

The Level of Effectiveness of Professional Development Programs and Its Relationship with Teaching Performance and Student Learning Outcomes in the Public Elementary Schools in Area II, Division of Batangas

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ABSTRACT

This paper aimed to determine the level of effectiveness of professional development programs and examine their relationship with teaching performance and student learning outcomes in public elementary schools in Area II, Division of Batangas. DepEd Professional Development Priorities for Teachers and School Leaders were issued by the department through the National Educators Academy of the Philippines (NEAP) pursuant to DepEd Order No. 1, s. 2020 to support the realization of the department's goal of continuous upskilling and reskilling of teachers and school leaders that will result in better teaching performance and learning outcomes. However, based on reports, one of the main findings asserts that most professional development programs today are ineffective due to duration of professional development which made significant with enough time for teachers to learn a new strategy and grapple with the implementation problem and the need for more engaging activities and approaches. Also, it was found that nearly 90 percent of participating teacher reported that the professional development was totally useless. Using descriptive method of research, findings revealed a statistically significant positive relationship between the perceived effectiveness of professional development programs and perceived student learning outcomes ($r = .651$, $p < .001$). A statistically significant positive relationship was likewise observed between teaching performance and perceived student learning outcomes ($r = .667$, $p < .001$). These findings indicate associations among the variables but do not establish causal relationships. It is hoped that through this study, different intervention activities as to professional development of teachers would be proposed to continually enhance the teaching performance and the student learning outcomes.

Keywords: professional development programs, teaching performance, student learning outcomes

INTRODUCTION

In the context of education, professional development is a vital force that generates educational improvement because a wide range of specialized training, formal education, or advanced professional learning are aimed at assisting administrators, teachers, and other educators in enhancing their professional knowledge, competence, skill, and effectiveness. Professional development, gaining new skills, continuing education, and career training were achieved after entering the workforce because it has the potential to open opportunities for career advancement, hone existing skills, and learn new ones.

In general, professional development is a framework that pertains to the wide range of activities that teachers may do individually or collectively for the improvement of their professional practice and enhance student learning (Mena, et.al., 2019). In the hope of enhancing teacher practice and student learning outcomes, education systems all over the world invest on significant resources to professional development. Thus, a deeper and better understanding of teacher development is critical to improve teaching quality with the ultimate goal of enhanced student learning outcomes.

In DepEd Order No. 50, s. 2020, DepEd Professional Development Priorities for Teachers and School Leaders were issued by the department through the National Educators Academy of the Philippines (NEAP) pursuant to

DepEd Order No. 1, s. 2020 entitled Guidelines for NEAP Recognition of Professional Development Programs and Courses for Teachers and School Leaders to support the realization of the department's goal of continuous upskilling and reskilling of teachers and school leaders that will result in better teaching performance and learning outcomes (DepEd Memorandum No. 50, s. 2020). As the NEAP has become the attached agency of the DepEd in providing professional development among teachers and school heads, it has the responsibility for the design, development and delivery of professional development with a maintained standards and the quality of training delivery.

Since the department initiated continuous professional development of the teachers and school leaders, teachers' engagement and compliance to professional development programs is significant to help them understand how to deliver effective education, and ensuring that they can adapt to the changing needs of the students. While teachers engage and comply in professional development programs, they remain competent, effective, and innovative when it comes to the skills and techniques they apply inside the classroom. Through constant compliance and engagement, goals of professional development can be achieved successfully and will create a positive impact on the student learning outcomes.

In relative thereto, professional development can enhance teaching performance because it increases the knowledge and practices which results to skills transfer between the teachers and the students. Through enhanced professional development, the quality of student learning outcomes would also be enhanced.

However, based on reports, one of the main findings asserts that most professional development programs today is ineffective due to duration of professional development which made significant with enough time for teachers to learn a new strategy and grapple with the implementation problem and the need for more engaging activities and approaches. Also, according to the study of Joyce and Showers, it was found that nearly 90 percent of participating teacher reported that the professional development was totally useless (Eliwale, 2019).

It is in this light that the researcher wanted to conduct a study on the effectiveness of professional development programs and their relationship with teaching performance and student learning outcomes in the Public Elementary Schools in Area II, Division of Batangas. It is hoped that through this study, the level of effectiveness of the professional development programs relative to the level of the teaching performance and the quality of student learning outcomes would be determined and an intervention program would be proposed to continually enhance professional development of teachers and school leaders.

LITERATURE REVIEW

Professional development is essential in education because it allows educators to continue growing and learning throughout their careers, which is intended to refine skills and assist teachers advance in an ever-changing world. The success of an institution in terms of teaching performance and student learning lies on how teachers developed their professional growth to continually enhance their knowledge and skills, which can be done through professional development programs.

Organized opportunities for teacher development have a long history in other countries including the United States even in the 19th century and the origin of the current systems of schooling (Heller, 2020). As the world becomes increasingly competitive and constantly changing, it is but a very important matter to develop professional learning and continual development to become more successful in achieving career goals.

Antley (2020) claimed that Professional Development (PD) refers to education that is on a continuous process and a training for career development after a person has entered the workforce to help them gained new knowledge and develop new skills. Every professional who actively participates in professional development and continuous learning will reap numerous benefits. Through PD, individuals can expand their knowledge base as there were new experiences that will give new ideas which would solidify their knowledge and increase their expertise in the field. Also, through PD, the confidence and self-reliance of teachers can be boosted. Truly, as an individual gained new knowledge and skills, his/her confidence increases because of additional learnings that he gained and achieved.

According to Haqq (2017) many sectors require professional development for professionals to consistently progress in their careers and experience new possibilities to examine their own skills and talents and optimize their own potentials, hence, teachers as one among the group of professionals must develop their engagement on PD. Tucker (2018) mentioned that as teachers, they must experience how to be engaging and positive as possible. He added that teacher engagement is a multidimensional motivational construct that reflects a teacher's choice to dedicate energy resources to their work. In teacher engagement there is that human connection between the satisfaction of teachers and the achievement of the students. As teachers become more engaged, students would become more attentive to the lesson.

Furthermore, paying attention to the activities provided in the trainings is essential in order for individuals to plan or preview their thoughts and actions, as well as monitor and regulate their thoughts and actions. Teachers who pay attention to the activities in the trainings will grasp, learn, and remember the training process, and their takeaways will apply in the study field.

Teacher engagement has four dimensions as discussed by Durksen (2016). First is the cognitive engagement where teachers show attentiveness to the activities provided in the PD programs while engaging physically and psychologically on trainings. Second is the emotional engagement which entails the teachers' feelings about, the degree of dedication and emotional response to work. This can be manifested on how teachers integrate the topics on trainings in their day-to-day interactions with the students as they understand their role as a teacher and as a learner. Third is the social engagement with students in which teachers' interactions with the students affects their feelings of energy at work. This further entails that as teacher wanted to become more engaged socially with the students, they would exert effort, persistence and contribution to the discussion on trainings to learn more and determine their role performances during trainings. And lastly is the social engagement with colleagues in which teachers' interactions with their colleagues affect their feelings. As teachers engaged socially, they manifest investment on learning including valuing, self-efficacy, self-regulation and goal setting and at the same time engaging in the pursuit of professional identity and professional vision.

On the other hand, teacher compliance as equally important as teacher engagement in the professional development programs. The main focus of teacher compliance is how teachers respond positively to the call of trainings and their willingness to attend PD programs. Teachers who are attracted to gain further knowledge and skills are complying very well to the trainings. According to Johnson (2020) teacher compliance is not just merely being present into PD programs for the sake of complying, but teachers must have a deeper understanding on the development of quality performance with the training through engagement in opportunities for PD programs. Further, compliance can be shown by developing and communicating plans to fill in key roles, providing assistance to colleagues and participating actively to trainings from the beginning till the end.

At present, teachers really need to improve themselves professionally in order to keep updated with the current trends of educational growth and development in particular with the approaches, techniques and strategies in the teaching learning process. Teaching performance as the observable outcomes in the classroom and the set of actions, attitudes, and behaviors in the teaching – learning environment that results in achieving educational goals for students. Teaching performance can produce quality students because of the effective and efficient teaching learning process rooted in content knowledge of teachers, quality of instruction, teaching climate, classroom management, professional behavior and teachers' belief.

Similarly, in developing a teaching performance that truly motivates students to learn, classroom management is an essential factor that must be given attention to. Tingley (2021) asserted that excellent classroom management entails more than merely keeping every student seated and silent; rather, it entails developing strong relationships with students through the construction of classroom rules and procedures that employ a variety of approaches to keep students' attention and focus.

Teaching performance can also be determined based on the learning outcomes. Student learning outcomes (SLO) are the expected knowledge, skills, abilities, or attitudes of students. The knowledge, abilities, and attitudes of students are described by their learning outcomes. The emphasis in SLO is on the student, not the activity (Anderson, 2017). Knowledge was determined when students learn the subject matter very well, understand and absorb the lessons on their own, and demonstrate the ability to grasp lessons easily. Also, as students foster the

utilization of prior information to fully comprehend the following lesson, it is expected from students to demonstrate the ability to recollect facts and information from the prior lesson. Further, in the acquisition of knowledge, students are expected to demonstrate the ability to solve difficulties on their own and the ability to evaluate and assess the worth and value of the lesson learned, as well as, the application of analytical and critical thinking skills needed in their daily decision making (Allen, 2018)

Skills is another component that determines the student learning outcomes. Skills are defined as the learned ability to act with determined results which were executed well with a given amount of time, energy or both (Hussain, 2020). Skills among students are developed through participating in school academic activities and enjoying learning despite of different tasks given. When students are skilled, they make creative outputs of learning and contribute to the class discussions and activities. Further, a skilled student shows the ability to improve his problem-solving skills and the attributes and qualities vital to effective performance.

Similarly, in learning, it is important that students maintain their interest into it and accomplish task independently. Having a positive attitude toward learning means taking courage in doing the given tasks and showing patience, diligence and resilience in learning. Moreover, students with proper attitude have a high regard for honesty in meeting school standards and in valuing teamwork that influence other's ability to learn effectively (Metin, et.al. (2017)

Truly, professional development programs help augment and raise the quality of teacher performance and student learning outcomes.

Research Questions

This study aimed to determine the level of effectiveness of professional development programs and its relationship with teaching performance and student learning outcomes in the Public Elementary Schools in Area II, Division of Batangas.

Specifically, this study sought to answer the following questions:

1. What is the profile of the teachers and school heads in terms of:
 - 1.1. age;
 - 1.2. sex;
 - 1.3. civil status;
 - 1.4. position;
 - 1.5. highest educational attainment; and
 - 1.6. level of trainings attended?
2. What is the level of effectiveness of professional development programs in terms of:
 - 2.1. teacher engagement;
 - 2.2. teacher compliance;
 - 2.3. achievement of goals; and
 - 2.4. impact on student learning?
3. What is the level of teaching performance with respect to:
 - 3.1. content knowledge;

- 3.2. quality of instruction;
- 3.3. teaching climate;
- 3.4. classroom management;
- 3.5. professional behavior; and
- 3.6. teachers' belief?
4. What is the quality of student learning outcomes as regards to:
 - 4.1. knowledge;
 - 4.2. skills; and
 - 4.3. attitude?
5. Is there significant relationship between the level of effectiveness of professional development programs and the quality of student learning outcomes?
6. Is there significant relationship between the level of teaching performance and the quality of student learning outcomes?
7. Is there significant difference between the profile of the respondents and the level of effectiveness of professional development programs?
8. Is there significant difference between the profile of the respondents and the level of teaching performance?
9. Is there significant difference between the profile of the respondents and the quality of student learning outcomes?
10. Is there significant difference in terms of the responses of the two groups of respondents?
11. Based on the result, what intervention program may be proposed?

Scope and Limitation

This study focused on the evaluation of the effectiveness of professional development programs and its impact in raising the quality of teaching and student learning outcomes and achievement in the Public Elementary Schools in Area II , Division of Batangas. The results of the study served as a basis in the development of an Intervention Program.

Content-wise, the data and analysis of the study focused on the correlation between the level of effectiveness of professional development programs and the quality of student learning outcomes , as well as the correlation between the level of the teaching performance and the quality of student learning outcomes. Also, it determined the difference on the profile of the respondents and the level of effectiveness of professional development programs; the profile of the respondents and the level of teaching performance; the profile of the respondents and the quality of student learning outcomes.

The independent variables consisted of the profile of the respondents as to age, sex, civil status, highest educational attainment and level of trainings attended. While the dependent variables pertained to the level of effectiveness of professional development programs in terms of teacher engagement, teacher compliance, achievement of goals, and impact on student learning. Another set of dependent variables covered the level of teaching performance with respect to content knowledge , quality of instruction, teaching climate, classroom

management, professional behavior and teacher's belief as well as the quality of student learning outcomes as regards to knowledge, skills and attitude.

Context-wise, the study only covered the area identified in the research locale and the data collected from the teacher-respondents of the public elementary schools in Area II, Division of Batangas. The final output of this study is the development of the proposed intervention program.

This study measured student learning outcomes through the perceptions and assessments of teachers and school heads regarding learners' knowledge, skills, and attitudes. The study did not utilize direct measures of student achievement such as standardized test scores, academic grades, or other objective learner performance indicators. Therefore, the findings regarding student learning outcomes should be interpreted as perceived learning outcomes based on respondents' professional observations.

RESEARCH METHODOLOGY

Sampling

The respondents of the study were 115 school heads and 876 teachers. All school heads in Area II were part of the study. Since there are 1 293 public elementary school teachers, a scientific sampling method was applied using Slovin's formula with five percent set as the margin of error. The Fish bowl technique was also applied to determine the teachers who were the respondents of the study.

Table 1 Distribution of Respondents

Districts in Area II	School Heads	Teachers	
		Population	Sample
Bauan East	11	206	136
Bauan West	13	183	126
San Pascual	21	227	145
San Luis	18	170	119
Mabini	17	186	127
Tingloy	13	103	82
Lobo	22	218	141
Total	115	1 293	876

Data Collection

The study utilized a survey questionnaire as the chief instrument to collect data. The questionnaire was based on the gained concepts and insights about the professional development programs and its impact to the teaching performance and student learning.

The first part of the questionnaire focused on the profile of the respondents. The second part was on the level of effectiveness of professional development programs in terms of teacher engagement, teacher compliance, achievement of goals, and relationship on student learning outcomes. The third part focused on the level of teaching performance in terms of content knowledge, quality of instruction, teaching climate, classroom management, professional behavior and teachers' belief. The last part is the quality of student learning outcomes as regards to knowledge, skills and attitude.

In this study, student learning outcomes were operationalized as the perceived learning outcomes of pupils based on the assessments of teachers and school heads. These outcomes were measured using a validated four-point Likert scale covering three dimensions: knowledge, skills, and attitude. The ratings reflect the respondents' professional observations of learners' classroom performance and development rather than direct measures of academic achievement such as test scores or standardized assessments. Consequently, the study focused on respondents' perceptions of student learning outcomes rather than direct measures of academic achievement.

The draft of the questionnaire was checked by the adviser and validated. Also, reliability testing was done using Cronbach Alpha test. The result revealed that the questionnaire contained high internal efficiency level of 0.810 which was higher than the minimum constant value of 0.70, indicating the instrument was reliable and the options in the questionnaire were appropriate for utilization.

The researcher administered the questionnaire to the different elementary schools in Area II using Google Form. Respondents were informed of the purpose of the study and the need for their honest and objective participation. The researcher retrieved the copies of the questionnaire from the respondents soon after they have finished answering the instrument. After all the data were tallied and well-accounted for, these were subjected to statistical treatment with the help of the statistician.

The data gathered from the respondents were given weights ranging from one (1) to four (4) with one (1) representing lowest assessment up to four (4) for highest assessment.

To determine the level of effectiveness of professional development programs, the scale continuum below was used.

Option	Scale	Verbal Interpretation
4	3.50-4.00	Highly Effective (HE)
3	2.50-3.49	Effective (E)
2	1.50-2.49	Less Effective (LE)
1	1.00-1.49	Not Effective (NE)

On the other hand, the following verbal interpretation was used to interpret the level of teaching performance and the quality of student learning outcomes.

Option	Scale	Verbal Interpretation
4	3.50-4.00	Highly Evident (HE)
3	2.50-3.49	Evident (E)
2	1.50-2.49	Less Evident (LE)
1	1.00-1.49	Not Evident (NE)

Data Gathering Procedure

Proper communication with concerned individuals was done after the researcher's request to administer the questionnaire in the field. With the approval of the schools division superintendent, the questionnaire was distributed to the elementary school heads and teachers. It took only one week to retrieve the data needed since a google form was utilized in gathering the data. It was much easier to consolidate the data. The data were then submitted to the statistician for treatment after which the data were analyzed and interpreted using percentage and frequency distribution, weighted mean determine the level of effectiveness of professional development

programs , the level of teaching performance and the quality of student learning outcomes as assessed by the two groups of respondents, Pearson Product Moment Correlation Coefficient to determine the relationship between and among the indicators and variables, Analysis of Variance to determine the significant difference between the profile of the respondents and the level of effectiveness of the professional development programs, the level of teaching performance and the quality of student learning outcomes and t-test to determine the significant difference in the assessments of school heads and teachers regarding the level of effectiveness of professional development programs , the level of teaching performance and the quality of student learning outcomes.

DISCUSSION OF RESULTS AND RECOMMENDATIONS

Profile of Public Elementary School Teachers and School Heads

Age. Age is considered one of the variables that is believed to influence the effectiveness of professional development programs and its impact in raising the quality of teaching and student learning. Table 2 presents the profile of the respondents in terms of age.

Table 2 Profile of Respondents in Terms of Age

	School Heads		Teachers	
Age	Frequency	Percentage	Frequency	Percentage
25 to 29 years old	0	0	42	4.80
30 to 39 years old	14	14.78	215	24.54
40 to 49 years old	63	54.78	425	48.51
50 to 59 years old	39	33.04	194	22.15
Total	115	100.0	876	100.0

Majority of the school heads fall to age group between 40 to 49 years old as data presented 63 out of 115 or 54.78% of the total respondents. Fourteen out of 115 or 14.78% fall between the ages of 30 to 39 while 39 out of 115 or 33.04% belong to age group between 50 to 59 years old. It could be inferred from the results that majority of the school heads are in their middle age between 40 to 49 while no one belongs to ages 25 to 29. Findings revealed that most of the school heads in Area II were in their middle age.

On the other hand, for teacher-respondents, it could also be gleaned that 425 out of 876 or 48.51% of teachers belong to age group between 40-49, while 215 or 24.54% fall in the age bracket of 31 to 40 and there are 194 or 22.14% who belong to age group between 50 to 59. Only 42 out of 876 or 4.80% belong to ages between 25 to 29. Findings entail that most of the respondents belong to ages between 40 to 49.

Based on the result, it could be inferred that school heads and teachers in the elementary level are relatively matured enough and with rich expertise in the field as they already have longer years of undergoing professional development programs.

Sex. Table 3 shows the frequency distribution of the respondents according to sex.

Table 3 Profile of Respondents in Terms of Sex

	School Heads		Teachers	
Sex	Frequency	Percentage	Frequency	Percentage

Male	50	43.48	211	24.09
Female	65	56.52	665	75.91
Total	115	100.00	876	100.00

The group is female dominated which can be inferred that the teaching group is composed of more female and out of these teaching group then the school heads were appointed.

Civil Status. The civil status of school heads was taken as it may have a bearing on their performance. Table 4 presents the gathered results in terms of civil status.

Table 4 Profile of Respondents in Terms of Civil Status

	School Heads		Teachers	
Civil Status	Frequency	Percentage	Frequency	Percentage
Single	13	11.30	48	5.48
Married	102	88.70	825	94.18
Widow/er	0	0	3	0.34
Total	115	100.00	876	100.00

The table shows that 102 out of 115 or 88.70% school heads were married, likewise, 825 out of 876 or 94.18% of teacher respondents were married. Thirteen school heads and 48 teachers are single while there were 3 teachers or 0.34% of the respondents were widow/widower. Generally, married people are said to be more understanding and mature in dealing with others thus it could be inferred that married school heads and teachers can perform well in the field through the help of the professional development programs given to them

Position. Table 5 presents the data gathered in terms of position.

Table 5 Profile of the School Heads in Terms of Position

Position	School Heads	
	Frequency	Percentage
Head Teacher I	38	33.04
Head Teacher II	11	9.57
Head Teacher III	22	19.13
Principal I	26	22.61
Principal II	12	10.43
Principal III	5	4.34
Principal IV	1	0.08
Total	115	100.00

The table shows that there are 38 Head Teacher I or 33.04% while 26 out of 115 or 22.61 are Principal I. Eleven school heads are Head Teacher II and 22 are Head Teacher III obtaining a percentage of 9.57% and 19.13 respectively. Also, there are 12 out of 115 or 10.43% are Principal II, 5 were Principal III and only one respondent has a position of Principal IV. Based on the result, majority of the school heads are Head Teachers because of the item given for Teacher-in-Charge before. Many TICs were given Head Teacher Positions.

Table 6 Profile of Teacher in Terms of Position

Position	School Heads	
	Frequency	Percentage
Teacher I	112	12.79
Teacher II	187	21.35
Teacher III	435	49.66
Master Teacher I	94	10.73
Master Teacher II	48	5.47
Total	876	100.00

As shown in the table, 435 out of 876 or 49.66% were Teacher III, 187 or 21.25% hold the position of Teacher II and 112 or 12.79% were Teacher I. Also, 94 or 10.73 were Master Teachers I and 48 or 5.47% were Master Teacher II. Findings revealed that majority of the teacher-respondents holds the position of Teacher III which entails that this is the common position of teachers in the study context.

Highest Educational Attainment

Table 7 presents the data gathered in terms of highest educational attainment.

Table 7 Profile of Respondents in Terms of Highest Educational Attainment

Highest Educational Attainment	School Heads		Teachers	
	Frequency	Percentage	Frequency	Percentage
Bachelor's Degree Holder	0	0.00	48	5.48
MA units earner	38	33.04	704	80.37
Masters' Degree	39	33.91	113	12.90
PhD/ EdD units earner	30	26.09	10	1.14
Doctorate Degree Holder	8	6.96	1	0.11
Total	115	100.00	876	100.00

It could be seen in the table that school heads have pursued their graduate studies as MA units earner or Masters' Degree Holder as data shows that 38 out of 115 school heads were MA units earner and 39 out of 115 or 33.91 were Masters' Degree Holder. It was also noticeable that 30 out of 115 or 26.09% were taking up doctoral degree for professional development and 8 school heads or 6.96% were already doctorate degree holders.

Relatively, 704 out of 876 teachers or 80.37% were MA units earner and 113 or 12.90% were Masters' Degree Holder. Also, there were 10 out of 876 who are taking doctorate units while there is 1 who is a doctorate degree holder. Forty-eight out of 876 or 1.14% were Bachelor's Degree holders. It could be inferred that based on their profile, those who are not yet pursuing their masters' degree are the newly hired teachers or Teacher I.

This data indicates that a considerable proportion of the respondents have pursued more studies or professional development beyond a bachelor's degree, with majority of respondents having finished or pursuing graduate degrees. This could indicate that the teachers in the sample are committed to ongoing learning and professional development. The findings emphasize the relevance of postgraduate degrees and continued education in the teaching profession, which may have repercussions for the teachers' qualifications and skills in the study or research setting. For better understanding of the findings, more study or evaluation of the impact of educational attainment on the findings may be necessary.

Level of Trainings Attended

Table 8 presents that data gathered in terms of level of trainings attended.

The table shows that school heads have attended trainings on a higher level such as regional, national and even international levels. Data shows that 45 out of 115 school heads or 39.13% have attended trainings on the regional training, 67 or 58.26% have attended trainings on the national levels and there were 3 who have attended in the international level.

Table 8 Profile of Respondents in Terms of Level of Trainings Attended

	School Heads		Teachers	
Level of Trainings Attended	Frequency	Percentage	Frequency	Percentage
District	0	0	1	0.11
Division	0	0	16	1.83
Regional	45	39.13	591	67.47
National	67	58.26	267	30.48
International	3	2.61	1	0.11
Total	115	100.00	876	100.00

Further, data on teachers' training also shows that majority of the teachers have attended trainings in the division, regional and national levels as 591 out of 876 or 67.47% have attended regional trainings, 267 out of 875 or 30.48% have attended the national training and there was one teacher who have attended the international training. Having competent and well-rounded school heads is one of the most important factors that defines an organization's success. One way of achieving this is learning more about competence through training and seminars and professional development programs.

Level of Effectiveness of Professional Development Programs

Teacher Engagement

Teachers who grow professionally engage themselves in the professional development programs. Table 9 presents the level of effectiveness of professional development programs as regards to teacher engagement as assessed by the teachers and school heads.

Table 9 Level of Effectiveness of Professional Development Programs in terms of Teacher Engagement

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Shows attentiveness to the activities provided in the trainings.	3.95	HE	3.85	HE
2. Engages physically and psychologically on trainings.	3.88	HE	3.80	HE
3. Relates to the ideas and discussions presented on trainings	3.60	HE	3.65	HE
4. Integrates the topics on trainings to their day-to-day interactions with the students	3.50	HE	3.50	HE
5. Understands their role performances during trainings as a teacher and as a teacher learner.	3.57	HE	3.58	HE
6. Focuses on their role performances during trainings	3.65	HE	3.70	HE
7. Exerts effort , persistence and contribution to the discussion on trainings	3.73	HE	3.60	HE
8. Shows interest, enthusiasm, enjoyment, and belonging in the activities conducted on trainings	3.79	HE	3.70	HE
9. Manifests psychological investment on learning including valuing, self-efficacy, self-regulation and goal setting	3.75	HE	3.70	HE
10. Engages in the pursuit of professional identity and professional vision	3.65	HE	3.57	HE
Overall	3.71	HE	3.64	HE

Both teachers and school heads said that teacher engagement to professional development programs is highly effective as a composite mean of 3.71 and 3.65 was achieved. Both group of respondents claimed that teachers show attentiveness to the activities provided in the training since this indicator achieve the highest mean of 3.95 and 3.85 respectively. It was also highly effective that teachers engaged physically and psychologically on trainings with a mean of 3.88 as assessed by school heads and 3.80 as assessed by the teacher-respondents

Teacher Compliance

As teachers, everyone is expected to be responsive and willing to learn and gain new knowledge and understanding to augment the necessary skills in the teaching- learning process. Table 10 presents the level of effectiveness of professional development programs in terms of teacher compliance.

Table 10 Level of Effectiveness of Professional Development Programs in terms of Teacher Compliance

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Responds positively to the call of trainings	3.74	HE	3.71	HE
2. Shows willingness to attend to trainings and development programs	3.81	HE	3.75	HE
3. Gains further knowledge and skills	3.72	HE	3.70	HE
4. Comes and leaves on time in the training venue	3.67	HE	3.60	HE

5. Jumpstarts effective job performance with the training	3.49	E	3.50	HE
6. Develops quality performance in activities	3.56	HE	3.60	HE
7. Engages in opportunities for professional development trainings	3.65	HE	3.70	HE
8. Develops and communicates specific plans to fill in key roles	3.68	HE	3.70	HE
9. Provides assistance to colleagues based on take aways on trainings	3.63	HE	3.55	HE
10. Participates actively from the start till the end of the training duration	3.66	HE	3.58	HE
Overall	3.66	HE	3.64	HE

The level of effectiveness of professional development programs in terms of teacher compliance is highly effective as assessed by school heads with an overall mean of 3.66 and an overall mean of 3.64 as assessed by the teachers.

Achievement of Goals

Achieving goals is one of the most important actions to do big things, hence, it is necessary to be aware of its importance in applying knowledge and skills in the learning process. Table 11 presents the level of effectiveness of professional development programs in terms of achievement of goals.

Table 11 Level of Effectiveness of Professional Development Programs in terms of Achievement of Goals

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Expands the arsenal of things to do based on the trainings conducted and attended	3.45	E	3.48	E
2. Completes the course or training to develop the workplace skills	3.58	HE	3.42	E
3. Seeks out leadership opportunities to develop leadership skills necessary in achieving the objectives of the training	3.46	E	3.50	HE
4. Expands professional networks to be exposed to new ideas and learn continuously	3.56	HE	3.42	E
5. Identifies tangible steps in achieving development targets and objectives	3.51	HE	3.55	HE
6. Aspires for a well-defined and unambiguous target to know exactly what is being wanted to	3.45	E	3.60	HE
7. Evaluates the training to measure the set targets	3.52	HE	3.50	HE
8. Sets reasonable and realistically targets and objectives	3.54	HE	3.60	HE
9. Aligns the targets with a long-term aspirations and values	3.54	HE	3.50	HE
10. Sets a deadline for the planned activities to stay on track and motivated	3.59	HE	3.60	HE
Overall	3.52	HE	3.52	HE

As to the professional development programs in terms of achievement of goals, the level of effectiveness is highly evident as assessed by school heads and teachers as both gained a composite mean of 3.52. As teachers engage and complied to the development programs, goals are also determined to achieve.

Impact on Students Learning Outcomes

The student learning outcomes can be a product of effective PD programs where teachers engage, complied, and achieve goals. Table 12 presents the level of effectiveness of professional development programs in terms of impact on student learning outcomes.

As assessed by the school heads, an overall mean of 3.74 was obtained while an overall mean of 3.66 was obtained in the assessment of teachers, both indicating that the level of effectiveness of professional development programs as regards to student learning outcomes is highly effective.

Table 12 Level of Effectiveness of Professional Development Programs in terms of Impact on Student Learning Outcomes

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Engages students to meaningful learning experiences	3.79	HE	3.65	HE
2. Translates the learnings from professional development into students' understanding of the subject matter.	3.70	HE	3.60	HE
3. Enhances the quality of processing the standards of professional development in coherence to students' needs	3.54	HE	3.50	HE
4. Helps the students engage in active learning through the development of learning trajectories	3.86	HE	3.80	HE
5. Influences the enhancement of learners' achievement through the development of instructional practices	3.90	HE	3.85	HE
6. Adopts practices from the professional development of teachers that would reflect on the teaching – learning process.	3.84	HE	3.80	HE
7. Attends to professional development to gain better knowledge in assessing the learners, thus, making the assessment more curriculum-focused	3.71	HE	3.65	HE
Undergoes professional development programs to make students learn more purposefully	3.71	HE	3.60	HE
Uses materials and resources more effectively to ensure positive learning outcomes	3.62	HE	3.57	HE
Develops a successful teaching – learning process to help students achieve fewer difficulties in understanding the lessons	3.77	HE	3.60	HE
Overall	3.74	HE	3.66	HE

Level of Teaching Performance

Content knowledge

Content knowledge is an essential tool to develop quality teaching performance. Table 13 presents the level of teaching performance in terms of content knowledge.

Table 13 Level of Teaching Performance in terms of Content Knowledge

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Demonstrates an understanding and in-depth knowledge of content and maintains an ability to convey this content to students.	3.83	HE	3.80	HE
2. Maintains on-going knowledge and awareness of current content developments.	3.78	HE	3.75	HE
3. Designs and implements standards-based courses/lessons/units using national standards.	3.47	HE	3.33	E
4. Gives the students the opportunity to learn from inquiries and the discovery of new information	3.75	HE	3.80	HE
5. Helps students develop better understanding of new information	3.87	HE	3.90	HE
6. Anticipates student challenges , misconceptions, strengths, interests, capabilities and background knowledge	3.88	HE	3.90	HE
7. Evaluates student ideas evident in work, talk, actions and interactions	3.81	HE	3.85	HE
8. Crafts and uses appropriate explanations at any point in time about concepts, procedures, representations,	3.76	HE	3.82	HE
9. Creates and adapts resources for instruction	3.61	HE	3.57	HE
10. Selects student tasks to elicit student thinking	3.78	HE	3.60	HE
Overall	3.75	HE	3.73	HE

The level of teaching performance as to content knowledge was highly evident based on the assessment of school heads obtaining an overall mean of 3.75 and 3.73 as assessed by the teachers.

Quality of Instruction

Table 14 presents the level of teaching performance in terms of quality of instruction.

Table 14 Level of Teaching Performance in terms of Quality of Instruction

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Delivers instruction rooted in content , facilitating the discovery and depth of new knowledge in a constructivist manner	3.88	HE	3.80	HE
2. Engages students in the learning process and relays relevant knowledge effectively	3.58	HE	3.65	HE

3. Uses a dynamic and different delivery styles.	3.51	HE	3.60	HE
4. Uses best teaching practices and has clear and high expectations for students	3.76	HE	3.78	HE
5. Encompasses the use of modern technology to aid teaching and learning	3.47	E	3.57	HE
6. Designs learning opportunities that allow students to participate in empowering activities in which they understand that learning is a process and mistakes are a natural part of the learning.	3.81	HE	3.80	HE
7. Incorporates student experiences, interests and real-life situations in instruction	3.82	HE	3.90	HE
8. Links concepts and key ideas to students' prior experiences and understandings, uses multiple representations, examples and explanations.	3.82	HE	3.75	HE
9. Works with other teachers to make connections between and among disciplines.	3.58	HE	3.60	HE
10. Makes lesson connections to community, society, and current events.	3.78	HE	3.85	HE
Overall	3.70	HE	3.73	HE

It could be seen in the table that the level of teaching performance as to quality of instruction is highly evident based on the assessment of school heads and teachers with a composite mean of 3.70 and 3.73. Quality instruction entails the teacher's ability to successfully engage pupils in the learning process and transmit pertinent information. It is more than just talking to pupils or reading slides from a PowerPoint presentation. A good lesson should be dynamic, with multiple delivery approaches (Sugonro, 2017).

Truly, the quality of instruction creates an impact to the teaching performance as Goldhaber (2018) affirmed that the quality of instruction shows a stronger relationship to student achievement which is an end process of the teaching performance.

Teaching Climate

Table 15 presents the level of teaching performance in terms of teaching climate.

Table 15 Level of Teaching Performance in Terms of Teaching Climate

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Creates learning environments where students are active participants as individuals and as members of collaborative groups	3.68	HE	3.70	HE
2. Motivates students and nurtures their desire to learn in a safe, healthy and supportive environment which develops compassion and mutual respect	3.83	HE	3.65	HE
3. Cultivates cross cultural understandings and the value of diversity	3.74	HE	3.57	HE

4. Encourages students to accept responsibility for their own learning	3.79	HE	3.60	HE
5. Displays effective and efficient classroom management that includes classroom routines promoting comfort , order and appropriate student behaviors	3.79	HE	3.80	HE
6. Provides students equitable access to technology , space, tools , and time.	2.98	E	2.87	E
7. Allocates time for students to engage in hands-on experiences, discusses and processes content and makes meaningful connections	3.56	HE	3.70	HE
8. Prepares lessons that engages students' participation through empowering activities	3.85	HE	3.85	HE
9. Creates an environment where student work is valued, appreciated and used as a learning tool	3.90	HE	3.85	HE
10. Fosters high, clear expectations and positive relationships and promotes active learning	3.87	HE	3.80	HE
Overall	3.70	HE	3.64	HE

As to teaching climate, the table indicated that the level of teaching performance is highly effective as a composite mean of 3.70 and 3.64 was achieved. In the teaching climate, the emotional atmosphere which determines the learning and progress made by the students was given importance and attention. A classroom that has an effective teaching climate has high regards to learning.

Classroom Management

Table 16 presents the level of teaching performance in terms of classroom management.

Table 16 Level of Teaching Performance in Terms of Classroom Management

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Organizes the classroom seating , using space etc.	3.64	HE	3.65	HE
2. Establishes classroom rules and procedures	3.90	HE	3.85	HE
3. Organizes teacher materials and supplies	3.78	HE	3.80	HE
4. Motivates students to learn	3.94	HE	4.00	HE
5. Uses multiple methods to systematically gather data about student understanding and ability	3.75	HE	3.75	HE
6. Maintains students' attention and focus	3.73	HE	3.68	HE
7. Plans and prepares lessons	3.87	HE	3.90	HE
8. Manages student behavior -discipline	3.85	HE	3.90	HE

9. Manages transitions -subject to subject and class to class	3.80	HE	3.70	HE
10. Applies differentiated instruction in recognition of the individual differences	3.62	HE	3.57	HE
Overall	3.79	HE	3.78	HE

As it could be gleaned in the table, as to classroom management, the level of teaching performance is highly evident as overall mean of 3.79 and 3.78 was achieved. This entails that classroom management is an essential tool that truly motivates the students to learn. Teachers claimed that they motivate the students. Also, planning and preparing lessons reflect a positive classroom management and it still poses a highly evident result.

While, least in the rank obtained a mean of 3.64 and 3.65 which entails management of the classroom seating, using space, etc. This shows that teachers need to enhance their classroom management when it comes to physical attributes because Tingley (2021) asserted that excellent classroom management entails proper space for the students. When the classroom is overcrowded, it would be impossible for the students to learn collaboratively and confidently. It was a challenge among teachers to produce and maintain an ordered environment for students and provide chances of meaningful academic learning that fosters social and emotional growth.

Professional Behavior

Table 17 presents the level of teaching performance in terms of professional behavior.

Table 17 Level of Teaching Performance in Terms of Professional Behavior

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Shows a positive attitude everyday	3.81	HE	3.75	HE
2. Sets high standards for yourself and for students	3.68	HE	4.00	HE
3. Puts students welfare ahead of personal interest	3.89	HE	3.70	HE
4. Shows creativity when working with student	3.70	HE	3.80	HE
5. Exhibits personal responsibility for the quality of one's own teaching	3.91	HE	3.80	HE
6. Makes classroom decisions based on students' needs	3.84	HE	3.90	HE
7. Keeps calm in all situations	3.71	HE	3.75	HE
8. Accepts new ideas and changes	3.85	HE	3.85	HE
9. Experiments with innovative teaching practices	3.91	HE	3.85	HE
10. Sees oneself as a lifelong learner.	3.91	HE	3.85	HE
Overall	3.82	HE	3.83	HE

It could be gleaned in the table that the level of teaching performance as to professional behavior is highly evident as the overall mean achieved was 3.82 and 3.83 by the groups of respondents. Findings revealed that

professional behavior significantly contributes to the teaching performance of teachers as Herrity (2022) discussed that teachers can perform well and they can set of high standards not only for themselves but also for students while exhibiting positive attitude. Also, part of it was exhibiting personal responsibility for the quality of one's own teaching and putting students' welfare ahead of teachers' personal interest. Further, keeping calm in all situations and accepting new ideas and changes , and experimenting innovative teaching practices manifest professional behavior as well as seeing oneself as a lifelong learner.

Teachers' Belief

Table 18 shows the level of teaching performance in terms of teachers' belief.

Table 18 Level of Teaching Performance in Terms of Teachers' Belief

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Believes that Knowledge of the subject area is the most important part of being an effective teacher.	3.92	HE	3.95	HE
2. Knows that students achieve more in classes in which teachers encourage them to express their personal beliefs and feelings.	3.86	HE	3.88	HE
3. Affirms that in order to maximize the teaching process, students must feel comfortable in discussing their feelings and beliefs.	3.96	HE	3.90	HE
4. Addresses students' social, emotional, and physical needs which are as important to learning and meeting their intellectual needs.	3.92	HE	3.95	HE
5. Helps students understand about themselves being influenced by learning by working on their academic skills	3.92	HE	3.95	HE
6. Helps students who are uninterested in learning to get in touch with their natural motivation to learn.	3.87	HE	3.80	HE
7. Motivates students to learn by getting to know them at a personal level	3.91	HE	3.90	HE
8. Gives students choices in their learning tasks	3.89	HE	3.90	HE
9. Builds up confidence and good relationships among learners and colleagues	3.86	HE	3.85	HE
10. Commits to the standards and ethics of teachers' work and manages duties responsibly .	3.78	HE	3.75	HE
Overall	3.89	HE	3.88	HE

As it could be seen in the table, the level of teaching performance in terms of teacher' belief is highly evident as school heads and teachers assessment achieved an overall mean of 3.89 and 3.88 respectively.

Teachers' beliefs, attitudes and practices are important for understanding and improving educational processes.

As teachers, they believe that helping students understand about themselves being influenced by learning and by working on their academic skills is a necessary step to enhance the students' learning as this indicator gained the highest mean of 3.92 and 3.95, as well as addressing students' social, emotional, and physical needs which are as important to learning and meeting their intellectual needs. By having these positive beliefs, teachers cope

with challenges and has the ability to shape students' learning environment and influence student motivation and achievement.

Quality of Student Learning Outcomes

Student learning outcomes are the expected knowledge, skills and attitudes of students that gave emphasis on the students themselves and not on the activity. In this study, the quality of student learning outcomes was determined as to knowledge, skills and attitudes.

Knowledge

Table 19 presents the quality of student learning outcomes as regards to knowledge.

Table 19 Quality of Student Learning Outcomes as regards to Knowledge

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Learns the subject matter very well	3.88	HE	3.85	HE
2. Understands and absorbs the lessons on his / her own	3.82	HE	3.80	HE
3. demonstrates the ability to grasp lessons easily	3.86	HE	3.70	HE
4. Utilizes prior information to fully comprehend the following lesson	3.75	HE	3.60	HE
5. Demonstrates the ability to recollect facts and information from the prior lesson	3.76	HE	3.50	HE
6. Demonstrates the ability to solve difficulties on one's own	3.84	HE	3.47	E
7. Internalizes ideas gained and applies them to actual everyday tasks	3.87	HE	3.75	HE
8. Applies analytical and critical thinking skills in learning as used to daily decision making	3.68	HE	3.55	HE
9. Demonstrates the ability to evaluate and assess the worth and value of lessons learned.	3.75	HE	3.50	HE
10. Demonstrates effective task management that establishes the ability to self-regulate learning	3.72	HE	3.65	HE
Overall	3.79	HE	3.64	HE

First in the rank which obtained the highest mean from both assessment indicates that student learn the subject very well. As students know the subject matter and they learn its value, their motivation to learn would increase and may have share their passion and enthusiasm for the subject, foster critical thinking, explain why a topic is important, connect course concepts to the real world, connect to the community, and apply learning (Teng, 2021)

There is also a high regard to students who understand and absorb their lesson on their own with a mean of 3.82 and 3.80 and internalize ideas gained and apply them to actual everyday use as a mean of 3.87 and 3.75 was achieved. Students gain crucial confidence and self-motivation as they begin to take ownership of their learning and achieve success. This can boost their appreciation of a variety of academic courses while also preparing them for personal and professional success later in life.

However, the least mean obtained was 3.68 and 3.55 indicating students' ability to apply analytical and critical thinking skills in learning as used to daily decision making. This entails that the students need more time to reflect on the learning and develop critical thinking skills since critical thinking is at the heart of learning because it allows students to reflect on and comprehend their points of view. Based on personal observation and comprehension, this skill assists a student in determining how to make sense of the world.

Skills

Table 20 presents the quality of student learning outcomes as regards to skills.

Table 20 Quality of Student Learning Outcomes as regards to Skills

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Participates in school academic activities on a regular basis	3.92	HE	3.85	HE
2. Enjoys learning despite of different tasks given	3.72	HE	3.50	HE
3. Contributes to the class discussions and activities	3.71	HE	3.65	HE
4. Makes creative outputs of learning	3.87	HE	3.80	HE
5. Organizes facts systematically to enhance skills development	3.72	HE	3.60	HE
6. Acquires practical skills in different learning areas	3.80	HE	3.65	HE
7. Improves problem solving skills and addresses work-related challenges effectively	3.76	HE	3.60	HE
8. Improves attributes and qualities vital to effective performance	3.64	HE	3.55	HE
9. Maximizes one's potential and achieve academic goals and objectives	3.86	HE	3.85	HE
10. Distinguishes important and necessary points to learning	3.87	HE	3.80	HE
Overall	3.79	HE	3.67	HE

As regards to skills, the quality of student learning outcomes is highly evident as an overall mean obtained was 3.79 and 3.67. The measurable skills, abilities, knowledge, or values that students should be able to display as a result of completing a course are referred to as learning outcomes. They are student-centered rather than teacher-centered in the sense that they outline what students will do rather than what the instructor will teach.

Attitudes

Table 21 presents the quality of student learning as regards to attitudes.

Table 21 Quality of Student Learning Outcomes as regards to Attitude

Indicator	School Heads		Teachers	
	WM	VI	WM	VI
1. Maintains learning interest at all times	3.72	HE	3.75	HE

2. Submits school requirements immediately	3.84	HE	3.47	E
3. Accomplishes tasks independently	3.73	HE	3.65	HE
4. Shows positive attitudes towards given tasks	3.79	HE	3.80	HE
5. Takes courage in doing the given tasks	3.76	HE	3.65	HE
6. Shows patience, diligence, and resilience in learning	3.76	HE	3.65	HE
7. Has a high regard for honesty when it comes to meeting school standards	3.77	HE	3.55	HE
8. Influences others' ability to learn effectively	3.76	HE	3.75	HE
9. Values teamwork and works collaboratively among peers	3.96	HE	3.90	HE
10. Appreciates the importance of learning	3.95	HE	3.90	HE
Overall	3.79	HE	3.71	HE

When it comes to attitude, the quality of student learning outcomes is highly evident as an overall mean of 3.79 and 3.71 was obtained. Attitude has an important role in developing quality student learning outcomes as its essential principle underlying in any teaching is that the student has the ability to learn and change and desires for these things to occur regardless of past performance. Negative attitudes restrict, if not completely prevent, learning, good transformation, and growth.

Relationship Between the Level of Effectiveness of Professional Development Programs and the Quality of Student Learning Outcomes

Table 22 presents the summary of correlation test between the level of effectiveness of professional development programs and the quality of student learning outcomes.

Table 22 Relationship Between the Level of Effectiveness of Professional Development Programs and the Quality of Student Learning Outcomes

Variables	Sample Size	Pearson r correlation	p value	decision	Conclusion
Level of effectiveness of professional development programs and Quality of student learning outcomes	991	.651	$p < .001$	Reject H_0	Significant

There is a significant correlation between the level of effectiveness of professional development programs and the quality of student learning outcomes, $r = .651$, $n = 991$, $p < .001$. There is a significantly positive relationship between the level of effectiveness of professional development programs and perceived student learning outcomes ($r = .651$, $p < .001$). This finding indicates that respondents who reported higher levels of professional development effectiveness also tended to report higher levels of student learning outcomes. However, the result should not be interpreted as evidence that professional development programs directly caused improvements in student learning outcomes because the study employed a descriptive-correlational research design.

Based on Cohen's guidelines for interpreting correlation coefficients, the obtained correlation coefficient ($r = .651$) indicates a large positive relationship between the perceived effectiveness of professional development programs and perceived student learning outcomes. This suggests that respondents who reported higher levels

of professional development effectiveness also tended to report higher levels of student learning outcomes. However, the correlation does not establish a causal relationship between the variables.

Truly, the right kind of professional development for teachers can directly contribute to improved student learning as Gonong (2022) reported that the need for professional training and learning was on top of the imperatives for teachers and they emphasized the importance of enhancing their practice to continually uplift the student learning outcomes. Findings can also be supported by Yoon's (2019) study that teachers' professional development helped them develop pedagogies which impacted pupils' learning.

Relationship Between the Level of Teaching Performance and the Quality of Student Learning Outcomes

Teaching performance can be evaluated to guide teacher skill improvement, recognize and reinforce teaching excellence, assist teachers in focusing on student outcomes, and plan service education activities. Table 23 presents the relationship between the level of teaching performance and the quality of student learning outcomes

Table 23 Relationship Between the Level of Teaching Performance and the Quality of Student Learning Outcomes

Variables	Sample Size	Pearson correlation	p value	decision	Conclusion
Level of Teaching Performance and the Quality of Student Learning Outcomes	991	.667	$p < .001$	Reject H_0	Significant

It could be seen in the table that there is a significant correlation between the level of teaching performance and the quality of student learning outcomes, $r = .667$, $n = 991$, $p < .001$. There is a significant large positive relationship between teaching performance and perceived student learning outcomes ($r = .667$, $p < .001$). The finding suggests that higher teaching performance ratings were associated with higher ratings of student learning outcomes. Nevertheless, the correlation does not imply a cause-and-effect relationship, and other factors not examined in the study may have contributed to the observed association.

The correlation coefficient ($r = .667$) likewise indicates a large positive relationship between teaching performance and perceived student learning outcomes based on Cohen's guidelines. This suggests that higher teaching performance ratings were associated with higher ratings of student learning outcomes. Nevertheless, the observed relationship should not be interpreted as evidence of causation because the study utilized a descriptive-correlational research design

This is in contrast to the study of Bonney, et.al. (2022) that even though there is a quality teaching performance, it did not reflect much in the performance of the students. However, Akram (2019) made a study on the Relationship Between the Teacher Effectiveness and Student Achievement and found out that there is significant relationship between teacher effectiveness and student achievement

Difference Between the Profile of the Respondents and the Level of Effectiveness of Professional Development Programs

Table 24 presents the analysis of variance and T-test for Independent Samples between the profile of the respondents and the level of effectiveness of professional development programs.

Table 24 Difference Between the Profile of the Respondents and the Level of Effectiveness of Professional Development Programs

Grouping Variables	F or t statistic	degrees of freedom	p value	Decision	conclusion
Age	2.034	(3,987)	.107	Failed to Reject H_0	Not Significant

Sex	-1.619	989	.106	Failed to Reject Ho	Not Significant
Civil Status	1.987	(2,988)	.138	Failed to Reject Ho	Not Significant
Position	1.087	(2,896)	.102	Failed to Reject Ho	Not Significant
Education	3.761	(4,986)	.005	Reject Ho	Significant
Trainings	.981	(4,986)	.417	Failed to Reject Ho	Not Significant

From the Analysis of Variance result, there is a significant difference for the level of effectiveness of professional development when respondents are group according to Highest Educational Attainment, $F(4,986)=3.761$, $p=.005<.05$. Tukey's Post Hoc analysis indicated that the level of effectiveness of professional development of PhD/ EdD unit earner teachers (Mean=3.73) is significantly higher than those of Bachelor degree holder teachers (Mean=3.54).

On the other hand, the Analysis of Variance results indicated that there is no significant difference for the level of effectiveness of professional development when respondents are group according to Age, $F(3,987)=2.034$, $p=.107>.05$, when group according to Civil Status, $F(2,988)=1.987$, $p=.138>.05$, and when group according to Trainings Attended, $F(4,986)=.981$, $p=.417>.05$. This means that the level of effectiveness of professional development does not differ with Age, Civil Status and Trainings Attended of respondents. T-test for Independent samples results indicated that there is no significant difference for the level of effectiveness of professional development when respondents are group according to Sex, $t(989)=-1.619$, $p=.106>.05$. This means that the level of effectiveness of professional development does not differ between male and female teachers.

Difference Between the Profile of the Respondents and the Level of Teaching Performance

Table 25 presents the difference between the profile of the respondents and the level of teaching performance .

Table 25 Difference Between the Profile of the Respondents and the Level of Teaching Performance

Grouping Variables	F or t statistic	degrees of freedom	p value	Decision	conclusion
Age	.283	(3,987)	.838	Failed to Reject Ho	Not Significant
Sex	-.980	989	.327	Failed to Reject Ho	Not Significant
Civil Status	.231	(2,988)	.794	Failed to Reject Ho	Not Significant
Position	.232	(2,879)	.689	Failed to Reject Ho	Not Significant
Education	.930	(4,986)	.446	Failed to Reject Ho	Not Significant
Trainings	.674	(4,986)	.610	Failed to Reject Ho	Not Significant

The Analysis of Variance results indicated that there is no significant difference for the level of teaching performance when respondents are group according to Age, $F(3,987)=.283$, $p=.838>.05$, when group according to Civil Status, $F(2,988)=.231$, $p=.794>.05$, when group according to Highest Educational Attainment, $F(4,986)=.930$, $p=.446>.05$, and when group according to Trainings Attended, $F(4,986)=.674$, $p=.610>.05$. This means that the level of teaching performance does not differ with Age, Civil Status, Position, Highest Educational Attainment, and Trainings Attended of respondents.

T-test for Independent samples results indicated that there is no significant difference for the level of teaching performance when respondents are group according to Sex, $t(989) = -.980, p = .989 > .05$. This means that the level of teaching performance does not differ between male and female teachers.

Difference Between the Profile of the Respondents and the Quality of Student Learning Outcomes

Table 26 presents the difference between the profile of the respondents and the quality of student learning outcomes.

Table 26 Difference Between the Profile of the Respondents and the Quality of Student Learning Outcomes

Grouping Variables	F or t statistic	degrees of freedom	p value	Decision	conclusion
Age	.974	(3,987)	.404	Failed to Reject Ho	Not Significant
Sex	.019	989	.985	Failed to Reject Ho	Not Significant
Civil Status	.532	(2,988)	.883	Failed to Reject Ho	Not Significant
Position	.820	(4,786)	.424	Failed to Reject Ho	Not Significant
Education	.930	(4,986)	.446	Failed to Reject Ho	Not Significant
Trainings	1.244	(4,986)	.291	Failed to Reject Ho	Not Significant

The Analysis of Variance results indicated that there is no significant difference for the quality of student learning outcomes when respondents are group according to Age, $F(3,987) = .974, p = .404 > .05$, when group according to Civil Status, $F(2,988) = .532, p = .883 > .05$, when grouped according to position, $F(4,786) = .820, p = .424 > .05$, when group according to Highest Educational Attainment, $F(4,986) = .930, p = .446 > .05$, and when group according to Trainings Attended, $F(4,986) = 1.244, p = .291 > .05$. This means that the quality of student learning outcomes does not differ with Age, Civil Status, Highest Educational Attainment, and Trainings Attended of respondents.

T-test for Independent samples results indicated that there is no significant difference for the quality of student learning outcomes when respondents are group according to Sex, $t(989) = -.019, p = .985 > .05$. This means that the quality of student learning outcomes does not differ between male and female teachers.

Difference in Terms of the Responses of the Two Groups of Respondents

Table 27 presents the difference in terms of responses of the two groups of respondents.

Table 29 Difference in Terms of Responses of the Two Groups of Respondents

Variable	Computed Value	p value	Decision	Conclusion
Level of Effectiveness of Professional Development Programs	2.037	0.120	Accept	Not Significant
Level of Teaching Performance	1.547	0.124	Accept	Not Significant
Quality of Student Learning Outcomes	2.120	0.237	Accept	Not Significant

As it could be gleaned in the table, there is no significant difference between the assessment of school heads and teachers on the level of effectiveness of professional development programs, level of teaching performance and the quality of student learning outcomes, thus the null hypothesis was accepted.

Proposed Intervention Plan and Activities

Considering that the roles of the teachers are crucial for school effectiveness, they occupy the pivotal role in improving the instruction and the teaching performance thus it is much expected that there must be good and effective programs for professional development of teachers.

As education is a never ending process, it does not end with receiving a degree and beginning a career. Career-minded individuals can constantly develop their abilities and become more proficient at their employment through professional development programs. It is especially important in the field of K-12 education administration to encourage teachers to pursue professional development, not only to ensure the best learning outcomes for their students, but also to be more effective and satisfied in various other aspects of their work.

Thus, in order to provide intensive and differentiated support to professional development of teachers, different intervention plans and activities were conceptualized.

The designed intervention plans and activities based on the result of the study was derived from the three components such as the level of professional development, teaching performance and the quality of student learning outcomes which this study believed are needed especially in enhancing the professional development programs of teachers in Area II, and eventually in the Division of Batangas.

Fullan (2020) stressed out that the purpose of intervention program is to ensure that teachers remain focused and collaborating to achieve a shared vision of enhancing the quality of student learning outcomes.

Focus of Intervention	Intervention Activity	Description	Time Frame	Persons Involved	Resources Needed	Success Indicator
Content Knowledge	Subject-Specific Workshops	Offer workshops led by experts to deepen teachers' content knowledge such as FGD, LAC Sessions	Quarterly	School Head L&D Coordinator Teachers	Materials, School Fund, Resource Speaker	Increased teacher confidence in subject matter, assessed through pre- and post-workshop surveys.
Quality of Instruction	Model Effective Teaching Strategies	Provide demonstrations of high-quality instructional practices in the classroom.	Monthly	School Head Master Teachers Teachers L & D Coordinator	Mentoring and coaching form	Improved lesson observations, with teachers implementing modeled strategies.
Teaching Climate	Team-Building Activities	Organize activities to foster collaboration and a positive school culture.	Bi-monthly	School Head Teachers	Resource person, school fund	Enhanced relationships among staff and increased student satisfaction surveys.

Classroom Management	Classroom Management Training	Conduct training sessions focusing on effective classroom management techniques.	Twice a year	School Head Teachers Resource Speaker	Resource Speaker School Fund	Reduced disciplinary incidents and improved classroom environments.
Professional Behavior	Code of Conduct Workshops	Hold discussions about professional expectations and ethical behavior.	Yearly	School Head Guidance Teacher Teachers L&D Coordinator	Resource Person School Fund	Increased adherence to professional standards and positive feedback from administration.
Teachers' Beliefs	Reflective Practice Sessions	Facilitate sessions where teachers reflect on and discuss their beliefs about teaching and learning.	Monthly	Coaches Teachers	Mentoring and Coaching Form	Shift in teachers' beliefs, assessed through reflective journals.

CONCLUSION

The study found significant positive relationships between the perceived effectiveness of professional development programs, teaching performance, and perceived student learning outcomes. Respondents who reported higher levels of professional development effectiveness and teaching performance also tended to report higher levels of student learning outcomes. These findings suggest meaningful associations among the variables; however, the descriptive-correlational design does not permit conclusions regarding causality. Student learning outcomes in this study were based on teachers' and school heads' assessments of learners' knowledge, skills, and attitudes rather than direct measures of learner achievement

RECOMMENDATIONS

In view of the foregoing conclusions, the researcher presented the following recommendations:

1. DepEd may invest in continuous professional development programs for teachers to enhance their teaching skills and keep them up-to-date with the latest teaching strategies and techniques, thus, achieving quality student learning outcomes.
2. School administrators may design training programs for teachers in schools through LAC sessions to further enhance teachers' knowledge and skills in applying different teaching pedagogies and techniques.
3. Teachers may apply their learnings from the professional development programs to continually elevate the quality of students' outcomes.
4. The proposed intervention program maybe utilized.
5. Similar studies can be conducted in other schools and institutions to validate the result of the study.

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