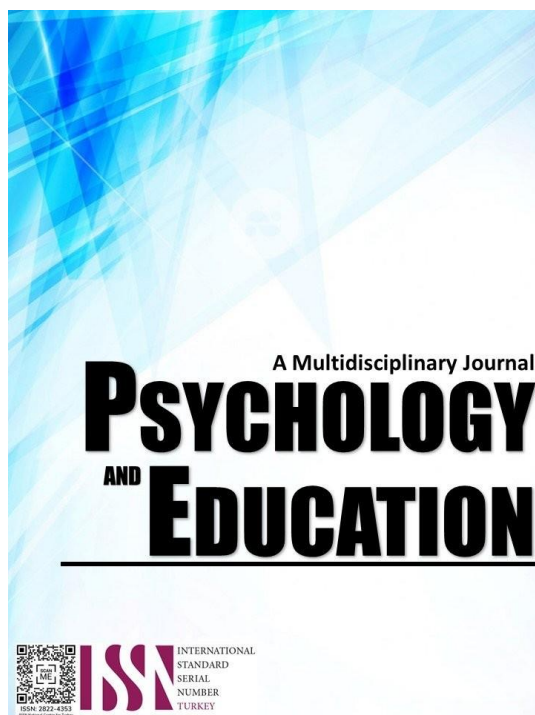


TEACHING EFFECTIVENESS AND STUDENTS' ACHIEVEMENT: THEIR IMPLICATION TOWARDS THE SCHOOL'S READINESS TO IMPLEMENT SCIENCE TECHNOLOGY ENGINEERING PROGRAM



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 18

Issue 10

Pages: 975-996

Document ID: 2024PEMJ1729

DOI: 10.5281/zenodo.10976336

Manuscript Accepted: 03-18-2024

Teaching Effectiveness and Students' Achievement: Their Implication towards the School's Readiness to Implement Science Technology Engineering Program

John Vincent B. Ogoc*, Roy Y. Salvador, Arnel P. Acuña, Arnel F. Pradia

For affiliations and correspondence, see the last page.

Abstract

This study examined the teaching effectiveness, students' achievement, and schools' readiness for the Science, Technology, Engineering, and Mathematics (STEM) program. Utilizing a quantitative research design, including survey questionnaires and both descriptive and inferential statistics, the findings indicated that the majority of STEM Program Teachers hold bachelor's degrees. Their teaching effectiveness was rated as "extremely achieved" across various domains such as professional growth, personality, commitment to service, and teaching performance. Students' achievement, as reflected in their second-quarter grades across English, Mathematics, Research, Science, and Social Studies, was consistently rated as "Outstanding." While the educational attainment, professional growth, commitment to service, and teaching performance of the teachers did not significantly influence student achievement, their personality emerged as a significant factor. The observed "extremely achieved" teaching effectiveness and "outstanding" student achievement contribute positively to the readiness of schools to implement the STEM Program. To enhance this readiness further, it is recommended to upgrade teachers' educational attainment, professional growth, commitment to service, and teaching performance. Encouraging STEM teachers to pursue advanced studies such as master's and doctoral degrees, as well as engaging in professional short courses and specialized training, is suggested.

Keywords: *science technology engineering program, teaching effectiveness, students' achievement, readiness*

Introduction

Teaching effectiveness encompasses various elements focused on enhancing student performance, including teacher behaviors, classroom management, and adherence to educational standards. When seeking teaching positions, candidates typically need to meet educational requirements, often including prior teaching experience. Additionally, effective teachers must exhibit strong communication skills and appropriate behavioral attributes in their interactions with students. Essential components of effective teaching include possessing relevant subject knowledge, assessing student needs, and employing engaging instructional strategies (Ko et al., 2013).

Students' achievement, typically measured through grades or assessments, serves as a key indicator of educational quality across all school settings (Brown, 2012). Educational institutions prioritize fostering student achievement as a primary objective. Research indicates a direct correlation between teaching effectiveness and student achievement (Kupermintz, 2002). Excellent teacher performance is widely recognized as a critical factor in promoting high educational standards (Rina et al.; Sharar & Nawab, 2020). Effective instruction is fundamental to student learning, underscoring the importance of enhancing teacher performance for long-term societal development (DO 42 s. 2017). In an ever-evolving educational landscape, teachers must adapt, develop, and surmount challenges to inspire and uplift future generations (McGraw Hill, 2018).

Given these considerations, this study aims to evaluate teaching effectiveness and students' achievement as they relate to the readiness of schools to implement STEM programs.

Research Objectives

This study sought to assess the teaching effectiveness and students' achievement towards schools' readiness to implement the STE Program. Specifically, it aimed to:

1. Determine the teachers' qualifications based on educational attainment
2. Assess the teaching effectiveness with the following components:
 - a. Professional growth and development;
 - b. Personality;
 - c. Commitment and dedication to service; and
 - d. Teaching performance
3. Evaluate the students' achievement based on grades in:
 - a. English;
 - b. Mathematics;
 - c. Research;
 - d. Science; and
 - e. Social studies

4. Determine the significant relationship between teaching effectiveness and students' achievement in the implementation of STE Program; and,
5. Determine the level of readiness in the implementation of STE program.

Methodology

Research Design

The descriptive-survey method was employed in this study to collect, analyze, and interpret data. Quantitative data regarding teaching effectiveness and student achievement pertaining to the school's readiness to adopt the STEM program were gathered through survey questionnaires.

A complete enumeration of teachers and students was utilized in this study. Both descriptive and inferential statistics were employed to analyze the data. Descriptive statistics were utilized to compute the mean and standard deviation for student achievement and teaching effectiveness. Additionally, inferential statistics, such as Pearson's *r*, were employed to assess the relationship between teaching effectiveness and students' achievement in relation to variables associated with school readiness.

Participants

The study included a total of 154 participants, comprising 120 students and 22 public secondary teachers, along with 2 School Heads and 10 Department Heads from Kalamansig and Lebak for the school year 2022-2023. To distribute the respondents by school, there were 28 students, 5 teachers, 1 School Head, and 5 Department Heads from Kalamansig National High School. Additionally, there were 92 students, 17 teachers, 1 School Head, and 5 Department Heads from Lebak Legislated National High School.

Complete enumeration was employed for both teachers and students of Kalamansig National High School and Lebak Legislated National High School under the STEM program due to the smaller number of participants.

Instruments

A modified teaching effectiveness questionnaire served as the primary tool for this research. It encompassed inquiries regarding the Teacher's Educational Qualifications, including age, gender, educational attainment, academic awards, length of service, and subjects taught. Additionally, the teachers' survey questionnaire comprised four key indicators: Professional Growth and Development, Personality, Commitment and Dedication to Service, and Teaching Performance.

Furthermore, a separate survey questionnaire was administered to STEM students to evaluate the teaching effectiveness of their teachers, focusing specifically on Science, Mathematics, English, Research, and Social Studies. In addition to these questionnaires, an adopted Level of Readiness survey questionnaire was utilized and administered to School Heads and Department Heads of various subjects to assess the School's Readiness in implementing the STEM program.

Procedure

The researchers sought permission from the Division Office of Sultan Kudarat and the principals of Lebak Legislated National High School and Kalamansig National High School to conduct the study. Subsequently, the study employed the modified teaching effectiveness survey questionnaire, which was administered to 22 public secondary school teachers, 120 STEM students, and 12 School Heads and Department Heads to assess the level of readiness.

The study obtained students' grades in Science, Mathematics, English, Research, and Social Studies as indicators of students' achievement for the School Year 2022-2023. The teaching effectiveness of teachers was assessed through frequency and percentage distributions, while mean scores were utilized to determine teaching effectiveness as rated by both teachers and students. Additionally, the level of readiness was evaluated by School Heads and Department Heads using mean rating.

Ethical Consideration

The researchers adhered to the specific research guidelines established by the institution's research committee. Research procedures and ethical considerations were carefully addressed during data collection to avoid plagiarism. Therefore, the study underwent review by the Ethics Committee of the institution.

Plagiarism checks through Turnitin yielded a score below 20 percent, meeting the institution's standard rating for a thesis. This research is supported by several literatures on the topic, and the data interpretation was cautiously done using simple language to aid reader understanding. The expected outcomes of this research will not solely benefit the researchers. The next step will involve publication of the study, which will adhere to the standard set by the publishing company.

Results and Discussion

Teachers' Educational Attainment

The educational attainment of the teachers teaching STE Program are categorized and presented in terms of frequencies and percentages

distribution (Table 1).

Table 1. *STE Teachers' educational attainment shows in Table 1 (n=22)*

<i>Educational Attainment</i>	<i>Frequencies (f)</i>	<i>Percentage (f %)</i>
Bachelor's Degree	13	59.1%
Master's Degree	9	40.9%
Total	22	100.0%

Of the 22 respondents, in terms of educational attainment a higher percentage of 59.1% has Bachelor's Degree ($f = 13$, $f\% = 59.1\%$) and the lower percentage of 40.9% has Master's Degree ($f = 9$, $f\% = 40.9\%$). Teacher qualifications and skills must be at a high level in order for educational institutions to deliver a high-quality education and for students to succeed. A teacher's success in teaching and training increases with their level of quality. However, a number of factors must be met before teachers may be considered to have the necessary degree of credentials. Teacher competences are one approach to assess these requirements (Akoul et al. ,2020).

Same results to study of Kosgei (2013) about teacher qualifications on the study found that 65% of teachers had degrees, 25% only held diploma certificates 10% were untrained. The results of a cross-tabulation indicate that there was no significant relationship between teachers with degrees and those with diplomas, indicating that teacher qualification did not lead to higher academic achievement among students.

Teaching Effectiveness

Professional Growth and Development

For professional growth and development, the teachers rating of themselves are shown in terms of frequencies and means (Table 2).

Table 2. *STE teachers' professional growth and development as rated by themselves (n=22)*

<i>Indicator Statements</i>	<i>Frequencies</i>					<i>Mean</i>	<i>Description</i>
	5	4	3	2	1		
I upgrade knowledge in my field of specialization	15	6	1	0	0	4.64	Extremely Achieved
I contribute new innovative ideas for the development of academic functions.	15	6	1	0	0	4.64	Extremely Achieved
I am conversant with new trends in other fields.	14	6	2	0	0	4.55	Extremely Achieved
I stimulate intellectual discussion with colleagues.	10	10	2	0	0	4.36	Extremely Achieved
I perform competently assigned scholarly tasks	11	11	0	0	0	4.50	Extremely Achieved
I keep abreast with multiple of issues with significance.	10	10	2	0	0	4.36	Extremely Achieved
I show professional maturity.	13	8	1	0	0	4.55	Extremely Achieved
I show cultural adaptability.	15	6	1	0	0	4.64	Extremely Achieved
I possess a good command of the medium of instruction.	16	5	1	0	0	4.68	Extremely Achieved
I demonstrate intellectual honesty.	16	5	1	0	0	4.68	Extremely Achieved
Overall	4.56						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.36 - 4.68 with an overall mean of 4.56 which is described as to which the respondents "extremely achieved" is observed for all the 10 statement indicators. These "extremely achieved" indicator statements include: they "upgrade knowledge in the field of specialization" (Statement 1), they "contribute new innovative ideas for the development of academic functions" (Statement 2), they are "conversant with new trends in other fields" (Statement 3), they "stimulate intellectual discussion with colleagues" (Statement 4), they "perform competently assigned scholarly tasks" (Statement 5), they "keep abreast with multiple of issues with significance" (Statement 6), they "show professional maturity" (Statement 7), they "show cultural adaptability" (Statement 8), they "possess a good command of the medium of instruction" (Statement 9), and they "demonstrate intellectual honesty" (Statement 10).

Teachers want professional development they can use right away, in order to prepare and deliver the lessons their students need the most, such as the skills, techniques, and strategies that allow them to customize differentiated learning for their students (Wei, Darling-Hammond, and Adamson, 2010).

Professional development helps teachers transfer abilities to students by broadening their knowledge and practices. The kids in the classroom have varying levels of knowledge and competence. The different learning levels must be addressed even though some kids may be above-average, below-average, or average learners. Teachers who have access to high-quality, ongoing professional development are better able to impact students of all academic levels and enhance their education (Washington, 2019). Teachers must persevere in an environment that is constantly changing by adjusting, developing, and overcoming difficulties in order to uplift and inspire future generations (McGraw Hill, 2018).

Personality

For personality, the teachers' rating of themselves is shown in terms of frequencies and means (Table 3).

Generally, high means of 4.64 - 4.91 with an overall mean of 4.76 which is described by the teachers themselves as they “extremely achieved” is observed for all of the 6 statement indicators. These “extremely achieved” indicator statements include: they “maintain wholesome relations with colleagues” (Statement 1), they “welcome criticisms from colleagues” (Statement 2), they “respect the rights of others” (Statement 3), they “behave within the bounds of morality” (Statement 4), they “handle challenging situations professionally” (Statement 5), and they “demonstrate leadership quality” (Statement 6).

Table 3. *STE teachers' personality as rated by themselves (n=22)*

Indicator Statements	Frequencies					Mean	Description
	5	4	3	2	1		
I maintain wholesome relations with colleagues.	17	5	0	0	0	4.77	Extremely Achieved
I welcome criticisms from colleagues.	14	8	0	0	0	4.64	Extremely Achieved
I respect the rights of others.	20	2	0	0	0	4.91	Extremely Achieved
I behave within the bounds of morality.	16	6	0	0	0	4.73	Extremely Achieved
I handle challenging situations	16	6	0	0	0	4.73	Extremely Achieved
I demonstrate leadership quality.	17	5	0	0	0	4.77	Extremely Achieved
Overall	4.76						

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

This extremely achieved implies that the STE teachers possess a good personality and respect the rights of others is one of the behaviors that teachers possess in which resulting to students' motivation to learn (Saafin, 2005). A teacher's personality directly affects how pupils think, feel inspired, and behave in ways that affect their academic achievement. Every teacher has unique qualities as a person, which gives them each a unique personality (Slater, 2013). A teacher's personality has a significant impact on students' creativity and success in learning (Mohammadi, 2015). Personality traits of an active teacher enhance school results and increase academic achievement for students (Gao and Liu, 2013). Moreover, in the educational system, teacher is the mirror in which their personality directly influences to the achievement of students (Awan, 2011), and well-structured personality can contribute to teacher's effectiveness (Borich, 2000).

Commitment and Dedication to Service

For commitment and dedication to service, the teachers rating of themselves are shown in terms of frequencies and means (Table 4).

Generally, high means of 4.68 - 4.82 with an overall mean of 4.73 which is described as to which the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: they “exude enthusiasm in their job” (Statement 1), they “devote official times in the accomplishment of my official responsibilities” (Statement 2), they participate actively in the different activities” (Statement 3), they “observe administrative protocol” (Statement 4), they “perform additional tasks even without remuneration” (Statement 5), and they “uphold the ideals of the Department” (Statement 6).

Their “extremely achieved” implies that STE teachers are committed and dedicated to their job. Teachers are motivated to improve their teaching practices and create a productive learning environment by the commitment to support students in achieving their goals. Student achievement is greatly influenced by teacher dedication. Teachers that are dedicated put their students, the school, and the teaching profession first. Teachers can affect student achievement when they are interested in the advancement of the teaching profession. Teachers that are very committed encourage their students to participate in school activities. Students have a better possibility of developing their achievement when they participate in learning activities (Altun, 2017).

The main elements that bring about significant changes in students' lives are committed teachers. Passion helps with the performance and motivation of the teacher. These teachers are responsible for establishing the emotional climate in the classroom and school. Their students see their behavior, and the implications of that behavior can aid in the development of good learning practices among their students (Maiyani, 2017).

Table 4. *STE teachers' commitment and dedication to service as rated by themselves (n=22)*

Indicator Statements	Frequencies					Mean	Description
	5	4	3	2	1		
I exude enthusiasm in my job.	15	7	0	0	0	4.68	Extremely Achieved
I devote official times in the accomplishment of my official responsibilities.	16	5	1	0	0	4.68	Extremely Achieved
I participate actively in the different activities.	15	7	0	0	0	4.68	Extremely Achieved
I observe administrative protocol.	17	5	0	0	0	4.77	Extremely Achieved
I perform additional tasks even without remuneration.	16	6	0	0	0	4.73	Extremely Achieved
I uphold the ideals of the Department.	18	4	0	0	0	4.82	Extremely Achieved
Overall	4.73						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The main elements that bring about significant changes in students' lives are committed teachers. Passion helps with the performance and motivation of the teacher. These teachers are responsible for establishing the emotional climate in the classroom and school. Their students see their behavior, and the implications of that behavior can aid in the development of good learning practices among their students (Maiyani,2017).

Teaching Performance

For teaching performance, the teachers rating of themselves are shown in terms of frequencies and means (Table 5).

Generally, frequencies and mean distribution of high means of 4.45 - 4.82 with an overall mean of 4.68 which is described by the teachers themselves as they “extremely achieved” is observed for all of the 17 statement indicators. These “extremely achieved” indicator statements include: they “attend class regularly” (Statement 1), they “observe proper decorum” (Statement 2), they “give activities to the students when he or she has an official undertaking” (Statement 3), they “administer assessment before dismissing the class” (Statement 4), they “teach the lesson clearly” (Statement 5), they “come to class well prepared” (Statement 6), they answer the questions of their students well” (Statement 7), they “have mastery of the subject matter” (Statement 8), they “present their lesson clearly with relevant application” (Statement 9), they “cover the learning competencies in the curriculum guide” (Statement 10), they “return exam results promptly” (Statement 11), they “encourage active participation” (Statement 12), they “listen attentively to our interactions in class” (Statement 13), they “vary their teaching strategies to make the lessons interesting” (Statement 14), they “motivate their students to achieve higher thinking skills” (Statement 15), they “demonstrate open mindedness” (Statement 16), and they “are fair in giving grades” (Statement 17).

Table 5. *STE Teachers teaching performance as rated by themselves (n=22)*

Indicator Statements	Frequencies					Mean	Description
	5	4	3	2	1		
I attend class regularly.	17	5	0	0	0	4.77	Extremely Achieved
I observe proper decorum	17	5	0	0	0	4.77	Extremely Achieved
I give activities to my learners when I have an official undertaking.	16	6	0	0	0	4.73	Extremely Achieved
I teach the lesson clearly.	14	8	0	0	0	4.64	Extremely Achieved
I administer assessment before dismissing the class.	14	5	3	0	0	4.50	Extremely Achieved
I come to class well prepared	13	8	1	0	0	4.55	Extremely Achieved
I answer the questions of my students well.	15	6	1	0	0	4.64	Extremely Achieved
I have mastery of the subject matter.	17	4	0	1	0	4.68	Extremely Achieved
I present my lesson clearly with relevant application.	11	10	1	0	0	4.45	Extremely Achieved
I cover the learning competencies in the curriculum guide.	15	7	0	0	0	4.68	Extremely Achieved
I return exam results promptly.	15	7	0	0	0	4.68	Extremely Achieved
I encourage active participation.	16	6	0	0	0	4.73	Extremely Achieved
I listen attentively to our interactions in class.	17	5	0	0	0	4.77	Extremely Achieved
I vary my teaching strategies to make the lessons interesting.	14	8	0	0	0	4.64	Extremely Achieved
I motivate my students to achieve higher thinking skills.	16	6	0	0	0	4.73	Extremely Achieved
I demonstrate open mindedness.	16	6	0	0	0	4.73	Extremely Achieved
I am fair in giving grades.	18	4	0	0	0	4.82	Extremely Achieved
Overall			4.68				Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The teachers “extremely achieved” implies that the STE teachers are better in teaching performance and fair in giving grades. One of the crucial factors that might encourage high standards in education is excellent teacher performance (Rina et al., and Sharar et al., 2020). For students to learn well, there must be great instruction. Therefore, enhancing teacher performance is essential for long-term and sustainable nation-building (DO 42 s. 2017).

If the teacher gives grade fairly and consistently, students will put in extra effort. Students' motivation and learning can suffer when they feel that something is unfair or inconsistent (McDonald, 2016).

Professional Growth and Development as Rated by the Students

For English teachers' professional growth and development, the teachers rating rated by the students are shown in terms of frequencies and means (Table 6).

Generally, high means of 4.58 - 4.80 with an overall mean of 4.69 which is described as to which the English teachers of the respondents “extremely achieved” is observed for all the 10 statement indicators. These “extremely achieved” indicator statements include: “upgrades knowledge in the field of specialization” (Statement 1), “contributes new innovative ideas for the development of academic functions” (Statement 2), “conversant with new trends in other fields” (Statement 3), “stimulates intellectual discussion with colleagues” (Statement 4), “performs competently assigned scholarly tasks” (Statement 5), “keeps abreast with multiple of issues with significance” (Statement 6), “shows professional maturity” (Statement 7), “shows cultural adaptability” (Statement 8), “possesses a

good command of the medium of instruction” (Statement 9), and “demonstrates intellectual honesty” (Statement 10).

Table 6. *Professional Growth and Development of English Teachers rated by the students (n=120)*

Indicator Statements My English teacher	Frequencies					Mean	Description
	5	4	3	2	1		
upgrades knowledge in my field of Specialization	92	25	3	0	0	4.74	Extremely Achieved
contributes new innovative ideas for the development of academic functions.	85	32	3	0	0	4.68	Extremely Achieved
conversant with new trends in other fields.	80	30	10	0	0	4.58	Extremely Achieved
stimulates intellectual discussion with colleagues.	87	26	6	1	0	4.66	Extremely Achieved
performs competently assigned scholarly tasks	89	25	6	0	0	4.69	Extremely Achieved
keeps abreast with multiple of issues with significance.	79	31	10	0	0	4.58	Extremely Achieved
shows professional maturity.	100	17	2	1	0	4.80	Extremely Achieved
shows cultural adaptability.	86	31	3	0	0	4.69	Extremely Achieved
possesses a good command of the medium of instruction.	87	32	1	0	0	4.72	Extremely Achieved
demonstrates intellectual honesty.	100	14	6	0	0	4.78	Extremely Achieved
Overall				4.69			Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students “extremely achieved” is like the result of teachers’ self-evaluation which signifies that the English teachers possess professional maturity which develops professional growth. Professional development helps teachers transfer abilities to students by broadening their knowledge and practices. The kids in the classroom have varying levels of knowledge and competence. The different learning levels must be addressed even though some kids may be above-average, below-average, or average learners. Teachers who have access to high-quality, ongoing professional development are better able to impact students of all academic levels and enhance their education (Washington, 2019).

Across all occupations, mature individuals readily state that they "are more interested in the "Work itself." (Simmons, 2005).

Professional Growth and Development as Rated by the Students

For Mathematics teachers’ professional growth and development, the teachers rating rated by the students are shown in terms of frequencies and means (Table 7).

Generally, high means of 4.42 - 4.82 with an overall mean of 4.66 which is described as to which the mathematics teachers of the respondents “extremely achieved” is observed for all the 10 statement indicators. These “extremely achieved” indicator statements include: “upgrades knowledge in the field of specialization” (Statement 1), “contributes new innovative ideas for the development of academic functions” (Statement 2), “conversant with new trends in other fields” (Statement 3), “stimulates intellectual discussion with colleagues” (Statement 4), “performs competently assigned scholarly tasks” (Statement 5), “keeps abreast with multiple of issues with significance” (Statement 6), “shows professional maturity” (Statement 7), “shows cultural adaptability” (Statement 8), “possesses a good command of the medium of instruction” (Statement 9), and “demonstrates intellectual honesty (Statement 10).

Table 7. *Professional Growth and Development of Mathematics Teachers rated by the students (n=120).*

Indicator Statements My Mathematics teacher	Frequencies					Mean	Description
	5	4	3	2	1		
upgrades knowledge in my field of Specialization	100	18	2	0	0	4.82	Extremely Achieved
contributes new innovative ideas for the development of academic functions.	86	30	4	0	0	4.68	Extremely Achieved
conversant with new trends in other fields.	64	42	14	0	0	4.42	Extremely Achieved
stimulates intellectual discussion with colleagues.	82	35	3	0	0	4.66	Extremely Achieved
performs competently assigned scholarly tasks	88	28	4	0	0	4.70	Extremely Achieved
keeps abreast with multiple of issues with significance.	66	43	11	0	0	4.46	Extremely Achieved
shows professional maturity.	100	18	2	0	0	4.82	Extremely Achieved
shows cultural adaptability.	84	26	10	0	0	4.62	Extremely Achieved
possesses a good command of the medium of instruction.	90	29	1	0	0	4.74	Extremely Achieved
demonstrates intellectual honesty.	93	19	8	0	0	4.71	Extremely Achieved
Overall				4.66			Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Their “extremely achieved” signifies that Mathematics teachers possess professional growth and development and upgrade knowledge. Professional development helps teachers transfer abilities to students by broadening their knowledge and practices. The kids in the classroom have varying levels of knowledge and competence. The different learning levels must be addressed even though some kids may be above-average, below-average, or average learners. Teachers who have access to high-quality, ongoing professional

development are better able to impact students of all academic levels and enhance their education (Washington, 2019).

As developing teachers, we must keep ourselves up to date in terms of our knowledge of our subject matter, our confidence, and our ability to adapt to new developments in the teaching profession to deliver instruction of the highest caliber and confidently respond to inquiries. By using innovation in teaching and learning, you may improve your teaching ideas (Sagar, 2020).

Professional Growth and Development as Rated by the Students

For Research teachers' professional growth and development, the teachers rating rated by the students are shown in terms of frequencies and means (Table 8).

Table 8. *Professional Growth and Development of Research Teachers rated by the students (n=120)*

Indicator Statements My Research teacher	Frequencies					Mean	Description
	5	4	3	2	1		
upgrades knowledge in my field of Specialization	78	31	10	1	0	4.55	Extremely Achieved
contributes new innovative ideas for the development of academic functions.	70	31	19	0	0	4.43	Extremely Achieved
conversant with new trends in other fields.	65	29	19	6	1	4.26	Extremely Achieved
stimulates intellectual discussion with colleagues.	73	35	10	2	0	4.49	Extremely Achieved
performs competently assigned scholarly tasks	82	30	8	0	0	4.62	Extremely Achieved
keeps abreast with multiple of issues with significance.	58	42	15	5	0	4.28	Extremely Achieved
shows professional maturity.	81	27	8	4	0	4.54	Extremely Achieved
shows cultural adaptability.	79	25	11	5	0	4.48	Extremely Achieved
possesses a good command of the medium of instruction.	70	40	10	0	0	4.50	Extremely Achieved
demonstrates intellectual honesty.	89	20	9	2	0	4.63	Extremely Achieved
Overall				4.48			Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.26 - 4.63 with an overall mean of 4.48 which is described as to which the Research teachers of the respondents "extremely achieved" is observed for all the 10 statement indicators. These "extremely achieved" indicator statements include: "upgrades knowledge in the field of specialization" (Statement 1), "contributes new innovative ideas for the development of academic functions" (Statement 2), "conversant with new trends in other fields" (Statement 3), "stimulates intellectual discussion with colleagues" (Statement 4), "performs competently assigned scholarly tasks" (Statement 5), "keeps abreast with multiple of issues with significance" (Statement 6), "shows professional maturity" (Statement 7), "shows cultural adaptability" (Statement 8), "possesses a good command of the medium of instruction" (Statement 9), "demonstrates intellectual honesty" (Statement 10)."

The students "extremely achieved" is like the result of teachers' self-evaluation which signifies that the Research teachers have professional growth especially intellectual honesty. Professional development helps teachers transfer abilities to students by broadening their knowledge and practices. The kids in the classroom have varying levels of knowledge and competence. The different learning levels must be addressed even though some kids may be above-average, below-average, or average learners. Teachers who have access to high-quality, ongoing professional development are better able to impact students of all academic levels and enhance their education (Washington, 2019).

Professional Growth and Development as Rated by the Students

For Science teachers' professional growth and development, the teachers rating rated by the students are shown in terms of frequencies and means (Table 9).

Table 9. *Professional Growth and Development of Science Teachers rated by the students (n=120)*

Indicator Statements My Science teacher	Frequencies					Mean	Description
	5	4	3	2	1		
upgrades knowledge in my field of Specialization	67	46	7	0	0	4.50	Extremely Achieved
contributes new innovative ideas for the development of academic functions.	68	38	11	3	0	4.43	Extremely Achieved
conversant with new trends in other fields.	50	58	12	0	0	4.32	Extremely Achieved
stimulates intellectual discussion with colleagues.	50	50	19	1	0	4.24	Extremely Achieved
performs competently assigned scholarly tasks	57	46	16	1	0	4.33	Extremely Achieved
keeps abreast with multiple of issues with significance.	42	49	26	3	0	4.08	Highly Achieved
shows professional maturity.	85	28	7	0	0	4.65	Extremely Achieved
shows cultural adaptability.	56	49	15	0	0	4.34	Extremely Achieved
possesses a good command of the medium of instruction.	71	45	4	0	0	4.56	Extremely Achieved
demonstrates intellectual honesty.	95	24	1	0	0	4.78	Extremely Achieved
Overall				4.42			Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.08 - 4.78 with an overall mean of 4.42 which is described as to which the Science teachers of the respondents “extremely achieved” is observed, 9 among 10 statement indicators. These “extremely achieved” indicator statements include: “upgrades knowledge in the field of specialization (Statement 1),” “contributes new innovative ideas for the development of academic functions (Statement 2),” “conversant with new trends in other fields (Statement 3),” “stimulates intellectual discussion with colleagues (Statement 4),” “performs competently assigned scholarly tasks (Statement 5),” “shows professional maturity (Statement 7),” “shows cultural adaptability (Statement 8),” “possesses a good command of the medium of instruction (Statement 9),” “demonstrates intellectual honesty (Statement 10),” and 1 among 10 indicators is “highly achieved” such as “keeps abreast with multiple of issues with significance (Statement 6).”

The students “extremely achieved” is similar to the result of teachers’ self-evaluation which signifies that the Science teachers have professional growth especially intellectual honesty. Professional development helps teachers transfer abilities to students by broadening their knowledge and practices. The kids in the classroom have varying levels of knowledge and competence. The different learning levels must be addressed even though some kids may be above-average, below-average, or average learners. Teachers who have access to high-quality, ongoing professional development are better able to impact students of all academic levels and enhance their education (Washington, 2019).

Professional Growth and Development as Rated by the Students

For Social Studies teachers’ professional growth and development, the teachers rating rated by the students are shown in terms of frequencies and means (Table 10).

Table 10. *Professional Growth and Development of Social Studies Teachers rated by the students (n=120)*

Indicator Statements <i>My Social Studies teacher</i>	Frequencies					Mean	Description
	5	4	3	2	1		
upgrades knowledge in my field of Specialization	83	31	6	0	0	4.64	Extremely Achieved
contributes new innovative ideas for the development of academic functions.	73	39	8	0	0	4.54	Extremely Achieved
conversant with new trends in other fields.	74	31	14	0	1	4.48	Extremely Achieved
stimulates intellectual discussion with colleagues.	77	36	7	0	0	4.58	Extremely Achieved
performs competently assigned scholarly tasks	82	35	3	0	0	4.66	Extremely Achieved
keeps abreast with multiple of issues with significance.	79	33	8	0	0	4.59	Extremely Achieved
shows professional maturity.	90	25	5	0	0	4.71	Extremely Achieved
shows cultural adaptability.	92	20	8	0	0	4.70	Extremely Achieved
possesses a good command of the medium of instruction.	84	29	7	0	0	4.64	Extremely Achieved
demonstrates intellectual honesty.	99	20	1	0	0	4.82	Extremely Achieved
Overall			4.64				Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.48 - 4.82 with an overall mean of 4.64 which is described as to which the Social Studies teachers of the respondents “extremely achieved” is observed for all the 10 statement indicators. These “extremely achieved” indicator statements include: “upgrades knowledge in the field of specialization” (Statement 1), “contributes new innovative ideas for the development of academic functions” (Statement 2), “conversant with new trends in other fields” (Statement 3), “stimulates intellectual discussion with colleagues” (Statement 4), “performs competently assigned scholarly tasks” (Statement 5), “keeps abreast with multiple of issues with significance” (Statement 6), “shows professional maturity” (Statement 7), “shows cultural adaptability” (Statement 8), “possesses a good command of the medium of instruction” (Statement 9), and “demonstrates intellectual honesty” (Statement 10).

The students “extremely achieved” is like the result of teachers’ self-evaluation which signifies that the Social Studies teachers have professional growth especially intellectual honesty. Professional development helps teachers transfer abilities to students by broadening their knowledge and practices. The kids in the classroom have varying levels of knowledge and competence. The different learning levels must be addressed even though some kids may be above-average, below-average, or average learners. Teachers who have access to high-quality, ongoing professional development are better able to impact students of all academic levels and enhance their education (Washington, 2019).

Personality as Rated by the Students

For English teachers’ personality, the teachers rating rated by the students are shown in terms of frequencies and means (Table 11).

Generally, high means of 4.51 - 4.76 with an overall mean of 4.67 which is described as to which the English teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “maintains wholesome relations with colleagues” (Statement 1), “welcomes criticisms from colleagues” (Statement 2), “respects the rights of others” (Statement 3), “behaves within the bounds of morality” (Statement 4), “handles challenging situations professionally” (Statement 5), and “demonstrates leadership quality” (Statement 6).

Table 11. *Personality of English teachers rated by the students (n=120)*

Indicator Statements My English teacher	Frequencies					Mean	Description
	5	4	3	2	1		
maintains wholesome relations with colleagues.	83	28	9	0	0	4.62	Extremely Achieved
welcomes criticisms from colleagues.	76	33	8	2	1	4.51	Extremely Achieved
respects the rights of others.	100	12	7	1	0	4.76	Extremely Achieved
behaves within the bounds of morality.	90	25	5	0	0	4.71	Extremely Achieved
handles challenging situations	97	18	4	1	0	4.76	Extremely Achieved
demonstrates leadership quality.	87	29	4	0	0	4.69	Extremely Achieved
Overall	4.67						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.51 - 4.76 with an overall mean of 4.67 which is described as to which the English teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “maintains wholesome relations with colleagues” (Statement 1), “welcomes criticisms from colleagues” (Statement 2), “respects the rights of others” (Statement 3), “behaves within the bounds of morality” (Statement 4), “handles challenging situations professionally” (Statement 5), and “demonstrates leadership quality” (Statement 6).

The students “extremely achieved” is like the result of the teacher’s self-evaluation which signifies that the English teachers are possess good personality. personality traits of teachers that are effective in enhancing character education include their capacity to act as friends, their capacity to serve as role models, their understanding of learning, their respect for the rights others, their willingness to pursue lifelong learning, their patience, their relaxed attitude, their mastery of the skill of educating characters, and their perception as being fun (Istiyono et. al, 2021).

Personality as Rated by the Students

For Mathematics teachers’ personalities, the teachers rating rated by the students are shown in terms of frequencies and means (Table 12).

Table 12. *Personality of Mathematics teachers rated by the students (n=120)*

Indicator Statements My Mathematics teacher	Frequencies					Mean	Description
	5	4	3	2	1		
maintains wholesome relations with colleagues.	87	26	7	0	0	4.67	Extremely Achieved
welcomes criticisms from colleagues.	81	31	8	0	0	4.61	Extremely Achieved
respects the rights of others.	103	12	5	0	0	4.82	Extremely Achieved
behaves within the bounds of morality.	87	30	3	0	0	4.70	Extremely Achieved
handles challenging situations	97	22	1	0	0	4.80	Extremely Achieved
demonstrates leadership quality.	94	26	0	0	0	4.78	Extremely Achieved
Overall	4.73						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.61 - 4.82 with an overall mean of 4.73 which is described as to which the mathematics teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “maintains wholesome relations with colleagues” (Statement 1), “welcomes criticisms from colleagues” (Statement 2), “respects the rights of others” (Statement 3), “behaves within the bounds of morality” (Statement 4), “handles challenging situations professionally” (Statement 5), “demonstrates leadership quality” (Statement 6).

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the mathematics teachers have positive personality. Personality traits of teachers that are effective in enhancing character education include their capacity to act as friends, their capacity to serve as role models, their understanding of learning, their respect for the rights others, their willingness to pursue lifelong learning, their patience, their relaxed attitude, their mastery of the skill of educating characters, and their perception as being fun (Istiyono et. al, 2021).

Personality as Rated by the Students

For Research teachers’ personality, the teachers rating rated by the students are shown in terms of frequencies and means (Table 13).

Generally, high means of 4.49 - 4.77 with an overall mean of 4.58 which is described as to which the Research teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “maintains wholesome relations with colleagues” (Statement 1), “welcomes criticisms from colleagues” (Statement 2),

“respects the rights of others” (Statement 3), “behaves within the bounds of morality” (Statement 4), “handles challenging situations professionally” (Statement 5), and “demonstrates leadership quality” (Statement 6).

Table 13. *Personality of Research teachers rated by the students (n=120)*

Indicator Statements <i>My Research teacher</i>	Frequencies					Mean	Description
	5	4	3	2	1		
maintains wholesome relations with colleagues.	81	22	14	3	0	4.51	Extremely Achieved
welcomes criticisms from colleagues.	76	36	11	1	0	4.66	Extremely Achieved
respects the rights of others.	97	18	5	0	0	4.77	Extremely Achieved
behaves within the bounds of morality.	78	25	15	2	0	4.49	Extremely Achieved
handles challenging situations	81	28	7	4	0	4.55	Extremely Achieved
demonstrates leadership quality.	77	31	8	3	1	4.50	Extremely Achieved
Overall	4.58						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students “extremely achieved” is like the result of the teacher’s self-evaluation which signifies that the Research teachers possess positive character. a teacher's personality directly affects how pupils think, feel inspired, and behave in ways that affect their academic achievement. Every teacher has unique qualities as a person, which gives them each a unique personality (Slater, 2013). A teacher’s personality has a significant impact on students' creativity and success in learning (Mohammadi, 2015). Personality traits of an active teacher enhance school results and increase academic achievement for students (Gao and Liu, 2013).

Thus, the personality traits of teachers that are effective in enhancing character education include their capacity to act as friends, their capacity to serve as role models, their understanding of learning, their respect for the rights others, their willingness to pursue lifelong learning, their patience, their relaxed attitude, their mastery of the skill of educating characters, and their perception as being fun (Istiyono et. al, 2021).

Personality as Rated by the Students

For Science teachers’ personalities, the teachers rating rated by the students are shown in terms of frequencies and means (Table 14).

Table 14. *Personality of Science teachers rated by the students (n=120)*

Indicator Statements <i>My Science teacher</i>	Frequencies					Mean	Description
	5	4	3	2	1		
maintains wholesome relations with colleagues.	85	28	6	1	0	4.64	Extremely Achieved
welcomes criticisms from colleagues.	69	35	13	3	0	4.42	Extremely Achieved
respects the rights of others.	102	16	2	0	0	4.83	Extremely Achieved
behaves within the bounds of morality.	81	33	6	0	0	4.63	Extremely Achieved
handles challenging situations	79	34	7	0	0	4.60	Extremely Achieved
demonstrates leadership quality.	83	31	6	0	0	4.64	Extremely Achieved
Overall	4.63						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.42 - 4.83 with an overall mean of 4.63 which is described as to which the Science teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “maintains wholesome relations with colleagues” (Statement 1), “welcomes criticisms from colleagues” (Statement 2), “respects the rights of others” (Statement 3), “behaves within the bounds of morality” (Statement 4), “handles challenging situations professionally” (Statement 5), and “demonstrates leadership quality” (Statement 6).

The students “extremely achieved” is like the result of the teacher’s self-evaluation which signifies that the Science teachers possess positive personality. A teacher's personality directly affects how pupils think, feel inspired, and behave in ways that affect their academic achievement. Every teacher has unique qualities as a person, which gives them each a unique personality (Slater, 2013). A teacher's personality has a significant impact on students' creativity and success in learning (Mohammadi, 2015). Personality traits of an active teacher enhance school results and increase academic achievement for students (Gao and Liu, 2013).

Personality traits of teachers that are effective in enhancing character education include their capacity to act as friends, their capacity to serve as role models, their understanding of learning, their respect for the rights others, their willingness to pursue lifelong learning, their patience, their relaxed attitude, their mastery of the skill of educating characters, and their perception as being fun (Istiyono et. al, 2021).

Personality as Rated by the Students

For Social Studies teachers’ personalities, the teachers rating rated by the students are shown in terms of frequencies and means (Table 15).

Generally, high means of 4.56 - 4.76 with an overall mean of 4.67 which is described as to which the Social Studies teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “maintains wholesome relations with colleagues” (Statement 1), “welcomes criticisms from colleagues” (Statement 2), “respects the rights of others” (Statement 3), “behaves within the bounds of morality” (Statement 4), “handles challenging situations professionally” (Statement 5), and “demonstrates leadership quality” (Statement 6).

Table 15. *Personality of Social Studies teachers rated by the students (n=120)*

Indicator Statements	Frequencies					Mean	Description
<i>My Social Studies teacher</i>	5	4	3	2	1		
maintains wholesome relations with colleagues.	85	30	5	0	0	4.67	Extremely Achieved
welcomes criticisms from colleagues.	80	29	10	0	1	4.56	Extremely Achieved
respects the rights of others.	95	21	4	0	0	4.76	Extremely Achieved
behaves within the bounds of morality.	88	28	2	2	0	4.68	Extremely Achieved
handles challenging situations	83	33	3	1	0	4.65	Extremely Achieved
demonstrates leadership quality.	89	26	4	1	0	4.69	Extremely Achieved
Overall					4.67		Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the Social Studies teachers possess a good personality. A teacher's personality directly affects how pupils think, feel inspired, and behave in ways that affect their academic achievement. Every teacher has unique qualities as a person, which gives them each a unique personality (Slater, 2013). A teacher's personality has a significant impact on students' creativity and success in learning (Mohammadi, 2015). Personality traits of an active teacher enhance school results and increase academic achievement for students (Gao and Liu, 2013).

Personality traits of teachers that are effective in enhancing character education include their capacity to act as friends, their capacity to serve as role models, their understanding of learning, their respect for the rights others, their willingness to pursue lifelong learning, their patience, their relaxed attitude, their mastery of the skill of educating characters, and their perception as being fun (Istiyono et. al, 2021).

Commitment and Dedication to Service as Rated by the Students

For English teachers’ commitment and dedication to service, the teachers rating rated by the students are shown in terms of frequencies and means (Table 16).

Generally, high means of 4.53 - 4.68 with an overall mean of 4.62 which is described as to which the English teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “exudes enthusiasm in my job” (Statement 1), “devotes official times in the accomplishment of my official responsibilities” (Statement 2), “participates actively in the different activities” (Statement 3), “observes administrative protocol” (Statement 4), “performs additional tasks even without remuneration” (Statement 5), and “upholds the ideals of the Department” (Statement 6).

Table 16. *Commitment and dedication to service of English teachers rated by the students (n=120)*

Indicator Statements	Frequencies					Mean	Description
<i>My English teacher</i>	5	4	3	2	1		
exudes enthusiasm in my job.	72	40	7	1	0	4.53	Extremely Achieved
devotes official times in the accomplishment of my official responsibilities.	75	36	9	0	0	4.55	Extremely Achieved
participates actively in the different activities.	85	29	5	1	0	4.65	Extremely Achieved
observes administrative protocol.	88	25	6	1	0	4.67	Extremely Achieved
performs additional tasks even without remuneration.	82	32	5	1	0	4.63	Extremely Achieved
upholds the ideals of the Department.	88	26	6	0	0	4.68	Extremely Achieved
Overall					4.62		Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the English teachers are committed to their job. Teachers are motivated to improve their teaching practices and create a productive learning environment by the commitment to support students in achieving their goals. Student achievement is greatly influenced by teacher dedication. Teachers that are dedicated put their students, the school, and the teaching profession first. Teachers can affect student achievement when they are interested in the advancement of the teaching profession. Teachers that are very committed encourage their students to participate in school activities. Students have a better possibility of developing their achievement when they participate in learning activities (Altun, 2017).

The main elements that bring about significant changes in students' lives are committed teachers. Passion helps with the performance

and motivation of the teacher. These teachers are responsible for establishing the emotional climate in the classroom and school. Their students see their behavior, and the implications of that behavior can aid in the development of good learning practices among their students (Maiyani, 2017).

Commitment and Dedication to Service as Rated by the Students

For Mathematics teachers' commitment and dedication to service, the teachers rating rated by the students are shown in terms of frequencies and means (Table 17).

Table 17. *Commitment and dedication to service of Mathematics teachers rated by the students (n=120)*

Indicator Statements My Mathematics teacher	Frequencies					Mean	Description
	5	4	3	2	1		
exudes enthusiasm in my job.	80	33	7	0	0	4.61	Extremely Achieved
devotes official times in the accomplishment of my official responsibilities.	73	41	6	0	0	4.56	Extremely Achieved
participates actively in the different activities.	86	30	4	0	0	4.68	Extremely Achieved
observes administrative protocol.	91	27	2	0	0	4.74	Extremely Achieved
performs additional tasks even without remuneration.	70	42	8	0	0	4.52	Extremely Achieved
upholds the ideals of the Department.	76	35	9	0	0	4.56	Extremely Achieved
Overall				4.61			Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.52 - 4.68 with an overall mean of 4.61 which is described as to which the mathematics teachers of the respondents "extremely achieved" is observed for all the 6 statement indicators. These "extremely achieved" indicator statements include: "exudes enthusiasm in my job" (Statement 1), "devotes official times in the accomplishment of my official responsibilities" (Statement 2), "participates actively in the different activities" (Statement 3), "observes administrative protocol" (Statement 4), "performs additional tasks even without remuneration" (Statement 5), and "upholds the ideals of the Department" (Statement 6).

The students "extremely achieved" is similar to the result of the teacher's self-evaluation which signifies that the mathematics teachers are committed to their work. Teachers are motivated to improve their teaching practices and create a productive learning environment by the commitment to support students in achieving their goals. Student achievement is greatly influenced by teacher dedication. Teachers that are dedicated put their students, the school, and the teaching profession first. Teachers can affect student achievement when they are interested in the advancement of the teaching profession. Teachers that are very committed encourage their students to participate in school activities. Students have a better possibility of developing their achievement when they participate in learning activities (Altun, 2017).

The main elements that bring about significant changes in students' lives are committed teachers. Passion helps with the performance and motivation of the teacher. These teachers are responsible for establishing the emotional climate in the classroom and school. Their students see their behavior, and the implications of that behavior can aid in the development of good learning practices among their students (Maiyani, 2017).

Commitment and Dedication to Service as Rated by the Students

For Research teachers' commitment and dedication to service, the teachers rating rated by the students are shown in terms of frequencies and means (Table 18).

Table 18. *Commitment and dedication to the service of Research teachers rated by the students (n=120).*

Indicator Statements My Research teacher	Frequencies					Mean	Description
	5	4	3	2	1		
exudes enthusiasm in my job.	68	35	8	7	2	4.33	Extremely Achieved
devotes official times in the accomplishment of my official responsibilities.	67	39	12	2	0	4.43	Extremely Achieved
participates actively in the different activities.	68	34	12	5	1	4.36	Extremely Achieved
observes administrative protocol.	75	25	10	7	3	4.35	Extremely Achieved
performs additional tasks even without remuneration.	58	44	11	5	2	4.26	Extremely Achieved
upholds the ideals of the Department.	78	28	13	1	0	4.53	Extremely Achieved
Overall						4.38	Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.26 - 4.53 with an overall mean of 4.38 which is described as to which the Research teachers of the respondents "extremely achieved" is observed for all the 6 statement indicators. These "extremely achieved" indicator statements include: "exudes enthusiasm in my job" (Statement 1), "devotes official times in the accomplishment of my official responsibilities" (Statement 2), "participates actively in the different activities" (Statement 3), "observes administrative protocol" (Statement 4),

“performs additional tasks even without remuneration” (Statement 5), and “upholds the ideals of the Department” (Statement 6).

The students “extremely achieved” is like the result of the teacher’s self-evaluation which signifies that the Research teachers are committed to their job. Teachers are motivated to improve their teaching practices and create a productive learning environment by the commitment to support students in achieving their goals. Student achievement is greatly influenced by teacher dedication. Teachers that are dedicated put their students, the school, and the teaching profession first. Teachers can affect student achievement when they are interested in the advancement of the teaching profession. Teachers that are very committed encourage their students to participate in school activities. Students have a better possibility of developing their achievement when they participate in learning activities (Altun, 2017). The main elements that bring about significant changes in students' lives are committed teachers. Passion helps with the performance and motivation of the teacher. These teachers are responsible for establishing the emotional climate in the classroom and school. Their students see their behavior, and the implications of that behavior can aid in the development of good learning practices among their students (Maiyani, 2017).

Commitment and Dedication to Service as Rated by the Students

For Science teachers’ commitment and dedication to service, the teachers rating rated by the students are shown in terms of frequencies and means (Table 19).

Generally, high means of 4.18 - 4.57 with an overall mean of 4.41 which is described as to which the Science teachers of the respondents “extremely achieved” is observed, 5 among 6 statement indicators. These “extremely achieved” indicator statements include: “exudes enthusiasm in my job” (Statement 1), “devotes official times in the accomplishment of my official responsibilities” (Statement 2), “participates actively in the different activities” (Statement 3), “observes administrative protocol” (Statement 4), “performs additional tasks even without remuneration” (Statement 5), “upholds the ideals of the Department” (Statement 6), and 1 among 6 indicators is “highly achieved” such as “performs additional tasks even without remuneration” (Statement 5).

Table 19. *Commitment and dedication to service of science teachers rated by the students (n=120)*

Indicator Statements My Science teacher	Frequencies					Mean	Description
	5	4	3	2	1		
exudes enthusiasm in my job.	67	42	10	0	1	4.45	Extremely Achieved
devotes official times in the accomplishment of my official responsibilities.	56	48	16	0	0	4.33	Extremely Achieved
participates actively in the different activities.	67	35	18	0	0	4.41	Extremely Achieved
observes administrative protocol.	78	32	10	0	0	4.57	Extremely Achieved
performs additional tasks even without remuneration.	41	60	18	1	0	4.18	Highly Achieved
upholds the ideals of the Department.	72	38	10	0	0	4.52	Extremely Achieved
Overall				4.41			Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the Science teachers are committed and dedicated to their job. Teachers are motivated to improve their teaching practices and create a productive learning environment by the commitment to support students in achieving their goals. Student achievement is greatly influenced by teacher dedication. Teachers that are dedicated put their students, the school, and the teaching profession first. Teachers can affect student achievement when they are interested in the advancement of the teaching profession. Teachers that are very committed encourage their students to participate in school activities. Students have a better possibility of developing their achievement when they participate in learning activities (Altun, 2017). The main elements that bring about significant changes in students' lives are committed teachers. Passion helps with the performance and motivation of the teacher. These teachers are responsible for establishing the emotional climate in the classroom and school. Their students see their behavior, and the implications of that behavior can aid in the development of good learning practices among their students (Maiyani, 2017).

Commitment and Dedication to Service as Rated by the Students

For Social Studies teachers’ commitment and dedication to service, the teachers rating rated by the students are shown in terms of frequencies and means (Table 20).

Generally, high means of 4.49 - 4.58 with an overall mean of 4.53 which is described as to which the Social Studies teachers of the respondents “extremely achieved” is observed for all the 6 statement indicators. These “extremely achieved” indicator statements include: “exudes enthusiasm in my job” (Statement 1), “devotes official times in the accomplishment of my official responsibilities” (Statement 2), “participates actively in the different activities” (Statement 3), “observes administrative protocol” (Statement 4), “performs additional tasks even without remuneration” (Statement 5), and “upholds the ideals of the Department” (Statement 6).

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the Social Studies teachers are committed and dedicated to their work. Teachers are motivated to improve their teaching practices and create a productive learning environment by the commitment to support students in achieving their goals. Student achievement is greatly influenced by teacher dedication. Teachers that are dedicated put their students, the school, and the teaching profession first. Teachers can affect student

achievement when they are interested in the advancement of the teaching profession. Teachers that are very committed encourage their students to participate in school activities. Students have a better possibility of developing their achievement when they participate in learning activities (Altun, 2017).

Table 20. *Commitment and dedication to service of Social Studies teachers rated by the students (n=120)*

Indicator Statements	Frequencies					Mean	Description
<i>My Social Studies teacher</i>	5	4	3	2	1		
exudes enthusiasm in my job.	70	40	9	1	0	4.49	Extremely Achieved
devotes official times in the accomplishment of my official responsibilities.	73	39	8	0	0	4.54	Extremely Achieved
participates actively in the different activities.	77	36	7	0	0	4.58	Extremely Achieved
observes administrative protocol.	69	43	7	1	0	4.50	Extremely Achieved
performs additional tasks even without remuneration.	71	37	12	0	0	4.49	Extremely Achieved
upholds the ideals of the Department.	79	32	9	0	0	4.58	Extremely Achieved
Overall			4.53				Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The main elements that bring about significant changes in students' lives are committed teachers. Passion helps with the performance and motivation of the teacher. These teachers are responsible for establishing the emotional climate in the classroom and school. Their students see their behavior, and the implications of that behavior can aid in the development of good learning practices among their students (Maiyani, 2017).

Teaching Performance as Rated by the Students

For English teachers' teaching performance, the teachers rating rated by the students are shown in terms of frequencies and means (Table 21).

Table 21. *Teaching performance of English teachers rated by the students (n=120)*

Indicator Statements	Frequencies					Mean	Description
<i>My English teacher</i>	5	4	3	2	1		
attends class regularly.	83	29	8	0	0	4.63	Extremely Achieved
observes proper decorum	87	27	6	0	0	4.68	Extremely Achieved
give activities to us when I have an official undertaking.	77	30	13	0	0	4.53	Extremely Achieved
teaches the lesson clearly.	96	21	3	0	0	4.78	Extremely Achieved
administers assessment before dismissing the class.	74	39	7	0	0	4.56	Extremely Achieved
comes to class well prepared	105	11	3	0	1	4.83	Extremely Achieved
answer our questions of my students well.	102	16	2	0	0	4.83	Extremely Achieved
has mastery of the subject matter.	100	19	1	0	0	4.83	Extremely Achieved
Presents his or her lesson clearly with relevant application.	89	28	3	0	0	4.72	Extremely Achieved
covers the learning competencies in the curriculum guide.	82	37	1	0	0	4.68	Extremely Achieved
returns exam results promptly.	79	32	9	0	0	4.58	Extremely Achieved
encourages active participation.	79	32	9	0	0	4.58	Extremely Achieved
listen attentively to our interactions in class.	91	24	5	0	0	4.72	Extremely Achieved
Varies his or her teaching strategies to make the lessons interesting.	85	24	11	0	0	4.62	Extremely Achieved
Motivates us students to achieve higher thinking skills.	92	24	4	0	0	4.73	Extremely Achieved
demonstrates open mindedness.	91	26	3	0	0	4.73	Extremely Achieved
is fair in giving grades.	88	22	9	1	0	4.64	Extremely Achieved
Overall			4.69				Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students "extremely achieved" is similar to the result of the teacher's self-evaluation which signifies that the English teachers have better teaching performance and have mastery of the subject matter. One of the crucial factors that might encourage high standards in education is excellent teacher performance (Rina et al., and Sharar et al., 2020). For students to learn well, there must be great instruction. Therefore, enhancing teacher performance is essential for long-term and sustainable nation-building (DO 42 s. 2017). Mastery of the subject matter gives teachers the chance to address misconceptions or incorrect information that students may have (David, 2018).

Teaching Performance as Rated by the Students

For Mathematics teachers' teaching performance, the teachers rating rated by the students are shown in terms of frequencies and means (Table 22).

Generally, high means of 4.53 - 4.83 with an overall mean of 4.69 which is described as to which the English teachers of the respondents "extremely achieved" is observed for all the 17 statement indicators. These "extremely achieved" indicator statements include: "attends class regularly" (Statement 1), "observes proper decorum" (Statement 2), "gives activities to us when he or she has an official

undertaking” (Statement 3), “teaches the lesson clearly” (Statement 4), “administers assessment before dismissing the class” (Statement 5), “comes to class well prepared” (Statement 6), “answers our questions well” (Statement 7), “has mastery of the subject matter” (Statement 8), “presents his or her lesson clearly with relevant application” (Statement 9), “covers the learning competencies in the curriculum guide” (Statement 10), “returns exam results promptly” (Statement 11), “encourages active participation” (Statement 12), “listens attentively to our interactions in class” (Statement 13), “varies his or her teaching strategies to make the lessons interesting” (Statement 14), “motivates us to achieve higher thinking skills” (Statement 15), “demonstrates open mindedness” (Statement 16), and “is fair in giving grades” (Statement 17).

Table 22. *Teaching performance of Mathematics teachers rated by the students (n=120)*

Indicator Statements My Mathematics teacher	Frequencies					Mean	Description
	5	4	3	2	1		
attends class regularly.	74	22	24	0	0	4.42	Extremely Achieved
observes proper decorum	88	27	5	0	0	4.69	Extremely Achieved
give activities to us when I have an official undertaking.	75	37	8	0	0	4.56	Extremely Achieved
teaches the lesson clearly.	100	20	0	0	0	4.83	Extremely Achieved
administers assessment before dismissing the class.	75	35	10	0	0	4.54	Extremely Achieved
comes to class well prepared	85	34	1	0	0	4.70	Extremely Achieved
answer our questions of my students well.	99	17	2	2	0	4.78	Extremely Achieved
has mastery of the subject matter.	98	22	0	0	0	4.82	Extremely Achieved
Presents his or her lesson clearly with relevant application.	93	20	7	0	0	4.72	Extremely Achieved
covers the learning competencies in the curriculum guide.	76	41	3	0	0	4.61	Extremely Achieved
returns exam results promptly.	76	36	8	0	0	4.57	Extremely Achieved
encourages active participation.	88	30	2	0	0	4.72	Extremely Achieved
listen attentively to our interactions in class.	90	28	2	0	0	4.73	Extremely Achieved
Varies his or her teaching strategies to make the lessons interesting.	85	27	8	0	0	4.64	Extremely Achieved
Motivates us students to achieve higher thinking skills.	101	19	0	0	0	4.84	Extremely Achieved
demonstrates open mindedness.	84	35	1	0	0	4.69	Extremely Achieved
is fair in giving grades.	93	20	7	0	0	4.72	Extremely Achieved
Overall				4.68			Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.42 - 4.84 with an overall mean of 4.68 which is described as to which the mathematics teachers of the respondents “extremely achieved” is observed for all the 17 statement indicators. These “extremely achieved” indicator statements include: “attends class regularly” (Statement 1), “observes proper decorum” (Statement 2), “gives activities to us when he or she has an official undertaking” (Statement 3), “teaches the lesson clearly” (Statement 4), “administers assessment before dismissing the class” (Statement 5), “comes to class well prepared” (Statement 6), “answers our questions well” (Statement 7), “has mastery of the subject matter” (Statement 8), “presents his or her lesson clearly with relevant application” (Statement 9), “covers the learning competencies in the curriculum guide” (Statement 10), “returns exam results promptly” (Statement 11), “encourages active participation” (Statement 12), “listens attentively to our interactions in class” (Statement 13), “varies his or her teaching strategies to make the lessons interesting” (Statement 14), “motivates us to achieve higher thinking skills (Statement 15), “demonstrates open mindedness” (Statement 16), and “is fair in giving grades” (Statement 17).

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the mathematics teachers are better in teaching performance and motivates the students to achieve higher thinking. One of the crucial factors that might encourage high standards in education is excellent teacher performance (Rina et al., and Sharar et al., 2020). For students to learn well, there must be great instruction. Therefore, enhancing teacher performance is essential for long-term and sustainable nation-building (DO 42 s. 2017). Moreover, critical thinking abilities are crucial because they allow students "to deal effectively with social, scientific, and practical problems" (Shakirova, 2007, p. 42).

Teaching Performance as Rated by the Students

For Research teachers’ teaching performance, the teachers rating rated by the students are shown in terms of frequencies and means (Table 23).

Generally, high means of 4.01 - 4.67 with an overall mean of 4.36 which is described as to which the Research teachers of the respondents “extremely achieved” is observed, 15 among 17 statement indicators. These “extremely achieved” indicator statements include: “observes proper decorum” (Statement 2), “gives activities to us when he or she has an official undertaking” (Statement 3), “teaches the lesson clearly” (Statement 4), “comes to class well prepared” (Statement 6), “answers our questions well” (Statement 7), “has mastery of the subject matter” (Statement 8), “presents his or her lesson clearly with relevant application” (Statement 9), “covers the learning competencies in the curriculum guide” (Statement 10), “returns exam results promptly” (Statement 11), “encourages active participation” (Statement 12), “listens attentively to our interactions in class” (Statement 13), “varies his or her teaching strategies to make the lessons interesting” (Statement 14), “motivates us to achieve higher thinking skills” (Statement 15), “demonstrates open mindedness” (Statement 16), “is fair in giving grades” (Statement 17), and 2 among 17 indicators are “highly achieved” such as “attends

class regularly” (Statement 1), “administers assessment before dismissing the class” (Statement 5).

Table 23. *Teaching performance of Research teachers rated by the students (n=120)*

Indicator Statements My Research teacher	Frequencies					Mean	Description
	5	4	3	2	1		
attends class regularly.	52	41	16	8	3	4.09	Highly Achieved
observes proper decorum	67	35	15	3	0	4.38	Extremely Achieved
give activities to us when I have an official undertaking.	58	41	12	7	2	4.22	Extremely Achieved
teaches the lesson clearly.	65	28	18	9	0	4.24	Extremely Achieved
administers assessment before dismissing the class.	52	40	13	7	8	4.01	Highly Achieved
comes to class well prepared	70	25	12	9	4	4.23	Extremely Achieved
answer our questions of my students well.	75	25	10	6	4	4.34	Extremely Achieved
has mastery of the subject matter.	83	27	8	2	0	4.59	Extremely Achieved
Presents his or her lesson clearly with relevant application.	71	36	7	6	0	4.43	Extremely Achieved
covers the learning competencies in the curriculum guide.	69	40	8	3	0	4.46	Extremely Achieved
returns exam results promptly.	77	37	6	0	0	4.59	Extremely Achieved
encourages active participation.	73	31	10	6	0	4.43	Extremely Achieved
listen attentively to our interactions in class.	69	33	12	6	0	4.38	Extremely Achieved
Varies his or her teaching strategies to make the lessons interesting.	66	28	16	5	5	4.21	Extremely Achieved
Motivates us students to achieve higher thinking skills.	82	22	7	7	2	4.46	Extremely Achieved
demonstrates open mindedness.	74	31	7	7	1	4.42	Extremely Achieved
is fair in giving grades.	90	20	10	0	0	4.67	Extremely Achieved
Overall	4.36						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the Research teachers are better teaching performance and fair in giving grades. One of the crucial factors that might encourage high standards in education is excellent teacher performance (Rina et al., and Sharar et al., 2020). For students to learn well, there must be great instruction. Therefore, enhancing teacher performance is essential for long-term and sustainable nation-building (DO 42 s. 2017). Moreover, if the teacher give grade fairly and consistently, students will put in extra effort. Students' motivation and learning can suffer when they feel that something is unfair or inconsistent (McDonald, 2016).

Teaching Performance as Rated by the Students

For Science teachers’ teaching performance, the teachers rating rated by the students are shown in terms of frequencies and means (Table 24).

Table 24. *Teaching performance of Science teachers rated by the students (n=120)*

Indicator Statements My Science teacher	Frequencies					Mean	Description
	5	4	3	2	1		
attends class regularly.	72	31	10	7	0	4.40	Extremely Achieved
observes proper decorum	67	40	13	0	0	4.45	Extremely Achieved
give activities to us when I have an official undertaking.	63	46	9	0	2	4.40	Extremely Achieved
teaches the lesson clearly.	74	34	10	1	1	4.49	Extremely Achieved
administers assessment before dismissing the class.	40	53	22	5	0	4.07	Highly Achieved
comes to class well prepared	75	28	15	2	0	4.47	Extremely Achieved
answer our questions of my students well.	74	36	9	1	0	4.53	Extremely Achieved
has mastery of the subject matter.	82	32	5	1	0	4.63	Extremely Achieved
Presents his or her lesson clearly with relevant application.	70	45	5	0	0	4.54	Extremely Achieved
covers the learning competencies in the curriculum guide.	50	65	5	0	0	4.38	Extremely Achieved
returns exam results promptly.	78	29	11	2	0	4.53	Extremely Achieved
encourages active participation.	89	26	5	0	0	4.70	Extremely Achieved
listen attentively to our interactions in class.	87	27	6	0	0	4.68	Extremely Achieved
Varies his or her teaching strategies to make the lessons interesting.	80	29	10	0	1	4.56	Extremely Achieved
Motivates us students to achieve higher thinking skills.	95	20	3	2	0	4.73	Extremely Achieved
demonstrates open mindedness.	92	23	4	1	0	4.72	Extremely Achieved
is fair in giving grades.	101	15	3	1	0	4.80	Extremely Achieved
Overall	4.53						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, high means of 4.07 - 4.80 with an overall mean of 4.53 which is described as to which the Science teachers of the respondents “extremely achieved” is observed, 16 among 17 statement indicators. These “extremely achieved” indicator statements include: “attends class regularly” (Statement 1), “observes proper decorum” (Statement 2), “gives activities to us when he or she has an official undertaking” (Statement 3), “teaches the lesson clearly” (Statement 4), “comes to class well prepared” (Statement 6), “answers our

questions well” (Statement 7), “has mastery of the subject matter” (Statement 8), “presents his or her lesson clearly with relevant application” (Statement 9), “covers the learning competencies in the curriculum guide” (Statement 10), “returns exam results promptly” (Statement 11), “encourages active participation” (Statement 12), “listens attentively to our interactions in class” (Statement 13), “varies his or her teaching strategies to make the lessons interesting” (Statement 14), “motivates us to achieve higher thinking skills” (Statement 15), “demonstrates open mindedness” (Statement 16), “is fair in giving grades” (Statement 17), and 1 among 17 indicators is “highly achieved” such as “administers assessment before dismissing the class” (Statement 5).

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the Science teachers are better in teaching performance which is also fair in giving grades. According to McDonald (2016), If the students reflect that the teachers grade fairly and consistently, they will put in extra effort. Students' motivation and learning can suffer when they feel that something is unfair or inconsistent.

Teaching Performance as Rated by the Students

For Social Studies teachers’ teaching performance, the teachers rating rated by the students are shown in terms of frequencies and means (Table 25).

Generally, high means of 4.44 - 4.71 with an overall mean of 4.60 which is described as to which the Social Studies teachers of the respondents “extremely achieved” is observed for all the 17 statement indicators. These “extremely achieved” indicator statements include: “attends class regularly” (Statement 1), “observes proper decorum” (Statement 2), “gives activities to us when he or she has an official undertaking” (Statement 3), “teaches the lesson clearly” (Statement 4), “administers assessment before dismissing the class” (Statement 5), “comes to class well prepared” (Statement 6), “answers our questions well” (Statement 7), “has mastery of the subject matter” (Statement 8), “presents his or her lesson clearly with relevant application” (Statement 9), “covers the learning competencies in the curriculum guide” (Statement 10), “returns exam results promptly” (Statement 11), “encourages active participation” (Statement 12), “listens attentively to our interactions in class” (Statement 13), “varies his or her teaching strategies to make the lessons interesting” (Statement 14), “motivates us to achieve higher thinking skills” (Statement 15), “demonstrates open mindedness” (Statement 16), and “is fair in giving grades” (Statement 17).

Table 25. Teaching performance of Social Studies teachers rated by the students (n=120)

Indicator Statements My Social Studies teacher	Frequencies					Mean	Description
	5	4	3	2	1		
attends class regularly.	88	25	4	3	0	4.65	Extremely Achieved
observes proper decorum	77	37	6	0	0	4.59	Extremely Achieved
give activities to us when I have an official undertaking.	72	41	6	1	0	4.53	Extremely Achieved
teaches the lesson clearly.	86	29	4	0	1	4.66	Extremely Achieved
administers assessment before dismissing the class.	65	46	7	1	1	4.44	Extremely Achieved
comes to class well prepared	86	33	1	0	0	4.71	Extremely Achieved
answer our questions of my students well.	87	29	3	1	0	4.68	Extremely Achieved
has mastery of the subject matter.	89	27	4	0	0	4.71	Extremely Achieved
Presents his or her lesson clearly with relevant application.	75	39	6	0	0	4.58	Extremely Achieved
covers the learning competencies in the curriculum guide.	78	37	4	0	1	4.59	Extremely Achieved
returns exam results promptly.	72	38	8	1	1	4.49	Extremely Achieved
encourages active participation.	88	27	5	0	0	4.69	Extremely Achieved
listen attentively to our interactions in class.	81	31	7	1	0	4.60	Extremely Achieved
Varies his or her teaching strategies to make the lessons interesting.	76	35	4	3	2	4.50	Extremely Achieved
Motivates us students to achieve higher thinking skills.	81	31	6	1	1	4.58	Extremely Achieved
demonstrates open mindedness.	81	28	10	1	0	4.58	Extremely Achieved
is fair in giving grades.	89	24	7	0	0	4.68	Extremely Achieved
Overall	4.60						Extremely Achieved

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved
3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

The students “extremely achieved” is similar to the result of the teacher’s self-evaluation which signifies that the Social Studies teachers are better in teaching performance and come to class well prepared with mastery of subject matter. One of the crucial factors that might encourage high standards in education is excellent teacher performance (Rina et al., and Sharar et al., 2020). For students to learn well, there must be great instruction. Therefore, enhancing teacher performance is essential for long-term and sustainable nation-building (DO 42 s. 2017). Moreover, mastery of the subject matter gives teachers the chance to address misconceptions or incorrect information that students may have (David, 2018).

Evaluation of STE Students’ Achievement

The students’ achievement based on grades during the second quarter, school year 2022-2023 is shown in Table 26.

Table 26. *Students' achievement based on grades attained during the second quarter, school year 2022-2023 (n=120)*

Subjects	Grades										Mean	Description
	90-100		85-89		80-84		75-79		BELOW 75			
	f	f%	f	f%	f	f%	f	f%	f	f%		
English	70	58.33	36	30.00	14	11.67	0	0	0	0	90.01	Outstanding
Mathematics	74	61.67	33	27.5	13	10.83	0	0	0	0	90.17	Outstanding
Research	86	71.67	22	18.33	12	10	0	0	0	0	91.84	Outstanding
Science	100	83.33	10	8.33	10	8.33	0	0	0	0	93.07	Outstanding
Social Studies	76	63.33	20	16.67	24	20	0	0	0	0	91.69	Outstanding
Legend: 90-100, Outstanding 85-89, Very Satisfied 80-84, Satisfied 75-79, Fairly Satisfied Below 75, Did not meet expectation												

Legend: 90-100, Outstanding 85-89, Very Satisfied 80-84, Satisfied 75-79, Fairly Satisfied Below 75, Did not meet expectation

Of the five subject areas, STE students obtain the highest mean grade of 93.07 % in Science which is described as “Outstanding” and the lowest mean grade of 90.01% in English which is also described as “Outstanding.” Generally, in the five subject areas of STE - English, Mathematics, Research and Social Sciences, the mean grades range from 90.01 to 93.07 which are all described as “Outstanding.”

The “Outstanding” achievement of STE students in the five subject areas reflects their exceptionally upper level of intelligence in the academic environment. Some students aspire to achieve high scores to demonstrate their subject matter expertise and to show that they are better in the other students (Kurtus, 2022). In DepEd Order Number 8, S. 2015 under Policy and Guidelines on Classroom Assessment for the K to 12 Basic Education Program, students receiving grades of 90 to 100 are deemed to be the Best or Outstanding in their class.

Relationship Between Teaching Effectiveness And Students' Achievement In The Implementation Of STE Program

The relationship between teaching effectiveness and students' achievement in the implementation of STE program is shown in the following analysis (Table 27).

The STE teachers' educational attainment and STE students' achievement in English, Mathematics, Research, Science and Social Studies are not significantly related with $r = .337$ and $p = .125$.

The analysis demonstrates that of the five variables on Teachers' factors, four are not significantly related to student achievement. Ho1, Ho2, Ho4, and Ho5, are accepted. While Ho3 is rejected.

For instance, Ho1:” that there is no significant relationship between teachers' educational attainment and students' achievement,” is accepted. This analysis indicates that the teachers' qualifications and teaching abilities do not influence the students' achievement. This implies that students' achievement is largely based on the innate student qualities.

Table 27. *Relationship between teaching effectiveness and students' achievement in the implementation of STE program (n= 142)*

Variable	r value	p value	Interpretation	Decision
Educational Attainment	.337	.125	Not significant	Accept Ho ₁
Students' Achievement				
Professional Growth and Development	.181	.419	Not significant	Accept Ho ₂
Students' Achievement				
Personality	.450	.036	Significant	Reject Ho ₃
Students' Achievement				
Commitment and Dedication to Service	.317	.151	Not significant	Accept Ho ₄
Students' Achievement				
Teaching Performance	.266	.231	Not significant	Accept Ho ₅
Students' Achievement				

*Significant at 0.05 level.

The finding is similar to an earlier study's finding that 65% of teachers has degrees, 25% only holds diploma certificates, and 10% are untrained. The results of a cross-tabulation indicate that there is no significant relationship between teachers with degrees and those with diplomas, indicating that teacher qualification does not lead to higher academic achievement among students (Kosgei, 2013).

The STE teachers' professional growth and development and STE students' achievement in English, Mathematics, Research, Science and Social Studies are not significantly related with $r = .181$ and $p = .419$.

Similarly, the analysis demonstrates that Ho2: ”that there is no significant relationship between teachers' professional growth and development and students' achievement,” is accepted. This analysis indicates that the teachers' professional growth and development

and teaching abilities do not influence the students' achievement. This similarly implies that students' achievement is largely based on the innate student qualities.

This finding opposes a finding of a recent study that the basis of all educational endeavors is considered to be the continuing professional development of teachers. All teachers must participate in effective, continuous, and appropriate professional development throughout their working lives as a responsibility of their job in order to create organized changes that ultimately result in the improvement of students' achievement. However, in this study, teacher professional development does not lead to higher academic achievement among students (Amiri, 2021).

The STE teachers' commitment and dedication to service and STE students' achievement in English, Mathematics, Research, Science and Social Studies are not significantly related with $r = .317$ and $p = .151$.

Similarly, the analysis demonstrates that Ho4:" that there is no significant relationship between teachers' commitment and dedication to service and students' achievement," is accepted. This analysis indicates that the teachers' commitment and dedication to service and teaching abilities do not influence the students' achievement. This similarly implies that students' achievement is largely based on the innate student qualities.

This finding opposes a finding of a recent study concludes that teachers are motivated to improve their teaching practices and create a productive learning environment by the commitment to support students in achieving their goals. Student achievement is greatly influenced by teacher dedication. Teachers that are dedicated put their students, the school, and the teaching profession first. Teachers can affect student achievement when they are interested in the advancement of the teaching profession. Teachers that are very committed encourage their students to participate in school activities. Students have a better possibility of developing their achievement when they participate in learning activities (Altun, 2017).

The STE teachers' teaching performance and STE students' achievement in English, Mathematics, Research, Science and Social Studies are not significantly related with $r = .266$ and $p = .231$.

Similarly, the analysis demonstrates that Ho5:" that there is no significant relationship between teachers' teaching performance and students' achievement," is accepted. This analysis indicates that the teachers' teaching performance does not influence the students' achievement. This similarly implies that students' achievement is largely based on the innate student qualities.

The finding is similar to an earlier study's finding that that there is no significant correlation between teachers' teaching performance and students' achievement. This is likely due to other potentially more important factors like teachers' teaching effectiveness. Thus, teaching performance does not lead to higher academic achievement among students (Akiri, 2013).

On the contrary, the STE teachers' personality and STE students' achievement in English, Mathematics, Research, Science and Social Studies are significantly related with $r = .450$ and $p = .036$.

The analysis demonstrates that Ho3:" that there is no significant relationship between teachers' personality and students' achievement," is rejected. This analysis indicates that the teachers' personality influences the students' achievement. Among the five attributes of the teachers, this is the only teacher factor that implies students' achievement is largely influenced.

The finding is similar to an earlier study's finding that a teacher's personality directly affects how pupils think, feel inspired, and behave in ways that affect their academic achievement. Every teacher has unique qualities as a person, which gives them each a unique personality (Slater, 2013). Thus, a teacher's personality has a significant impact on students' creativity and success in learning (Mohammadi, 2015). Personality traits of an active teacher enhance school results and increase academic achievement for students (Gao and Liu (2013).

Level Of Readiness in The Implementation Of STE Program As Rated By School Heads And Department Heads

The level of readiness in the implementation of STE program as rated by the school heads and department heads in terms of frequencies and mean distribution is presented in the table below (Table 28).

Generally, very high means of 4.00 - 4.63 with an overall mean of 4.31 which is described as "very high" is observed towards schools' readiness and 7 among 9 statement indicators. These "very high" indicators include: "Adequacy of conditions for the realization of the new curriculum" (Statement 1), "Information dissemination of the outcomes" (Statement 2), "Readiness of teachers on the structure of the curriculum" (Statement 3), "Efficiency in managing the curricular implementation process" (Statement 6)," "Monitoring of teaching process realization" (Statement 7), "Connecting with educational partners" (Statement 8), "Overall Level of Readiness" (Statement 9), and 2 among 9 is "high" such as "Sufficiency of trainings for teachers and all personnel involved of the curriculum" (Statement 4), "Provision of adequate laboratory equipment and instructional materials" (Statement 5).

Their "very high" values signify that the school is very ready to implement the Science and Technology Engineering (STE) Program. Similar results are reported that the school was determined to be ready in terms of policies and guidelines, ready to provide the appropriate buildings, facilities, and equipment, ready to provide the essential learning materials, and extremely ready to support the department's programs and activities (Crucillo, 2019).

Table 28. *Frequencies and mean distribution of level of readiness in the implementation of STE program as rated by the school heads and department heads (n=12)*

Indicator Statements	Frequencies					Mean	Description
	5	4	3	2	1		
Adequacy of conditions for the realization of the new Curriculum	5	7	0	0	0	4.42	Very High
Information dissemination of the outcomes	5	7	0	0	0	4.42	Very High
Readiness of teachers on the structure of the curriculum	5	6	1	0	0	4.33	Very High
Sufficiency of trainings for teachers and all personnel involved of the curriculum	3	6	3	0	0	4.00	High
Provision of adequate laboratory equipment and instructional materials.	4	6	2	0	0	4.17	High
Efficiency in managing the curricular implementation Process	5	6	1	0	0	4.33	Very High
Monitoring of teaching process realization	6	6	0	0	0	4.50	Very High
Connecting with educational partners	4	7	1	0	0	4.25	Very High
Overall Level of Readiness	5	7	0	0	0	4.42	Very High
Overall						4.31	Very High

Legend: 1.00-1.80, Never Achieved 1.81-2.60, Slightly Achieved 2.61-3.40, Fairly Achieved 3.41-4.20, Highly Achieved 4.21-5.00, Extremely Achieved

Generally, the results of the present study imply a “very high” level of readiness to implement the Science and Technology Engineering (STE) Program in both the Lebak Legislated National High School and Kalamansig National High School.

Conclusion

The teachers in the STE Program in the public secondary schools of Kalamansig and Lebak are mostly with bachelor’s degree. Their teaching effectiveness based on self and on students’ evaluation is “extremely achieved” in relation to professional growth and development, personality, commitment and dedication to service, and teaching performance. While the students’ achievement in terms of their grades in the second quarter is “Outstanding” in all of the five subject areas - English, Mathematics, Research, Science and Social Studies.

The teacher’s educational attainment, professional growth and development commitment and dedication to service, and the teaching performance do not influence, while their personality largely influence the students’ academic achievement. The “extremely achieved” teaching effectiveness and “outstanding” students’ achievement are contributory towards the school’s readiness to implement the Science Technology and Engineering (STE) Program.

To upgrade the teachers’ educational attainment, professional growth and development, commitment and dedication to service, and the teaching performance, STE teachers must be encouraged in continuing advanced studies such as masters and doctoral degrees, as well as professional short courses and specialized trainings.

References

- Abdellah, R. (2015). Metacognitive awareness and its relation to academic achievement and teaching performance of pre-service female teachers in Ajman University in UAE. *Procedia-Social and Behavioral Sciences*, 174, 560-567.
- Akiri, A.A. (2013). Effects of teachers’ effectiveness on students’ academic performance in public secondary schools; delta state - Nigeria. *J. of Educational and Social Research*, 3, 3, 105-111
- Akoul, M., Lotfi, S., & Radid, M. (2020). Effects of academic results on the perception of competence and selfesteem in students’ training. *Global Journal of Guidance and Counseling in Schools: Current Perspectives*, 10(1), 12-22. <https://doi.org/10.18844/gjgc.v10i1.4874>
- Amiri, J. (2021). The Relationship between Teachers’ Professional Development and Academic Performance with emphasis on the Mediating Role of Secondary School Boys Bonding retrieved from https://www.jmep.ir/article_132307.html?lang=en
- An, X., Hannum, E.C. and Sargent, T. (2007), Teaching quality and student outcomes:academic achievement and educational engagement in rural northwest China. *China: an Inter. J.*, 5, 2, 309-334.
- Al-Ansari, I. H. (1996). In-service Education and Training of EFL Teachers in Saudi Arabia: A Study of Current Provision and Future Needs. *Dissertation Abstracts International- C57/03*, p. 716.
- Al Sa’di, I. (2005). An Investigative Study of the Perceptions of UNRWA English Language Teachers in Jordan of their Professional Development. Unpublished MA Thesis. The University of Jordan, Jordan.
- Al- Shdaifat, A. H. (1998). Building a Training Course Based on EFL Teachers’ Needs. Unpublished MA Thesis, Yarmouk University, Irbid, Jordan

- Altun, M. (2017). The effects of teacher commitment on student achievement. *International Journal of Social Sciences & Educational Studies*, 3(3), 51.
- Baluyos, G. R., Toring, A. R. M., Gahut, M. J. C., Tagaan, D. J. P., Quiap, K. G. P., & Maliao, H. A. (2020). The Level of Readiness of Misamis University in the Implementation of the New Curricula. *Indonesian Journal of Curriculum and Educational Technology Studies*, 8(1), 1-12.
- Borich, G. D. (2000). *Effective teaching methods*. New Jersey: Prentice Hall.
- Carbonneau, N., & Vallerand R.J., Fernet, C., & Guay, F., (2008). The role of passion for teaching in intrapersonal and interpersonal outcomes. *Journal of Educational Psychology*.
- Carver-Thomas, D., & Darling-Hammond, L. (2017). *Teacher turnover: Why it matters and what we can do about it*. Learning Policy Institute.
- Crawford, L., Megan, S., & Alicia, B. (2008). Impact of intensive professional development on teachers' use of sheltered instruction with students who are English language learners. *Journal of In-Service Education*, 34(3), 327-342. <http://dx.doi.org/10.1080/13674580801950816>
- Crucillo, V. (2019). Readiness in the Implementation of Senior High School as Perceived by the Teachers and Students of Accountancy, Business and Management of the Tagaytay CityScience National High School retrieved <https://ojs.aaresearchindex.com/index.php/AAJMRA/article/view/4237>
- David, Miriam Q. (2018). *Mastery of the Subject Matter* retrieved from <https://www.pressreader.com/>
- Deringer, M. L. (1998). The Impact of a Professional Development Program Co-Developed by Middle School Teachers and College Faculty: A Qualitative Study of Teacher Initiated Change. *Dissertation Abstracts International- A* 59/10, p. 3790
- Eun, B., & Audrey, L. H-B. (2007). Impact of an English as a Second Language Professional Development Program. *Journal of Educational Research*, 101(2), 36-48. <http://dx.doi.org/10.3200/JOER.101.1.36-49>
- Gao, M., & Liu, Q. (2013). Personality traits of effective teachers represented in the narratives of American and Chinese preservice teachers: A cross-cultural comparison. *International Journal of Humanities and Social Science*, 3(2), 84-95.
- Gorsev, I. (2010). A case study on needs assessment of English language teachers. *Procedia Social and Behavioral Sciences*, 2(2), 317-321. <http://dx.doi.org/10.1016/j.sbspro.2010.03.017>
- Halim, S. (2008). The Effect of Using Some professional Development Strategies on Improving the Teaching Performance of English Language Student Teacher at the Faculty of Education, Helwan University in the Light of Pre-service Teacher Standards.
- Horn, A, Jang S. (2017). The Impact of Graduate Education on Teachers Effectiveness: Does a Master's Degree Matters? retrieved from https://www.mhec.org/sites/default/files/resources/teacherprep1_20170301_3.pdf
- Istiyono, E., Kartowagiran, B., Retnawati, H., Cahyo Adi Kistoro, H., & Putranta, H. (2021). Effective Teachers' Personality in Strengthening Character Education. *International Journal of Evaluation and Research in Education*, 10(2), 512-521.
- Kosgei, A., Mise, J. K., Odera, O., & Ayugi, M. E. (2013). Influence of teacher characteristics on students' academic achievement among secondary schools.
- Kupermintz, H. (2002). Teacher effects as a measure of teacher effectiveness: Construct validity considerations in TVAAS. Los Angeles, CA: CRESST/University of Colorado, Boulder.
- Kurtus, R. (2022). Reasons to Seek Good Grades retrieved from https://www.school-for-champions.com/grades/reasons_to_seek_good_grades.htm
- Maiyani, N. J. (2017). Committed teacher: Teacher commitment and dedication to student learning. *International Journal of Research and Analytical Reviews*, 4(4), 109-110.
- Masters, J., Raquel, M., Laura, M., Sheralyn, D., & Michael, R. (2010). The Effect of Online Professional Development on Fourth Grade English Language Arts Teachers' Knowledge and Instructional Practices. *Journal of Educational Computing Research*, 43(3), 355-375. <http://dx.doi.org/10.2190/EC.43.3.e>
- McDonald, D. (2016). Grading and Providing Feedback: Consistency, Effectiveness, and Fairness retrieved from <https://ctl.wiley.com/grading-and-providing-feedback-consistency-effectiveness-and-fairness/>
- Mohammadi, F. (2015). The Effect of personality traits and self- efficiency of secondary school teacher" job performance based on a causation model. *Journal of LUDUS VITALIS XI*(1),78-84.
- Namdari, P, M., Gorbaniyan, P., Ghanbari, P., and Basiri, I. (2017). The effectiveness of curriculum program on the professional skills

- of teachers working in exceptional education in Hamedan province. *New Educational Approaches*, 12 (2), 74-46. (In Persian)
- Noreen, S., Ali, A., & Munawar, U. (2019). The Impact of Teachers' Personality on Students' Academic Achievement in Pakistan. *Global Regional Review*, 4(3), 92-102.
- Raik, K., Igor, K., & Jelena, R. (2013). Subject Area Teachers' Professional Competence Development Needs during the Transition to Teaching in a Second Language. *Problems of Education in the 21st Century*, 57(1), 111-123.
- Saafin, S.M. (2005). An investigation into Arab students perceptions of effective EFL teachers at university level. (Unpublished Doctoral Dissertation). University of Exeter, U.K
- Sagar, S. (2020). Why should Teachers Update Their Pedagogical Skills retrieved from <https://www.highereducationdigest.com/why-should-teachers-update-their-pedagogical-skills/>
- Simmons School of Management, Bright Horizons Family Solutions. (January 2005). "The New Workforce Reality: Insights for Today, Implications for Tomorrow." Collaborative Study.
- Shakirova, D. M. (2007). Technology for the shaping of college students' and upper-grade students' critical thinking. *Russian Education & Society*, 49(9), 42–52.
- Slater, L. (2013). Building High-Performing and Improving Education Systems: Curriculum and Assessment. Review: ERIC.CfBT Education Trust 60 Queens Road Reading Berkshire RG1 4BS+44 (0)118 902 1000 www.cfbt.com
- Stonner, N. C. (1999). Middle Level Teacher Preparation and Support: First- Year Teachers' Perceived Competence and Influencing Factors (Teacher Preparation, Beginning Teachers, Pre-service, In-service). *Dissertation Abstracts international- A 06/04*, p. 1089.
- Suswanto, H., Asfani, K., & Wibawa, A. P. (2017). Contribution of teaching performance, learning satisfaction and achievement motivation to students' competence achievement. *Global Journal of Engineering Education*, 19(1), 66-71.
- Touchton, D. J. (1997). Looking Through the Lens of Teacher Professional Development: An Exploratory Study of Elementary School Teachers Perceptions of Their Involvement in Shared Decision Making. *Dissertation Abstracts International- A 57/10*, P.4219.
- Wall, U. (2008). A Needs Assessment Interview: The Professional Development Needs of Non-native Speaking EFL Teachers in Thailand. *Innovation in Language Learning and Teaching*, 2(1), 47-64. <http://dx.doi.org/10.1080/17501220802158800>
- Walqui, A. (1998). The Development of Teachers Understanding: In-service Professional Growth for Teachers of English Language Learners. *Dissertation Abstracts International- A 59/06*, p. 1984.
- Washington B. (2019). Keys to Improving Teacher Professional Development retrieved from <https://www.graduateprogram.org/2019/09/keys-to-improving-teacher-professional-development/>
- Yurdakul, B., Oner, U., Esra, C., & Derya G. (2014). Evaluation of a Professional Development Program on Web Based Content Development. *Educational Sciences: Theory and Practice*, 14(4), 1427-1428.

Affiliations and Corresponding Information

John Vincent B. Ogoc, MSciEd

Limulan Integrated School
Department of Education – Philippines

Roy Y. Salvador

Central Lebak District
Department of Education – Philippines

Arnel P. Acuña

Datu Etang Integrated School
Department of Education – Philippines

Arnel F. Pradia, MAELT

Lebak Legislated National High School
Department of Education – Philippines