teachers in MSHS and PHS with the following categories:

			Value Label
Range	0.5-1.5	Strongly Agree	1
	1.5-2.50	Agree	2
	2.50-3.50	Strongly Disagree	3
	3.51-4.50	Disagree	4

4.50-5.50	Not Applicable	5

Using the likert scale, the frequency of responses is multiplied to the value label (1,2,3,4,5). The product is then divided to the total no. of respondents to get the average rating for a specific item.

The researcher defined strongly agree as "always"; agree as "most of the time"; disagree as "rarely"; strongly disagree as "never", and not applicable means the statement does not correspond to the person to be evaluated.

The survey questionnaire as presented by a rating scale consists of 1 to 25 items. Statements 1 to 5 pertains to the management behaviour of teachers, 6 to 10 for the behaviour of teachers' in presenting new material, 11 to 15 statements pertains to the behaviour of teacher during guided practice, 16 to 20 for feedback and correctives, and 21 to 25 for the behaviour of teachers during independent practice.

Sampling and Respondents

The researcher selected the Marikina Science High School and Parang High School as the sample for this study. Marikina Science High School was chosen because of the school curriculum tracks, not common to public schools. To wit, the freshmen students' are offered Science Curriculum, The Basic Education Curriculum for sophomore and junior students, and the New Secondary Education Curriculum for senior students, a practice not usually employed by other public secondary high schools in Metro Manila.

Meanwhile, Parang High School was selected as sample to represent all other public secondary high schools in the City of Marikina because it was more accessible.

The population considered in this study are students of currently enrolled in Marikina Science High School and Parang High School in school year 2002-2003. All respondents are already in fourth-year. For both schools, the students from the highest section and student from the lowest section were selected. A total of 167 students served as the samples (88 students from MSHS and 79 students from PHS). The table represents the no. of samples.

SCHOOL	SECTION	MALE	FEMALE	TOTAL
MSHS	4-1	20	20	40
	4-6	27	21	48
PHS	4-1	15	21	36
	4-13	23	20	43

Total No. of Respondents
167 students

The sample included in this study were not the same in both schools because the students were absent while others came late after the distribution of the questionnaire.

The teachers that need to be evaluated were randomly selected. The random selection process was done by placing the teachers' names in a container where teachers number where picked as the samples for evaluation.

The lower portion of the questionnaire was then used to write down student's comments regarding the instructional behaviour of their teachers. In this study, five teachers in both schools were selected.

Data Gathering

The researcher sought the permission of the principals of both schools through a letter (Appendix B & C) for the conduct of a survey and interview were the students and the teachers are the respondents.

The researcher started administering the research instruments was started on 5 March 2003, a few weeks after the researcher conducted an interview with selected teachers in both schools concerning teaching strategies.

As sources of data for this study, the researcher also conducted a review of the records of Marikina Science High School and Parang High School students' performance rating in summative tests and in UPCAT

Presentation of Results

I. Curriculum

The Marikina Science High School employs different curriculum in each year level. For freshmen students', the school employs the "Science Curriculum". A particular emphasis is placed on the teaching of science and technology. The science curriculum allots more time for students to learn more and broaden their scientific and technological knowledge and skills. Additional laboratory exercises and lectures were given to the students.

Meanwhile, sophomores and juniors follow the "Basic Education Curriculum". Apart from enhancing the knowledge concerning science and technology and mathematics, the school also gives emphasis on the other core learning areas, to wit, Language, Filipino, History, and Ethics (also known as the Values Education).

The seniors, on the other hand, are taught according to the New Secondary Education Curriculum. This is also the curriculum employed in Parang High school and other public secondary high schools.

The New Secondary Education Curriculum stresses the following subjects: Filipino, English, Science, Mathematics, and the MAKABAYAN (drawn

from the competencies of Technology and Home Economics (THE), Physical Education, Health and Music (PEHM), Values Education, and Social Studies).

TEPP also known as the "Teknolohiya, Edukasyong Pantahanan at Pangkabuhayan" (during early days known as " Technology and Home Economics (THE) delivers the student additional skills and activities which help them to be prepared in the higher levels of learning or in the world of work. The subject offers experiences in classroom and practical activities that will help student to understand and develop their skills in different areas under four primary fields:

1. **HOME ECONOMICS**. Primarily deals with activities that fosters learning about family, household management, food, nutrition, childcare, food processing, tailoring, among others.
2. **AGRICULTURE AND FISHERY**. Includes activities concerning the production of plants, animals and ways to improve fish business. In both respects, the use of technology in the production of plants and animals was also put into place.
3. **INDUSTRY**. Refers to the application of technology in processing materials, carpentry and management and fixing household furnitures and appliances.
4. **ENTREPRENEURSHIP**. Involves abilities that aim to foster skills on the development of small business, development of retail stores how to program a computer and other office activities.

In Parang High School, the daily time allotment for each core learning area is 40 minutes.

Although both schools employ the same curriculum in their respective fourth-year levels, there are two distinct differences in terms of its application:

a. Every student in Marikina Science High School spends a maximum amount of 9 hours a day in school compared to 5 hours in PHS.
b. Students are provided catechism subjects.
c. Also, in Marikina Science High School one more hours is allotted for the teaching of science and mathematics subject.

II. Survey Results

This portion presents a summary of the research findings from the survey conducted with the Marikina Science High School and Parang High School students as respondents.

There are five components of the instructional behaviour of teacher that needs to be evaluated. The tables on the next pages show their replies.

a. Survey Findings on 88 students in Marikina Science High School as Respondents

Such components concerning the instructional behaviour of teachers are: the management behaviour of teacher, guided practice, the teacher presenting a new material, feedback and correctives, and the independent practice given to the students.

TABLE 1 MANAGEMENT BEHAVIOUR OF TEACHERS in MSHS

Statements	SA	A	SD	D	NA	TOTAL
Explains the lesson well	26	62	0	0	0	88
Does not bore the student	8	57	19	3	1	88
Open to questions	35	52	1	0	0	88
Review past days' lesson	22	58	8	0	0	88
Encourage student to participate	33	45	8	2	0	88

Table 1 tabulates the response of sample students regarding the management behaviour of the teacher selected to be evaluated.

The next component of teaching behaviour tries to examine the behaviour of teachers in the presentation of new information and learning of the students.

TABLE 2 PRESENTING NEW MATERIALS
(MSHS students Response)

Statements	SA	A	SD	D	NA	TOTAL
Clearly states the objectives and requirements etc.	25	56	7	0	0	88
Provides relevant background about the lesson	23	55	9	0	1	88
Comes unprepared	0	0	37	45	6	88
Identifies important points	15	70	2	0	1	88
Presents material in organized manner	23	63	2	0	0	88

The table presented above represents the tabulated response of the sample students regarding the behaviour of the teacher in presenting new material.

However, some comments about the component of instructional behaviour of teacher suggested were presented below:

-some of the teachers who provide relevant background on the lesson/subject are those who teach Science, Mathematics, and Language.

-all teachers always state first the objectives, and requirements of a particular subject.

- not all teachers identify and stress important points during classroom discussions and/or lectures

As another component of teaching behaviour, the researcher included the guided practice category. It tends to evaluate the behaviour of teacher when he/she directly supervises the student's work and academic learning.

TABLE 3-GUIDED PRACTICE
(Response of MSHS sample students)

Statements	SA	A	SD	D	NA	TOTAL
Asks questions for student understanding	30	54	4	0	0	88
Invites feedback from the students	14	60	13	1	0	88
Efficiently use classroom time	16	60	12	0	0	88
Conducts regular reviews	17	58	13	0	0	88
Checks student understanding regularly	17	47	24	0	0	88

Table 3 tabulated the response of the students to the statements regarding the behaviour of teacher in direct supervision of student learning.

Feedback of the teachers to student's ideas is another factor.

TABLE 4 FEEDBACK AND CORRECTIVES
(Evaluation of MSHS sample students)

Statements	SA	A	SD	D	NA	TOTAL
Corrects insufficient student responses	24	59	5	0	0	88
Recognizes the effort of students	13	56	14	0	0	88
Criticize students' works	8	47	26	4	3	88
Explains concepts again for the students	24	57	7	0	0	88
Praises the students for correct answer	15	58	14	1	0	88

Table 4 presents the response of the students regarding the feedback and correctives component presented.

Finally, the last component included in the questionnaire deals with the behaviour of teachers in giving an independent practice for the students.

TABLE 5 INDEPENDENT PRACTICE
(Response of MSHS students)

Statements	SA	A	SD	D	NA	TOTAL
Give seatwork for further student practice	20	55	9	3	1	88
Gives unreasonable requirements	6	19	45	15	3	88
Explains the seatwork	23	57	8	0	0	88
Monitors the work of students	21	48	18	1	0	88
Give meaningful independent practice	24	60	2	0	2	88

Table 5 shows the response of the sample students.

Furthermore, below are the important comments of the 4th year students with respect to the teaching behaviour component presented above:

-some teachers are not open to questions from students.

-not all teachers reviews past day's lessons.

-some teachers require students to participate during classroom discussions.

-there are some teachers who tends to have more time on nonsense chats rather than to focus on the subject he/she teaches.

-some of our teachers do not check student understanding regularly before proceeding to the next lesson.

-most of the time, teachers praise the students when they give the correct answers or new insights

-in most cases, teachers reward appropriate student performance to make students feel good

-our science teacher posted names of achievers on bulletin boards, as one way of teacher's rewards and incentives used effectively to reinforce academic learning

-most teachers' gives constructive criticism of students' works, most especially during major subjects

-most especially, our Mathematics teacher, she conducts weekly and monthly reviews of the complicated lessons she taught, then reteaching if necessary.

-most of the time, our teachers used a high frequency type of questions and involved students in recitation. It's just like a daily routine inside our classroom.

b. Survey Findings on 79 students in Parang High School as Respondents

The following tables present the responses of sample students regarding the instructional behaviour of teachers in Parang High School.

TABLE 6 EVALUATION OF STUDENTS ON THE COMPONENT PRESENTED
(Management Behaviour of PHS Teachers)

Statements	SA	A	SD	D	NA	TOTAL
Explains the lesson well	31	40	8	0	0	79
Does not bore the student	15	30	34	0	0	79
Open to questions	6	40	33	0	0	79
Review past days' lesson	41	11	27	0	0	79
Encourage student to participate	24	32	23	0	0	79

Table 6 represents the response of Parang High School sample students regarding the management behaviour of their teacher.

Below are important comments the 4th year students wrote on the management behaviour of their teachers:

- during lessons, there are more teacher talk than student- involved learning experience, hence no wonder students often become bored with lessons.

- most of the time, our teachers' explains past days' lessons after proceeding to another topic. It's another type of reviewing.
- most of our teachers can be considered as –dull teachers- who bore students with the subject

Further, similar to the evaluation made by MSHS students, the sample students in PHS also evaluated their teacher in terms of "presenting the new material" as another component of the instructional behaviour of teachers presented.

Table 7 PHS STUDENTS RESPONSE
(The teacher presents new material)

Statements	SA	A	SD	D	NA	TOTAL
Clearly states the objectives and requirements etc.	34	21	24	0	0	79
Provides relevant background about the lesson	28	20	31	0	0	79
Comes unprepared	6	11	16	46	0	79
Identifies important points	38	16	25	0	0	79
Presents material in organized manner	40	22	17	0	0	79

Table 7 tabulates the response of Parang High School sample students regarding the component presented.

While initially we may tend to think of what actually happens inside the classroom, most especially, when presenting new material and/or lessons. In terms of the component presented, it is good to note the comment of one sample student.

- some teachers are confusing and boring. Most of the time, teachers begin each lesson less promptly and assertively. The concepts that they present are many, but they don't care whether the student understands.
- sometimes we do not know whether the teacher's knowledge of certain subject is inadequate.

The third component of instructional behaviour of teachers and presented throughout this study was the guided practice. The following table presents the replies of the students.

TABLE 8 GUIDED PRACTICE
(PHS sample students response)

Statements	SA	A	SD	D	NA	TOTAL
Asks questions for student understanding	28	36	15	0	0	79
Invites feedback from the students	18	42	19	0	0	79
Efficiently use classroom time	24	47	8	0	0	79
Conducts regular reviews	36	25	19	0	0	79
Checks student understanding regularly	21	29	10	19	0	79

Table 8 presents the response of students regarding the component presented.

Still another component presented concerning the instructional behaviour of teachers was feedback and correctives.

TABLE 9 FEEDBACK AND CORRECTIVES
(Evaluation of PHS sample students)

Statements	SA	A	SD	D	NA	TOTAL
Corrects insufficient student responses	28	38	6	7	0	79
Recognizes the effort of students	15	26	23	15	0	79
Criticize students' works	8	30	40	1	0	79
Explains concepts again for the students	31	34	15	0	0	79
Praises the students for correct answer	22	36	20	1	0	79

Table 9 represents the tabulated response of the students regarding the component presented.

It also needs to evaluate another important component of teaching behaviour necessary for the academic learning of each student. The independent practice given for every student.

Perhaps a homework assignment is a very important task given for every student for independent practice. Homework assignments can provide added

depth to the topics being studied, but of course, it should be assigned with specific purposes in mind.

Below are student's responses concerning the behaviour of teachers in giving homework assignments.

TABLE 10 INDEPENDENT PRACTICE
(PHS sample students' response to the teaching behaviour presented)

Statements	SA	A	SD	D	NA	TOTAL
Give seatwork for further student practice	18	42	19	0	0	79
Gives unreasonable requirements	0	0	26	48	5	79
Explains the seatwork	2	18	52	7	0	79
Monitors the work of students	12	38	18	11	0	79
Give meaningful independent practice	24	16	32	7	0	79

Table 10 tabulates the response of students to the statements presented regarding the instructional behaviour of teachers, particularly during an independent practice given for every student.

III. Instructional Approaches

A semi- structured interview conducted by the researcher revealed that most teachers in Marikina Science High School used a direct instructional model for everyday learning.

As most interviewed teachers stated that they usually review what students already know about the topic to be covered.

Then, when a new lesson is started, most teachers first start the lesson's purpose and objectives. In stating the objectives and describing the latest lesson, 9 out of 10 teachers in MSHS interviewed use advance organizers. Particularly in mathematics, teachers use sequential organizers, to show the steps that will be followed in performing a skill.

Then the next element is presenting the new information in small segments, which often takes the form of demonstration. The following table differentiates the time spends by the teacher in both schools during lecture and demonstrations.

SCHOOL	LECTURE	DEMONSTRATIONS
MSHS	40 MINUTES	20-30 MINUTES
PHS	20 MINUTES	10-20 MINUTES

In MSHS, 5 teachers in mathematics spend more time in demonstration. More time was spent per day in lecture, demonstration, and discussion. Then, the teacher uses many examples and explanations that are essential for student learning.

Then, after which all students are checked for understanding. Further, based on the students' responses, the teacher monitors and adjusts the level of lesson, and reteaching as necessary. Students' ideas regarding the presented lessons were also entertained.

Then following instruction is guided practice. Most especially, in mathematics and science subjects wherein the teacher provides opportunities for the students to practice the new learning. During problem solving and/or other complicated lesson students are given feedback and assistance in order for them to mastered the new lesson. Then, after these stages the 10 respondent-teachers give students independent practice to over learn the material. Almost everyday teachers specifically assign homework assignment to ensure that students truly understand the content material presented by the teacher.

Meanwhile, selected teachers that were interviewed in Parang High School start the lesson by conducting a set of activity about the lessons yesterday. Then the teacher presents the information or the new material. However, it is to be noted that most teachers in PHS also used active-teaching

strategies in presenting new material. As such the popular active teaching styles being used are reporting, group discussions, and role-playing.

After the students have been introduced to the skill or content material, teachers proceed by asking a variety of questions, and by checking for understanding. One mathematics teacher said that due to limited time reteaching the necessary lessons in which students find it quite difficult are ignored. Perhaps most teachers assume that once they have taught and presented the material, students are ready to engage in independent practice.

Selected teachers have the same experience of not having more time working on problems. Most teachers' also encouraged students do an independent practice, especially if students do not fully understand a skill or concept

Summary and Conclusion

This study mainly focuses on the difference of instructional policies and the level of students' academic performance in MSHS and PHS. The primary criterion on which instructional policies were judged is students' academic performance, particularly in summative tests and in UPCAT.

This study looks for the instructional policies that greatly affect the academic performance of the students. Instructional policies include the classroom curriculum, instructional behaviour of teachers, and instructional approaches. Through observation, the researcher was able to lists down other instructional variable/s that may affect students' academic performance.

The researcher discussed such instructional policies presented. It was an important factor to determine the level of students' academic performance in both schools.

The researcher gathered pertinent data concerning the classroom curriculum employed in both schools. As it was presented both schools do not employ a similar curriculum in secondary level.

In Marikina Science High School (MSHS), they employ different curriculum tracks in each year level. For freshmen students', the school employed the Science Curriculum. The sophomore and junior followed the Basic Education Curriculum. Moreover, for the senior students', the school employed

the New Secondary Education Curriculum. In contrast, Parang High School (PHS) only employed the New Secondary Education Curriculum (NSEC) in all year levels.

The MSHS provided additional hours for studying two core major subjects: science and mathematics. Additional instructional time allotted for two subjects presented involved other stimulating active activities. An additional hour was spent on laboratory activities, mathematical analysis, comprehension, and problem solving, among others.

Meanwhile, this study also focuses on the different instructional behaviour of teachers in Marikina Science High School and Parang High School. The teaching behaviour of teachers is an important instructional policy that affects the academic learning of students. Through a survey questionnaire the researcher are able to present the different instructional behaviour of teachers in both schools.

This was chiefly done using five teaching behaviour components. A series of studies indicates that effective teaching behaviour can be determined through the following components: the management behaviour of teachers, presenting new material, guided practice, feedback and correctives, and independent practice given for students.

As the study indicates, there is no significant difference in terms of teaching behaviour inside the classroom in both schools. The comments of students regarding the component presented also being given much emphasis.

Teachers in Marikina Science High School, although, not all proved to possess effective instructional behaviour necessary for the students' academic learning. Effective teaching behaviour will differ from teacher to teacher, from grade to grade, and even from period to period. In the case of Marikina Science High School (MSHS) and Parang High School (PHS) not all teachers possessed such effective instructional behaviour.

The five components of teaching behaviour suggested in this study are components of good teachers to produce the teaching and learning they want in the classrooms, and most importantly, for the students.

For instance, the management behaviour of teachers during instructional activities plays an important important role for the learning skills of every student. Through students comments not all teachers in MSHS and PHS provide effective management behaviour. As indicated, not all teachers' shows good management behaviour in explaining the lessons, entertaining questions from the students, and in requiring students' to participate in classroom discussions.

Further, the knowledge of teacher in a particular learning area correspond to another component presented, it was the teacher behaviour in presenting the new lesson/material.

As one student in Parang High School noted that in presenting new material "some teachers are confusing and boring. Most of the time, teachers begin each lesson, less promptly and assertively. The concept that they presents are many, but they don't cares whether the student understand." Another

reaction indicates, "sometimes we do not know whether the teacher's knowledge of certain subject is inadequate".

But the point being made here is not only the instructional behaviour of teachers affect the academic learning of students but as well as the use of such instructional approaches.

This study also puts an emphasis on the teaching strategy practice by the teachers in both schools. This study focuses primarily on direct instructional model that produces high academic performance.

Teaching strategies play an important role in the academic learning of students. Direct instruction, as Lasley and Matczynski indicate use a step-by-step sequence of teacher phases to help students recall and recognize what teacher's deem important for students to learn. In teaching basic skills, research on direct instruction noted that the model has the more power. Teachers in any academic discipline that has a heavy skills base (i.e. mathematics) find the direct instruction model powerful and useful, which enhances student academic performance.

The researcher conducted a semi-structured interview among the teachers in both schools to identify the teaching strategies they use for the academic learning of students.

One significant result of the interview is that most Marikina Science High School teachers use direct instruction as their everyday instructional model.

Based on the teacher's responses, they determine what skill to teach and then teach the skill in a step-by-step process. All teachers selected to be

interviewed provide daily review first. It was done through checking the homework and reteaching the areas where there were student errors. After which, the teacher presents new content/skills. Most teachers do it by providing an overview about the new material, explaining, and proceeding in small steps, but at a rapid pace. All teachers' respondents give detailed or redundant instructions and explanations during complex lessons.

After the presentation of new material, teachers provide initial student practice. Once students have been introduced to the skill or content material, teachers proceed by enabling students to practice what they have learned. Teachers used a variety of questions to assess and check students understanding. 8 out of 10 teachers spends more time in guided practice, more time asking questions and correcting errors, and if necessary repeating the new material that was being taught if the teacher found out that students have difficulties in understanding the new material. Further MSHS mathematics teacher provided more time working on problems under their guidance and help.

Teachers in Markina Science High School also assess whether students have really learned the material. When students respond to teacher, the teacher is positioned to see how the student understands the material presented. Most interviewed teachers argued that they are most likely to reteach the material when students still have an unclear understanding of the skill or content that is presented by the teacher. And this time, the teacher assign students skills to practice (for homework) which is then intended to ensure that students truly understand the content material presented by the teacher.

In contrast, the interview conducted by the researcher in Parang High School suggests that most of the teachers do not follow direct instruction. Nine out of ten teachers follow a pattern of (1) activity concerning the new lesson, (2) through lectures and demonstrations, (3) preparing for seatwork and homework assignments. And most especially, they used such active-teaching strategies, which includes role-playing, group discussions, and presentation.

Most teachers initiate an activity about the new material, and then present the new skill or content material. In presenting new material, 5 out of 10 teachers took the form of lectures and demonstrations. Then, some questions from students were entertained followed by the teacher explaining the seatwork or homework assignments.

Most teachers provide seatwork with examples before the students start, and inspect individual works on the other day. Then, they continue to start again new lessons.

From the above discussion, the researcher found out that there is a difference in the instructional policies employed in MSHS and PHS.

The MSHS use different curriculum tracks on each year level enhance the learning ability of students, not only focus on one distinct learning area. The three different curriculum tracks to wit, Science Curriculum, Basic Education Curriculum, and New Secondary Education Curriculum (NSEC) employed made a particular emphasis on two major subjects: science and mathematics.

Further, the instructional approaches employed by the Marikina Science High School teachers indicate a greater significance to increase the academic performance of the students.

The teachers structure the content to be learned into patterns that the students can recognize easily, students can more easily store the learning in long-term memory and retrieve the information in new situations. The teaching strategies used by MSHS have a significant influence on the academic performance of students.

Further analysis shows that using different instructional model produce different level of students' academic performance. MSHS students achieved an even high performance rating during summative tests, particularly periodical tests because their teachers actively teach and actively supervise them during learning process.

Students learn more when the teacher personally provides the content to them instead of leaving them alone to work and expecting them to pick it up on their own from their readings and assignments.

Instructional teaching strategies used in MSHS deals with academic learning of students. The instructional approach use is best, most especially for the academic achievements of students, since the teacher presentations are organized and structured, and involves questioning, recitation, feedback on student's ideas, and the teacher supervised seatwork and independent practice of students.

Using direct instruction, the teacher presentations become more effective because it is structured and organized in a way that students can follow easily. The elements of this type of presentation serve as the initial overviews of content to be covered, the use of an advance organisers, outlines, noticeable transitions in presenting information, the teachers' emphasis on main points, and reviews ideas and concept that students find it difficult to understand. And because of a well- paced presentations, main points and key concepts are organized and repeated several times for student learning process hence, the students seem to learn more and enhance academic performance.

Direct instructional model and monitoring technique used by the teachers in Marikina Science High School able the students to actively engaged in learning phase and have better- managed the class that will increase student achievement than do teachers who leave students alone for independent practice, unsupervised their works and activities.

To facilitate understanding, direct instruction as teaching strategies used in MSHS direct teachers to check for students' understanding regularly before proceeding to the next step in a lesson. If students do not understand, the teacher will restructure the task and provide different examples and experiences to build the background knowledge.

Further, the direct instructional approach used requires that teachers proceed in a way that limits information flow but enhances information transfer. The significance of direct instruction should not be underestimated because it

provides informational recall and be able to enhance and contribute to the level of students' academic performance.

A student learning enhances most especially when the teacher directly supervised and guides students' work. Most teachers assume that once they have taught and presented the material, they are ready to allow students to engage in independent practice, as such teacher give homework assignments to the students.

The result many students exit schools with an inadequate understanding of salient skills and content. Particularly such spurious reasoning explains the low level of students' academic performance.

As it was the case of Parang High School, most teachers that are being interviewed do not have more time to directly supervise and guide students' understanding on the content material presented. Most of the time, teachers give the particular lessons in students for reports, and other activities. The student's alone works with the required lesson without further explanations and demonstrations coming from the teacher. After which the teacher assigned again, another reporting activities in which the student understanding in the past days' lesson still unclear.

In contrast, when the teacher actively supervise and guide students during initial student practice- although not necessarily 100 percent of the time, but at least students can answer questions correctly at an 80 percent rate.

During guided practice the academic performance of students enhances and definitely increases toward high success rates because, it involves a variety of students in this phase.

When the teacher continue practice until students are firm, the success rate of students will increase. Since it is also an excellent way for the teacher to monitor whether the students understand the content material.

Because of neglecting initial guidance on students' during practice drill, the academic performance of students remains at the minimal level.

Further, homework is intended to ensure that students truly understand the lesson presented and provide additional academic skills on the students.

In Parang High School, most teachers practice student skills at home that students do not fully understand. The result leads to the students' mislearning-students' practice skills incorrectly and mislearn how to use a skill. In doing so, the academic performance of students will remain at a very minimal level. This is because the students simply do not understand the content material presented and the students are unable to excel on academic activities because teachers fail to assign enough practice to ensure academic learning. Therefore, the independent practice will deem to produce successful rates when the teacher spend more time in the guided practice phase to make certain students know the skills they are going to practice.

Further, instructional policies presented become more when the time for learning is also recognized. In the academic learning of student, time for learning is an essential important role.

As such, time for learning also contributed much to the academic learning of students. One significant observation has to do with how teachers use time. This is another by-products of direct instruction- how teachers choose to use time and how they work with students to ensure academic success.

Students in Marikina Science High School were generally engaged in academic studies longer and as might be expected, students made greater academic gains.

In maximizing engagement rates, students were given more problem solving, laboratory activities, comprehension, and other academic tasks so that they can perform at higher rates. This means that teachers provide the time for learning to take place.

The teacher set the activities and subject at the appropriate level of difficulty. The instruction was paced appropriately hence, the students experience continuous progress.

Instructional policies employed in MSHS resulted from a different level of students' academic performance. The summative test results provide a great difference in terms of the average performance of students in MSHS to that of PHS students who have taken the test. The result of periodical tests (See Appendix D & E) revealed so much difference concerning the performance rating of students. Particularly in the area of science and mathematics wherein students in MSHS received maximum gains in the two major subjects.

Further, as part of presenting the level of academic performance of students in both schools, the researcher presents the ability of the students in both schools to pass on the college placement exam- UPCAT.

Students' academic performance was measured by means of UPCAT exam, those students who have taken the test after graduation, and results were compared to teat scores of UPCAT passers in Parang High School.

There were significant differences in student achievement between the two schools. Even more surprising was the fact that MSHS students found to have made a maximum growth in the UPCAT exam.

The score represents how well a student performed on such college placement exam compared to all other student in the same year level taking the tests nation-wide.

Surprisingly enough, out of 40 students in MSHS who take an UPCAT exam, 24 of them passed and successfully managed to achieve an even higher average test score compare to other private secondary schools. Data gathered by the researcher pointed out the big difference among the UPCAT passers in MSHS and the UPCAT passers in Maris School- an exclusive private secondary school. Only 7 out of 100 students in Maris High School passed the UPCAT exam.

Meanwhile, in PHS for as much as 120 students who have taken UPCAT exam, no one passed the exam. Even more dismaying was the fact that PHS students were not found to have any growth in UPCAT exam.

Implication and Recommendation

From the above discussion, it is obvious that the instructional policies employed at the school level are very important for the academic learning and high gains of the students.

This study encourages other secondary schools to be very aware of the instructional policies they employed in their schools. The classroom curriculum is important but it has some characteristics that proved to be important. As research shows structured curriculum provides more time for instruction instead of organising and also more time for the learning of students. The way teachers use it is responsible for the results.

A combination should be made, of course, of the different components and the characteristics that prove to be effective. The instructional behaviour of teachers plays an important role in the academic performance of the students.

Effective teaching behaviour has significant impact on students. Although further analysis shows that only a limited number of teachers actually produced the influence noted.

Instructional behaviour of teachers presented has over students' affect what students learn. However, this study emphasise that it is important not to

generalise too sweepingly about the "best ways to teach" because no two teachers, students, or classrooms are exactly alike.

Meanwhile, the point of departure for such a combination of teaching behaviour components and effective characteristics of curriculum is a basic idea about how students' learning takes place. For this instance, the time available for learning- points at an important variable for student learning.

This study looks at the components to see to what extent and in what way they create time for learning. And the, what happens within this time should be taken into account. Time is an important instructional variable.

Studies like this looked at time as an important variable, and it also put much emphasis on the importance of actual instructional time to learning tasks. This found out that the actual amount of instruction time varies by teachers, as does the type of instruction provided within that time.

It is important to maximize students' engagement rates and teachers should be aware of how they are using time. It also depends on the teacher's ability to organize and manage the classroom as an efficient learning environment which is, most importantly, appropriate to the students' level of development, lessons are conducted systematically and smoothly, transitions are brief and orderly, and there is only little time wherein students be inattentive or behave inappropriately.

This study also stresses the fact that effective teachers need to engage student in academic learning, also not just provide the time for the learning to take place.

Further, as the proceeding discussion indicates the instructional approaches use is an important instructional policy. Apparently when the teacher presentations are structured and organized, students can follow easily.

The study also made an emphasis on the use of active teaching and monitoring techniques to better manage the class. The step-by-step process coupled with constant efforts to check for understanding found to enhance students' academic performance.

It was in direct instruction that teacher should understand that this model will not work unless information is taught sequentially, and with a vigilant analysis of the students' comprehension of the material.

Direct instruction does not need to be boring. Using good demonstrations and explanations it will sure to excite the students and ensure that students understand the content material. Direct instruction is highly structured but it is not true that this model requires teachers to boringly present discrete bits of information in an unenthusiastic manner.

This model is predicated on the fundamental assumption that teachers are responsible for enabling student learning, that all students are capable for learning what teachers present, and that student's success requires thoughtful, explicit teacher practice. To a large extent, direct instruction is not a flashy but an effective teaching strategy when used appropriately in teaching skills or discrete concepts.

Although some teachers find this model boring. Primarily because direct instruction becomes boring only when teachers present information in the same

way every time they teach. But then as this study suggests direct instruction requires that teachers be active in the classroom.

Teachers should actively teach their students by way of demonstrating skills, explaining concepts, conducting participatory and practice activities, and reviewing when necessary.

Direct instruction is neither a simple nor an easy model. But then the factor would be teachers clearly think through how to teach an idea, skill, or fact and then to thoughtfully assess whether the students learned the material just taught.

Once again this provides a place for the interrelationship among instructional policies such as the classroom curriculum, instructional behaviour of teachers, and instructional approaches. It cannot be expected that one single variable contributes substantially to the students' academic performance because it is only a small part of the whole.

Further, there are a lot of variables in the area of instruction that prove to be effective. And as part of recommendation of this study, the researcher is able to present other instructional policy that can greatly affect students' academic performance.

Separately instructional policies presented contribute but their effect is enlarged if they are combined with other effective variables. Hence, the researcher looks at other variables around the school that can contribute to the level of students' academic performance.

The grouping of pupils as another instructional policy to enhance the academic performance of students. When a teacher groups the students to discussed specific idea or lesson, students actively cooperate and share each other's opinion. Such educational practice has a stronger positive effect in the students' academic performance.

Forms of grouping students can contribute to effective instruction as well as enhance the learning ability of the students.

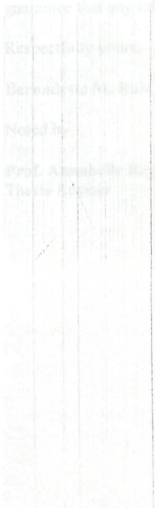
Cooperative learning generally seems to have a positive effect on student learning. This instructional model suggests that students be organized into teams that include students of different abilities. This time each team is expected to work together so that all students in each group learn the material being studied. It is another instructional model in which students are encouraged or sometimes required to work together on academic tasks.

Along with individual grades, students receive group rewards based on improvement of their work. Cooperation in a team of individual members is stimulated by competition among teams. As a result, all students are rewarded if they help each other learn.

Meanwhile, there are other forms of grouping that encourage and enforce student cooperation that is generally seem to have a positive effects on the students, academic learning.

For example, "the peer-tutoring" (students provide resource help to each other) are involved in academic learning during more of the class time than are

those in traditional classes. Also, the classroom problem solving lessons seem to motivate the students not only to cooperate but also to achieve.



APPENDIX A

Letter to the Department of Education, Culture and Sports (Division of City of Marikina)

University of the Philippines
Manila
College of Arts and Sciences
Padre Faura, Manila

Dr. Jerome Mendoza
Chief Superintendent
Sta. Elena Marikina City

To Whom It May Concern:

I, the undersigned 4th year – BA Political Science student of University of the Philippines would like to ask your good office in aid of my thesis. I am conducting a study about the differences of instructional policy employed in Marikina Science High School with other public secondary high schools located in the City of Marikina. Further, the researcher wanted to know its' significance on students' academic performance measured through the performance rating of students' in summative tests and in the college placement exam –UPCAT.

Hoping for your kind consideration and cooperation with regard to this matter. You can guarantee that any information obtained in your office will be highly appreciated.

Respectfully yours,

Bernadette M. Ruiz

Noted by:

Prof. Annabelle Ragsag
Thesis Adviser

APPENDIX B

Letter to the Principal
(Marikina Science High School)

University of the Philippines
Manila
College of Arts and Sciences
Padre Faura, Manila

LAURO Z. DE GUZMAN
Principal II
Marikina Science High School
Sta. Elena Marikina City

To Whom It May Concern:

I, the undersigned 4th year – BA Political Science student of University of the Philippines would like to ask your good office in aid of my thesis. I am conducting a study about the differences of instructional policy employed in Marikina Science High School with other public secondary high schools located in the City of Marikina. Further, the researcher wanted to know its' significance on students' academic performance measured through the performance rating of students' in summative tests and in the college placement exam –UPCAT.

In partial fulfillment of the course, the researcher would like to conduct field research and interview pertaining to these matters:

1. Curriculum
2. Instructional Behaviour of Teachers
3. Instructional Approaches
4. Students' Academic Performance in summative test and the UPCAT

The researcher would like to ask your help for any information regarding instructional variables, referred to above. Furthermore, the survey questionnaire was administered for the students. The questions primarily concerns in the evaluation of teaching behaviour.

Hoping for your kind consideration and cooperation with regard to this matter. You can guarantee that any information obtained in your office will be highly appreciated.

Respectfully yours,

Bernadette M. Ruiz

Noted by:

Prof. Annabelle Ragsag
Thesis Adviser

APPENDIX C

Letter to the Principal (Parang High School)

University of the Philippines
Manila
College of Arts and Sciences
Padre Faura, Manila

Principal's Office
Parang High School
Tandang Sora, Marikina City

To Whom It May Concern:

I, the undersigned 4th year – BA Political Science student of University of the Philippines would like to ask your good office in aid of my thesis. I am conducting a study about the differences of instructional policy employed in Marikina Science High School with other public secondary high schools located in the City of Marikina. Further, the researcher wanted to know its' significance on students' academic performance measured through the performance rating of students' in summative tests and in the college placement exam –UPCAT.

In partial fulfillment of the course, the researcher would like to conduct field research and interview pertaining to these matters:

1 Curriculum
2 Instructional Behaviour of Teachers
3 Instructional Approaches
4 Students' Academic Performance in summative tests and in UPCAT

The researcher would like to ask your help for any information regarding instructional variables, referred to above. Furthermore, the survey questionnaire was administered for the students. The questions primarily concerns in the evaluation of teaching behaviour.

Hoping for your kind consideration and cooperation with regard to this matter. You can guarantee that any information obtained in your office will be highly appreciated.

Respectfully yours,

Bernadette M. Ruiz

Noted by:

Prof. Annabelle Ragsag
Thesis Adviser

APPENDIX D

Sample Survey Questionnaire for MSHS Students

Greetings!

I am a student of Political Science in the University of the Philippines Manila currently conducting a research in aid of my thesis regarding the instructional policy employed here in Marikina Science Public High School. My thesis mainly focuses on the differences of instruction used in your school with other public secondary high schools located in the City of Marikina, and most importantly, the students' level of academic performance.

Name: _____ Age:_____ Sex:_____
School: _____

Dear Student:
This questionnaire is designed to gather information regarding the instructional behaviour of teachers in Marikina Science Public High School. Please answer each item frankly, honestly and independently. **Answer all items**. Your response and opinions will be held in strict confidence and will not affect your grade in this subject. The data collected will be useful in evaluating the teaching behaviour (as one variable of instructional policy).

Direction: Indicate your agreement or disagreement with each of the following statements by checking one of the following to indicate your answer concerning the extent to which instructional teaching behaviour exists inside the classroom. Comment whenever you wish to do so. The questionnaire will only take a few minutes of your time.

SA- Strongly Agree A- Agree D- Disagree SD- Strongly Disagree
NA for not applicable

		SA	A	D	SD	NA
1.	The teacher s explains the lesson well					
2.	The teachers' style of teaching does not bore the students.					
3.	The teacher is open to questions from students.					
4.	The teacher reviews past days' lessons.					
5.	The teacher encourages students to participate in the classroom discussions.					

6.	The teacher clearly states the objectives, expectations and requirements of the lesson/ subject.					
7.	The teacher provides relevant background or information on the lesson/ subject.					
8.	The teacher comes unprepared for the lesson.					
9.	The teacher identifies and stresses important points.					
10.	The teacher presents the lesson in an organized manner .					
11.	The teacher frequently asks questions to assess student understanding.					
12.	The teacher invites feedback from students on the lessons they learned.					
13.	The teacher efficiently uses classroom time to learning tasks to learn more.					
14.	The teacher conducts regular reviews of the previous lessons.					
15.	The teacher checks students understanding regularly before proceeding to the next lesson					
16.	The teacher corrects the students when the responses are incorrect or insufficient.					
17.	The teacher recognizes the effort of students.					
18	The teacher gives constructive criticism of students' works.					
19.	The teacher explains concepts again when he/she notes that the concept is not well understood					
20.	The teacher praises the students when they give the correct answers or new insights.					
21.	The teacher provides an appropriate number of seatwork's for independent practice					
22.	The teacher gives unreasonable requirements and assignments.					
23.	The teacher explains the seatwork with examples before the students start, demonstrates and model what is to be done, and lead the students in guided practice.					
24.	The teacher monitors the seatwork of students conscientiously, inspect individual papers frequently, and provide firmly and precise feedback.					
25.	The teacher assigns homework that is meaningful and appropriate; and reviews and checks student homework reteaching if necessary.					

-THANK YOU-

APPENDIX D

Sample Survey Questionnaire for PHS Students

Greetings!

I am a student of Political Science in the University of the Philippines Manila currently conducting a research in aid of my thesis regarding the instructional policy employed here in Parang High School. My thesis mainly focuses on the differences of instruction used in your school with other public secondary high schools located in the City of Marikina, and most importantly, the students' level of academic performance.

Name: _____ Age:_____ Sex:_____
School: _____

Dear Student:
This questionnaire is designed to gather information regarding the instructional behaviour of teachers in Parang High School. Please answer each item frankly, honestly and independently. **Answer all items**. Your response and opinions will be held in strict confidence and will not affect your grade in this subject. The data collected will be useful in evaluating the teaching behaviour (as one variable of instructional policy).

Direction: Indicate your agreement or disagreement with each of the following statements by checking one of the following to indicate your answer concerning the extent to which instructional teaching behaviour exists inside the classroom. Comment whenever you wish to do so. The questionnaire will only take a few minutes of your time.

SA- Strongly Agree A- Agree D- Disagree SD- Strongly Disagree
NA for not applicable

		SA	A	D	SD	NA
1.	The teacher s explains the lesson well					
2.	The teachers' style of teaching does not bore the students.					
3.	The teacher is open to questions from students.					
4.	The teacher reviews past days' lessons.					
5.	The teacher encourages students to participate in the classroom discussions.					

6.	The teacher clearly states the objectives, expectations and requirements of the lesson/ subject.					
7.	The teacher provides relevant background or information on the lesson/ subject.					
8.	The teacher comes unprepared for the lesson.					
9.	The teacher identifies and stresses important points.					
10.	The teacher presents the lesson in an organized manner .					
11.	The teacher frequently asks questions to assess student understanding.					
12.	The teacher invites feedback from students on the lessons they learned.					
13.	The teacher efficiently uses classroom time to learning tasks to learn more.					
14.	The teacher conducts regular reviews of the previous lessons.					
15.	The teacher checks students understanding regularly before proceeding to the next lesson					
16.	The teacher corrects the students when the responses are incorrect or insufficient.					
17.	The teacher recognizes the effort of students.					
18	The teacher gives constructive criticism of students' works.					
19.	The teacher explains concepts again when he/she notes that the concept is not well understood					
20.	The teacher praises the students when they give the correct answers or new insights.					
21.	The teacher provides an appropriate number of seatwork's for independent practice					
22.	The teacher gives unreasonable requirements and assignments.					
23.	The teacher explains the seatwork with examples before the students start, demonstrates and model what is to be done, and lead the students in guided practice.					
24.	The teacher monitors the seatwork of students conscientiously, inspect individual papers frequently, and provide firmly and precise feedback.					
25.	The teacher assigns homework that is meaningful and appropriate; and reviews and checks student homework reteaching if necessary.					

-THANK YOU-

APPENDIX E

Periodical Tests Results in Marikina Science High School

Department of Education
MARIKINA SCIENCE HIGH SCHOOL
Division of Marikina City
1st PERIODICAL TEST RESULTS BY YEARS LEVEL & LEARNING AREA **SY 2002-2003**

DATE: SEPTEMBER 9, 2002

Year level		English	Filipino	Math	Science	A.P.	MSEPP Average	TEPP	Values Education	Average	Rank
I	MS	41.52	28.37	34.66	42.01	32.94	40.71	30.73	40.17	36.46	
	PM	83.04	56.74	69.32	84.02	65.89	81.41	61.47	81.41	72.95	
	SD	3.13	5.63	5.13	3.17	3.33	4	3.914	2.54	3.86	
II	MS	34.5	38.63	26.72	33.59	36.4	26.36	36.83	39.87	34.11	
	PM	68.99	77.2	53.45	71.96	72.79	53.81	73.67	79.73	68.95	
	SD	4.42	4.54	5.17	3.73	5.31	3.63	3.79	3.38	4.62	
III	MS	33.31	33.37	37.1	31.4	35	38.67	30.05	39.1	34.75	
	PM	65.22	66.92	74.16	62.69	70	77.35	60.11	78.19	69.33	
	SD	4.25	4.91	5.6	3.96	4.21	3.04	4.79	3.5	4.28	
IV	MS	33.19	22.58	28.26	36.12	35.02	33.08			31.36	
	PM	66.37	45.15	56.53	74.25	70.04	66.16	n/a	n/a	63.08	
	SD	4.42	7.17	7.8	3.54	3.63	7.13			5.62	
TOTAL / AVERAGE	MS	35.63	30.74	31.69	35.78	34.84	34.71	32.54	39.89	34.48	
	PM	70.91	61.5	63.37	73.23	69.68	69.69	65.06	79.78	69.15	
	SD	4.06	5.56	5.93	3.6	4.12	4.45	5.76	3.14	4.58	
RANK											

MS – MEAN SCORE
PM – PERCENTAGE OF MASTERY
SD – STANDARD DEVIATION

Department of Education
MARIKINA SCIENCE HIGH SCHOOL
Division of Marikina City
2nd PERIODICAL TEST RESULTS BY YERS LEVEL & LEARNING AREA SY 2002-2003

DATE: NOVEMBER 20, 2002

Year level		English	Filipino	Math	Science	A.P.	MSEPP Average	TEPP	Values Education	Average	Rank
I	MS	34.77	30.47	36.55	32.12	24.56	33.81	26.57	37.79	32.08	
	PM	75.54	60.94	56.75	64.24	49.12	67.62	53.14	75.60	62.87	
	SD	4.30	4.33	7.21	5.00	5.13	3.38	5.25	3.79	38.39	
II	MS	28.89	28.38	25.77	24.85	18.81	23.19	27.02	36.62	26.69	
	PM	57.78	57.63	51.54	49.70	37.63	46.38	45.00	73.24	52.36	
	SD	4.63	6.67	6.67	4.47	6.13	5.63	5.53	3.96	5.49	
III	MS	27.73	22.65	22.34	23.61	23.61	36.24	32.11	29.16	27.18	
	PM	55.46	45.30	44.67	47.22	47.22	72.48	64.21	58.32	54.36	
	SD	4.58	4.33	5.40	6.79	5.50	8.29	6.00	7.50	6.05	
IV	MS	22.56	30.58	37.68	24.63	24.54	32.26	27.29		28.51	
	PM	45.12	61.16	42.78	49.26	49.08	64.51	54.57	N/A	52.35	
	SD	3.88	7.25	7.79	7.05	6.88	5.67	3.88		6.06	
TOTAL / AVERAGE	MS	28.49	28.02	30.59	20.30	22.88	31.38	28.25	34.52	28.05	
	PM	58.48	56.26	48.94	52.61	45.76	62.75	54.23	69.05	65.01	
	SD	4.35	5.65	6.77	5.88	5.91	5.74	5.17	5.08	5.57	
RANK											

MS – MEAN SCORE
PM – PERCENTAGE OF MASTERY
SD – STANDARD DEVIATION

APPENDIX F

Periodical Tests Results in Parang High School

1ST PERIODICAL TEST RESULTS BY YERS LEVEL & LEARNING AREA
SY 2002-2003

SCHOOL: PARANG HIGH SCHOOL DATE: SEPTEMBER 20, 2002

Year level		ENGLISH	FILIPINO	A.P	MATH	SCIENCE	PEHM AVERAGE	T.E.P.P	VALUES EDUC.	AVE.	RANK
I	MS	16.43	28.65	27.6	27.6	19.65	28.16	31	30.54		
	PM	32.86	57.3	57.23	41.48	39.3	56.33	62	61.08		
	SD	22	9	13	14.51	10.25	10.0	6.25	5.08		
II	MS	20.17	23	24.38	27.25	20.72	20.75	27	33.08		
	PM	40.34	46	48.75	54.50	41.44	41.51	54	66.16		
	SD	9.0	8.75	18.5	13.6	9.5	10.0	6.25	8.25		
III	MS	22.85	22.72	21.23	22.67	22.99	25.15	25	34.13		
	PM	45.61	45.44	42.46	45.34	45.98	50.3	50	68.26		
	SD	14.5	8.25	17	14.27	7.75	9.0	7.75	4.25		
IV	MS	22.74	26.49	17.42	23.4	24.47	24.13	28	39.70		
	PM	45.47	52.98	34.83	46.8	48.94	48.26	56	79.4		
	SD	22	9.0	18	18.5	9.5	7.5	6.25	4.5		
TOTAL / AVERAGE	MS	20.55	25.22	22.91	25.23	21.96	24.55	28	34.36		
	PM	41.07	50.43	45.82	47.03	43.92	49.1	56	68.73		
	SD	16.88	8.75	16.63	15.22	9.25	9.13	26	5.5		

MS – MEAN SCORE
PM – PERCENTAGE OF MASTERY
SD – STANDARD DEVIATION

2nd PERIODICAL TEST RESULTS BY YEAR LEVEL AND LEARNING AREA
SCHOOL YEAR 2002 – 2003

SCHOOL: PARANG HIGH SCHOOL

DATE: NOVEMBER 18. 2002

Year level		QUALITY INDICATORS FOR THE DIFFERENT LEARNING AREA										
						MAKABAYAN						
		ENGLISH	FILIPINO	MATH	SCIENCE	A.P	TEPP	MSEPP	VALUES EDUC.	AVERAGE	GENERAL AVERAGE	RANK
I	MS	20.63	31..85	32.8	22.5	35.65	35.55	32.30	37.90	35.35		
	PM	41.26	637	65.8	45	71.3	71.1	64.6	75.8	70.7		
	SD	8.25	6.5	7.0	7.5	7.0	9.25	8.5	66.75	7.88		
II	MS	25.19	29	32.50	24.70	29.59	33.5	26.9	38.50	32.12		
	PM	50.38	58	65	49.4	59.18	67	53.8	77	64.25		
	SD	7.5	7..5	7.5	8.5	8.0	6.25	7.5	9.5	31.75		
III	MS	27..70	29.95	25.70	27.90	27.50	29.65	29.8	39.25	31.55		
	PM	55.4	59.5	51.4	55.8	55	59.3	59.6	78.5	63.1		
	SD	6.75	6.5	8.5	6.5	7.5	5.5	7.0	7.5	6.88		
IV	MS	25.60	31.59	26.84	29.58	23.62	35.5	29.5	43.80	33.11		
	PM	51.2	63.18	53.68	59.16	47.24	71	59	87.6	66.21		
	SD	7.5	70	8.75	7.5	7.0	7.0	8.25	7.0	7.31		

MS – MEAN SCORE
PM – PERCENTAGE OF MASTERY
SD – STANDARD DEVIATION

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