

MODERATING EFFECT OF SYSTEMATIC CLASSROOM OBSERVATION ON THE RELATIONSHIP BETWEEN THE BEHAVIORAL COMPETENCIES AND PERFORMANCE OF TEACHERS: A CONVERGENT DESIGN

Angie L. Auman¹ and Cynthia S. Asuncion²

¹Central Mindanao Colleges, Kidapawan City, Philippines.

Corresponding email: aauman@cmc.edu.ph

ABSTRACT

This convergent mixed study examined the moderating effect of systematic classroom observation on the relationship between the behavioral competencies and performance of teachers perceived by elementary teachers of Tulan, Cotabato. The researcher conducted convergence of quantitative and qualitative data hoping to help teachers, school principals and future researchers to address some gaps about systematic classroom observation. This study was participated by 200 teachers, evaluating classroom observation examining its influence on the teachers' teaching performance and behavioral competencies measured using adapted survey questionnaire and in-depth interview. Results revealed that systematic classroom observation has significant relationship and significant influence on both teaching performance and behavioral competencies among elementary school teachers. Additionally, it revealed that the behavioral competencies and systematic classroom observation significantly predicts the teaching performance among elementary school teachers. Moreover, study widened the idea on the perceived impact of systematic classroom observation to the performance of elementary teachers with emerging themes in the structured theme are improvement of planning and teaching skills; assessing content knowledge; and develop teaching strategies. Additionally, the perceived challenges of elementary teachers in the systematic classroom observation revealed emerging themes in the structured theme are learners' behavior; class size; classroom management and cause of stress. Furthermore, perceived help of the systematic classroom observation to the behavioral competencies of elementary teachers revealed emerging themes such as guide for improvement; evaluation and assessment; ability to accept constructive criticism; advocate professional growth; and receives technical assistance. Lastly, this study revealed that the significant relationship of systematic classroom observation to both teaching performance and behavioral competencies converge with the emerging themes of its impact to both teaching performance and behavioral competencies. This study recommends investigating other external components such as individual and family variables are explored to get a clearer picture on other factors that will have any impact on teachers' performance and behavioral competencies which in turn are determinants of behavioral issues that happen within the organization.

Keywords: Systematic Classroom Observation, Teachers Performance, Behavioral Competencies, Teacher's Perception, Convergent Design, Tulan, Cotabato

INTRODUCTION

Classroom observation is a systematic process conducted by the curriculum heads to sit inside the teachers' class and rate teaching performance. Knowing that a teacher could change someone's life, it is inevitable that a teacher has an influence inside the classroom having a big

responsibility on quality education the Department of Education (DepEd) envisioned to offer to its clientele. One way of ensuring its quality is through classroom observation of teachers during their actual classes to evaluate their performance. However, many preparations among teachers had been observed to achieve higher performance during class observation. These preparations require additional time, effort and money from teachers that might affect performance and individual's growth.

Research in different cultures globally regarded teacher observation in a classroom as essential procedure in teacher training process as to test teachers' professional skills and knowledge in the drive of prioritizing teaching and learning as the main driver of continuous improvement (Liu et al., 2019). Focusing on lesson observation, classroom observation offers an alternative way forward in dealing with the contested practice of evaluating the quality of teaching and learning. This will contextualize the adequacies of approaches of teachers in the classroom that will be a backdrop of the marketisation of education (Poulou, Reddy & Dudek, 2019).

Additionally, Comighud and Arevalo (2021) contended that each approach to teachers' performance and personal growth expressly, legitimizes certain factors such as leadership practices and clinical observation. Besides, challenging practices can involve some degree of resistance and poor performance. Additionally, in Bahasa Indonesia, according to Ancho and Arrieta (2021), teacher personal growth and job performance can be classified into three categories: pedagogical, personal, and social. It has also been stated that a professional teacher must possess skills and qualifications that have been standardized by the authorities (teacher standards competence).

In the Philippines, public school teachers teach and facilitate a classroom of 50 to 60 pupils. The classroom observation mandated in the Philippine Professional Standards for Teachers – Results-Based Performance Management System (PPST-RPMS) has become more objective and standardized and is used for monitoring, coaching, performance review and evaluation which supports the teachers' on-going professional development (Department of Education Order No. 02, s. 2015). This is to ensure efficient, timely and quality performance among personnel as it abides to the Civil Service Commission Memorandum Circular No. 06, s. 2012 or the Strategic Performance Management System (SPMS).

There have been several valuable studies on the impact classroom observation to the performance of teachers and learners (Bilash, 2009; Hammond, 2010; de Abreu & Interpeler, 2015; Bell, Dobbelaer, Klette & Visscher, 2019; Eradze, Rodríguez-Triana & Laanpere, 2019). However, none of these studies provides specific framework on its impact to teachers' growth affectively. Thus, it is imperative to discover the impact of classroom observation to the performance and personal growth of teachers through convergent investigation.

It is expected from the teachers to perform with quality in the educational arena. This is the drive implemented to every elementary school in Tulunan East, North and South District. As a rater, two kinds of responses from the teachers with regards to classroom observation can be observed. Some are taking it as a help in improving their performance in teaching, while some considered it as an additional burden. In addition to classroom observation, teachers are also expected to perform various community and extra-curricular works. Some of them looked exhausted but some also are excited. Some complaints regarding class observations can be heard from among the teachers themselves. Thus, it is imperative to discover the impact of classroom observation to the performance and personal growth of teachers.

FRAMEWORK

The philosophical foundation of this mixed method research is pragmatism, which aims to provide that it is a beneficial and scientific way of problem solving. According to Creswell (2013), pragmatism affords researchers freedom to choose the methods and methodologies of their

investigation, to hold on to different assumptions, to use multiple methods in gathering and analyzing of different types of data, mixing, or integrating the results so as to come up with a more comprehensive interpretation. This is why mixed methods studies gravitate around the philosophical underpinning of pragmatism.

While pragmatism is the way how the world is viewed in this study, to-date, theorists have suggested that several theories may be useful in seeking to understand how classroom observation gives impact to the teachers' performance and behavioral growth. The analysis of this study is anchored to the Expectancy Theory of Porter and Lawler (1969). As cited by Taylor and Baker (2006), Porter and Lawler (1969) developed a notion of Expectancy Theory as a means of understanding the relationships between motivation and performance behaviors.

There are three concepts that are the building blocks for the theory; performance-outcome expectancy, valence, and effort-performance expectancy. Performance outcome expectancy states that every behavior has associated with it, in an individual's mind, an expected outcome (rewards or punishments). Effort-performance expectancy represents the individual's perception of how difficult it will be to achieve a behavior and a probability of successful achievement of that behavior.

METHODS

Research Design

This study is a convergent parallel mixed method design, which implies collection of both qualitative and quantitative data at the same time. Convergent mixed method design is a type of concurrent mixed method where collection of data is done concurrently, analyzed separately and independently then the results are mixed, compared or relate (Creswell & Clark, 2011).

A key feature of mixed methods research is that it provides pluralism or eclecticism, which frequently results to superior research compared to monomethod research (Johnson & Onwuegbuzie, (2006). In this design, both interview and survey will be done at the same time or in a single phase. In-depth interview and focus group discussion is used to gather qualitative data and survey questionnaire will be utilized to collect quantitative data.

Respondents

The respondents of the quantitative study will be the 200 elementary teachers of Tulunan East, North and South District. The 200 elementary teachers will be the respondents of the survey while the 10 teachers will be the participants of the in-depth interview.

In the quantitative phase, 200 elementary teachers will be the respondents of the descriptive survey taken from the sample size of 263 elementary teachers using the Rawssoft Online Sample Size Calculator of using 95% confidence level with confidence interval of 7.4. Random sampling technique through lottery was utilized in selecting participating schools and all teachers from the participating schools are the respondents of the study.

In qualitative phase, 10 teachers will be the participants, all of them will be administered in-depth interview to collect an in-depth understanding of systematic classroom observation.

Inclusion Criteria. All participants will in inclusive to teachers with more the 3 years' experience to capture rich and substantial information since they are the teachers who experienced classroom observation with face to face classes.

Research Instruments

In this study, the researcher used an adapted-modified survey questionnaire from Horizon Research, Inc. 2005–06 Core Evaluation Manual: Classroom Observation Protocol by UTeach Natural Sciences, University of Texas at Austin (2009). The set of questionnaires dealt with the level of classroom observation as perceived by elementary school teachers. The original questionnaire was modified to contextualize the school setting. The original items were simplified or paraphrased to gain better understanding from the respondents. It was content validated by the panel of experts. It underwent the test of validity and reliability and was measured using Cronbach Alpha. For each item, the respondents were asked to rate the level of classroom observation using the five-point Likert Scale anchored at (5) Always, (4) Frequent, (3) Occasionally, (2) Rarely and (1) Never.

The second set of instrument embarks with behavioral competencies among the elementary school teachers. This is composed of six indicators of the Core Behavioral Competencies of the IPCRF namely: Self-Management; Professionalism and Ethics; Results Focus; Teamwork; Service Orientation; and Innovation. For each item, the respondents rated themselves the level of personal growth using the five-point Likert Scale anchored at (5) Role Model, (4) Consistently, (3) Most of the Time, (2) Sometimes and (1) Rarely.

The third set of the instrument embarks with teacher's performance among elementary school teachers. The research instrument for this variable was adopted from the nationally validated PPST-RPMS Tool as mandated by the Department of Education. It is composed of five indicators which are the Key Result Areas (KRAs) namely: Content Knowledge and Pedagogy; Learning Environment and Diversity of Learners; Curriculum and Planning; Assessment and Reporting; and Plus Factor. For each item, the teachers will be rated in their level of performance using the standard scale anchored at (5) Outstanding, (4) Very Satisfactory, (3) Satisfactory, (2) Unsatisfactory and (1) Poor.

In the qualitative phase, the researcher formulated an interview guide that asked questions about the impact of systematic classroom observation to behavioural competencies and teachers' performance as well as their significant experiences during classroom observation. The interview provided an insight into how does systematic classroom observation help the teacher in the teaching and learning process and behavioral growth.

Statistical Tool

For the quantitative data analysis, formula for finding of means and Pearson-r were used. Mean formula was used to identify the mean extent of classroom observation, teachers' behavioral competencies and teachers' performance. Pearson's-r was utilized to test the significant relationship of classroom observation to the behavioral competencies and performance of teachers. Lastly, Sobel Test was utilized in analyzing the moderating effect of systematic classroom observation in the relationship of behavioral competencies and performance of teachers.

In the qualitative data, thematic analysis was used to analyze the data. This approach places a premium on identifying, evaluating, and documenting patterns (or "themes") within the data. Themes are patterns found in data sets that are important for the explanation of a phenomena and are associated with certain study areas (Boyatzis, 1998).

This design maintains the separation of the studies throughout the processes of data collection and analysis; however, when it comes to the overall interpretation, it mixes or merges

the results. Because of this, it will combine quantitative and qualitative findings in order to acquire a more complete comprehension of a phenomenon.

RESULTS AND DISCUSSION

Perceived Impact of Systematic Classroom Observation to the Performance of Elementary Teachers

The themes generated from this section were taken from the central research question 'How does systematic classroom observation impacted the performance of the elementary teachers?' Themes generated from the responses are three such as Improvement of Planning and Teaching Skills; Assessing Content Knowledge; and Develop Teaching Strategies as presented in Table 1.

Table 1
Perceived Impact of Systematic Classroom Observation to the Performance of Elementary Teachers

Significant Statements	Formulated Meaning	Theme
<i>"Systematic classroom observation generates improvement on the teaching and delivery skill of the teacher" IDI_01</i>	Systematic classroom observation makes teachers improve.	Improvement of Planning and Teaching Skills
<i>"Good planning, effective classroom management and creative learning environment to support students' learning." IDI_04</i>	Systematic classroom observation enables teachers make a good planning.	
<i>"By creating new ideas/teaching skills needed/widens the scopes around and across the curriculum in teaching." IDI_06</i>	Systematic classroom observation makes teachers create new ideas and improve teaching skills.	
<i>"The role is to improve planning the activities." IDI_08</i>	Teachers find systematic classroom observation made them improve in planning activities.	
<i>"Systematic classroom observation assesses teachers in terms of knowledge of the content and preparation of appropriate instructional materials (IMs)." IDI_01</i>	Teacher's assessment of content knowledge.	Assessing Content Knowledge

<p><i>“To improve students’ outcomes by improving the instructional process of the teacher adhering to content.” IDI_04</i></p>	<p>Mastery of instructional process in content to improve students’ outcome.</p>	
<p><i>“Enhances my teaching styles and skills of the content, promotes professional growth.” IDI_06</i></p>	<p>Enhances teaching styles and skills of the content.</p>	
<p><i>“It made me develop and create activities according to the level of the pupils. Also, the consistency of checking the outputs of the pupils, the teacher needs so much time for it.” IDI_02</i></p>	<p>Development of activities to meet students’ needs.</p>	<p>Develop Teaching Strategies</p>
<p><i>“Best practices might be the contextualized learning materials as well as the association of ICT related instruction.” IDI_03</i></p>	<p>Enable to practice contextualized learning materials and ICT integration.</p>	
<p><i>“Differentiated Instruction, Collaborative learning and Gamification.” IDI_10</i></p>	<p>The teacher employed different strategies to ensure engagement from pupils.</p>	

Improvement of Planning and Teaching Skills

This theme comprised the impact of systematic classroom observation to the teacher’s performance as perceived by the elementary teachers. This implies that systematic classroom observation improved planning and teaching skills of teachers. This theme was pointed out by participants 1, 4, 6 and 8 with their significant statements as respectively:

“Systematic classroom observation generates improvement on the teaching and delivery skill of the teacher” IDI_01

“Good planning, effective classroom management and creative learning environment to support students’ learning.” IDI_04

“By creating new ideas/teaching skills needed/widens the scopes around and across the curriculum in teaching.” IDI_06

“The role is to improve planning the activities.” IDI_08

This is relevant to the statement of Kim, Raza and Seidman (2019), that the effectiveness of classroom instruction (and how it relates to learning outcomes) can be a key lever for educational change. But there is still much to learn about what really occurs in classrooms, especially in low- and middle-income nations (LMICs). The improvement of teacher instructional quality is being attributed to the development of 21st-century skills competencies. However, a major obstacle to achieving the desired improvements is the absence of meaningful strategies for supporting teacher professional development and a context-specific understanding of teaching practices.

Assessing Content Knowledge

This theme comprised the impact of systematic classroom observation to the teacher's performance as perceived by the elementary teachers. This implies that systematic classroom observation enables teachers and observes to assess content knowledge. This theme was pointed out by participants 1, 4 and 6 with their significant statements as follows:

“Systematic classroom observation assesses teachers in terms of knowledge of the content and preparation of appropriate instructional materials (IMs).” IDI_01

“To improve students' outcomes by improving the instructional process of the teacher adhering to content.” IDI_04

“Enhances my teaching styles and skills of the content, promotes professional growth.” IDI_06

This adheres to the result of Keller, Neumann and Fischer (2017), that teacher pedagogical content knowledge is a significant predictor of student achievement, whereas teacher motivation is thought to have a significant impact on students' interest. Students' perceptions of enthusiastic teaching served as a mediator between teachers' motivation and students' interest. Both student interest and student achievement were not predicted by the teacher's pedagogical content knowledge or teacher motivation. This implies that both teachers' knowledge and their motivation need to be taken into account in order to improve students' cognitive as well as affective outcomes.

Develop Teaching Strategies

This theme comprised the impact of systematic classroom observation to the teacher's performance as perceived by the elementary teachers. This implies that systematic classroom observation enables teachers to develop various teaching strategies. This theme was pointed out by participants 2, 3 and 10 with their significant statements as follows:

“It made me develop and create activities according to the level of the pupils. Also, the consistency of checking the outputs of the pupils, the teacher needs so much time for it.” IDI_02

“Best practices might be the contextualized learning materials as well as the association of ICT related instruction.” IDI_03

“Differentiated Instruction, Collaborative learning and Gamification.” IDI_10

Teachers are doing their best to provide quality education to learners adhering the vision of the Department of Education. This relates to the findings of Da Fonte and Barton-Arwood (2017), stated that it is the duty of teacher preparation programs to focus on strategies to reduce potential barriers and support outcomes for students with disabilities while also preparing general and special education teachers for collaboration. Understanding teacher candidates' perspectives on collaboration is a necessary first step in becoming more responsive to their development. It takes time to develop collaboration skills, and there are numerous obstacles that could stand in the way of effective teamwork.

What is the significant challenges experience by teachers during systematic classroom observation?

This section presents the results to the 2nd central research question ‘What are the significant experiences of teachers during systematic classroom observation?’ Three specific questions were used to collect data on the views of the participants on the classroom observation.

Perceived Challenges of Teachers in Systematic Classroom Observation

The themes generated from this section were taken from the 2nd central research question ‘What are the significant experiences of teachers during systematic classroom observation?’ Themes generated from the responses are four such as Learners’ Behavior; Class Size; Classroom Management and Cause of Stress as presented in Table 2.

Table 2
Perceived Challenges of Teachers in Systematic Classroom Observation

Significant Statements	Formulated Meaning	Theme
<i>“What challenge me are pupils’ behavior and the number of students inside the classroom. It is hard to manage pupils who are attention seekers and lack of discipline.” IDI_02</i>	Learners are attention-seeker and lack of discipline.	Learners’ Behavior
<i>“Pupils’ unpleasing behavior and poor understanding the instruction.” IDI_06</i>	Behaviors of learners are unpleasing and having poor understanding.	

<p><i>“My experiences during classroom observation are the pupils are lack of discipline and they cannot follow instructions. As teacher, the challenge as for me is to be more literate in ICT.”</i> IDI_08</p>	<p>Learners are lack of discipline and hard to follow instructions.</p>	
<p><i>“Disruptive behavior of pupils and some chose to not participate.”</i> IDI_10</p>	<p>Disruptive behavior and not participative.</p>	
<p><i>“What challenges the teacher is class size and actual classroom size”</i> IDI_01</p>	<p>No congruence of class size and classroom size.</p>	
<p><i>“Class structure especially class size affects the class observation process thus making it more conducive for learning is much better. Never stay old fashioned and be updated always. Invite and stimulate the learners' minds to sustain their interest.”</i> IDI_03</p>	<p>Class size affects learning process.</p>	<p>Class Size</p>
<p><i>“Too many numbers of pupils inside that lessen conducive learning. Technology to use is limited.”</i> IDI_10</p>	<p>Bigger class size lessens conduciveness of learning.</p>	
<p><i>“Classroom management, endless paper works and extended working hours, diversity of learners.”</i> IDI_05</p>	<p>Classroom management and teacher's responsibilities aside from teaching.</p>	<p>Classroom Management</p>
<p><i>“On how to handle your pupils to participate actively in your lesson. Classroom management.”</i> IDI_04</p>	<p>Difficulty in handling the learners to actively participate.</p>	
<p><i>“Pupils performance/behavior, classroom management.”</i> IDI_10</p>	<p>Having a hard time managing the classroom given the students' performance and behavior.</p>	

<p><i>“Sometimes, it caused stress if the teacher is not prepared or having some personal problems.”</i> IDI_01</p>	<p>Cause stress when unprepared.</p>	<p>Cause Stress</p>
<p><i>“It would be better if before there will be classroom observation, the teacher must prepare physically, emotionally, mentally and others. Sometimes, it adds burden to the teachers to prepare because of some added reports to comply that may cause stress”</i> IDI_02</p>	<p>It sometimes becomes a burden to teachers.</p>	
<p><i>“The teachers are burdened to have no time for their family anymore because of too much classroom work. The teacher even can teach their own children because of too much work. They divulge their time on Saturdays and Sundays just to make their classroom pleasant.”</i> IDI_08</p>	<p>Classroom preparation sometimes used even family time and weekends.</p>	

Learners' Behavior

This theme comprised the challenges experience by the teachers in the systematic classroom observation with the learners' behavior. This theme was pointed out by participants 6, 8 and 10 with their significant statements respectively:

“Pupils' unpleasing behavior and poor understanding the instruction” IDI_06

“My experiences during classroom observation are the pupils are lack of discipline and they cannot follow instructions. As teacher, the challenge as for me is to be more literate in ICT.” IDI_08

“Disruptive behavior of pupils and some chose to not participate.”
IDI_10

Learners' behavior is one of the major challenges of teachers in most contexts and settings. This agreed to the study of Sheafferet al. (2021) stating that negative talk, disengagement, and aggression were the main behavior variables for students that were directly observed. Frequency counts were used to gauge aggressive behavior and negative speech. The percentage of observed time during which a student was disengaged was used to calculate disengagement. Below, we define these actions. Low to moderate correlations were found between student ratings of internalizing behaviors and negative talk, problematic behavior, and social skills. No correlation was found between aggression and teacher evaluations. Disengagement was negatively correlated with academic performance and positively correlated with problem behavior. Additionally, there was a strong correlation between negative talk and

problem behavior as assessed by teachers. There was a correlation between students' reading proficiency and teachers' evaluations of their academic abilities.

Class Size

This generated theme showed the challenges of teachers in the systematic classroom observation particularly the class size. This implies that the number of learners inside the classroom could affect the effectiveness of teachers in delivering the content. This theme was pointed out by participants 1, 3 and 10 with their significant statements as follows:

“What challenges the teacher is class size and actual classroom size” IDI_01

“Class structure especially class size affects the class observation process thus making it more conducive for learning is much better. Never stay old fashioned and be updated always. Invite and stimulate the learners' minds to sustain their interest.” IDI_03

“Too many numbers of pupils inside that lessen conducive learning. Technology to use is limited.” IDI_10

It is challenging for a teacher to manage a big class with multiple needs students and having varied behaviors. This is similar to the findings of Maloney (2020) that larger classes tend to have more discipline issues, as observed by 88.5% of participating teachers. There was no association between class size and behavior issues, according to 11.5 percent of teachers. No participating teachers mentioned that they had observed a link between large class sizes and behavioral issues. Additionally, it has been observed that students have learned more specialized skills as a result of the smaller classes. A whopping 23% of the teachers polled said they had not observed a link between student learning of specialized skills and class size. No participating teacher mentioned that they had observed that students were learning more specialized skills as a result of the larger classes.

Classroom Management

This theme generated from the research question comprised challenges of elementary teachers in systematic classroom observation with classroom management. This implies that managing classroom is a task of a teacher that requires patience, consistency and strategies. This theme was pointed out by participants 4, 5 and 10 with their significant statements as follows:

“On how to handle your pupils to participate actively in your lesson. Classroom management.” IDI_04

““Classroom management, endless paper works and extended working hours, diversity of learners.” IDI_05

““Pupils performance/behavior, classroom management.” IDI_10

Teachers are having a hard time managing a classroom given the student's poor performance, behavior and opting not to participate. This is adherence to the suggestion of Jerome, Oviatt and Naveira (2020) that classroom management programs give school-based educators the chance to find the programs that best address the unique needs of different grade

levels, different school contexts, and at-risk students. The findings show a shifting trend toward a model of self-discipline and self-direction away from compliance and obedience, which are frequently the norm for inner city schools. It has been demonstrated that more individualistic, uncoordinated efforts do not produce the same long-term results as those that place more emphasis on student engagement and a developmental, holistic approach to the child's development.

Cause of Stress

This theme generated from the research question comprised challenges of elementary teachers in systematic classroom observation as cause of stress. This implies that systematic classroom observation sometimes causes additional burden to teachers particularly in its preparation that sometimes took teacher's personal time with family. This theme was pointed out by participants 1, 2 and 8 with their significant statements respectively:

"Sometimes, it caused stress if the teacher is not prepared or having some personal problems." IDI_01

"It would be better if before there will be classroom observation, the teacher must prepare physically, emotionally, mentally and others. Sometimes, it adds burden to the teachers to prepare because of some added reports to comply that may cause stress" IDI_02

"The teachers are burdened to have no time for their family anymore because of too much classroom work. The teacher even can teach their own children because of too much work. They divulge their time on Saturdays and Sundays just to make their classroom pleasant." IDI_08

In this result, factors such as preparation of materials and the classroom observation itself may cause burden and stress to teachers. This is parallel to the study of Harmsen et al. (2018) that the profession of teaching is thought to be very stressful. In comparison to other professionals, teachers also reported heavier workloads. It appears that being under a lot of stress is bad for teachers' health. The relationship between teacher stress, teaching behavior, and attrition remains unclear due to the fragmented nature of research in studying the mentioned variables, despite the current knowledge on teacher stress providing an indication about the role of stress factors for outcomes such as well-being and attrition.

Perceived Help of Systematic Classroom Observation to the Behavioral Competencies of Elementary Teachers

The themes generated from this section were taken from the central research question 'How does systematic classroom observation help the teacher in the teaching and learning process and behavioral growth?' Themes generated from the responses are five such as *Guide for Improvement; Evaluation and Assessment; Ability to Accept Constructive Criticism; Advocate Professional Growth; and Receives Technical Assistance* as presented in Table 3.

Table 3
Perceived Help of Systematic Classroom Observation to Improve Behavioral Competencies

Significant Statements	Formulated Meaning	Theme
<p><i>“Classroom observation seems as my guide to improve my teaching performance and help me to deliver the lesson well.CO improves the teacher’s performance by making the lesson more understandable and lead him/her in the right track in the teaching learning process” IDI_02</i></p>	<p>It serves as guide to improve teaching performance.</p>	<p>Guide for Improvement</p>
<p><i>“When teachers absorb and digest the constructive criticism of the raters as well as encourages ourselves to improve and seek for new and innovate ways of teaching, make one’s lesson creative and student centered, maybe teacher’s behavioral growth uphold.” IDI_03</i></p>	<p>Encourage teachers to improve and seek for new and innovate ways of teaching.</p>	
<p><i>“This is to help teachers improve teaching practices and student’s performance.” IDI_04</i></p>	<p>Improve teaching practices and student’s performance.</p>	
<p><i>“The role of SCO in teachers’ performance is to standardized the learning through evaluation and assessment” IDI_03</i></p>	<p>Standardized the learning through evaluation and assessment.</p>	<p>Evaluation and Assessment</p>
<p><i>“Through identifying your strengths and weaknesses as a professional teacher. How the teachers design tasks, share authority and evaluate pupil’s progress” IDI_04</i></p>	<p>Identifying oneself strengths and weaknesses.</p>	
<p><i>“Classroom observation is an essential step in the assessment process to learn about from our students and performing on this classroom.” IDI_09</i></p>	<p>As assessment process of learners’ performance.</p>	
<p><i>“To monitor and evaluate teacher’s performance in delivering standards and competencies to learners. Since it will assess my performance in the perspective of my observer, it gave me the idea on what to improve more through the constructive criticism” IDI_10</i></p>	<p>Monitor and evaluate teacher’s performance in delivering standards to learners.</p>	
<p><i>It helps me develop my self-confidence and accept constructive criticism religiously. IDI_01</i></p>	<p>Develop self-confidence of teachers and accept constructive criticism.</p>	

<i>My advice is for my fellow teachers to accept classroom observation not a distressing procedure but consider it a help for professional and behavioral growth through constructive criticism. Moreover, my suggestion to the observer to help teacher grow through uplifting words and not degrading comments. IDI_10</i>	Classroom observation is considered help in professional and behavioral growth through constructive criticism.	Ability to accept constructive criticism
<i>The heads give the teachers constructive feedback and give some suggestions. The objective should be simple and achievable. IDI_08</i>	Heads should give feedback and suggestions to teachers.	
<i>SCO develops my professional growth through constant encouragement and constructive criticism of the raters. It encourages me to do well and improve my abilities to further elevate myself as a teacher. IDI_03</i>	It develops professional growth through constant encouragement and constructive criticism.	Advocate Professional Growth
<i>Enhances by teaching styles/strategies to promote professional growth. IDI_09</i>	Enhances teaching styles/strategies.	
<i>It gave me a glimpse of what I am doing in the classroom in the perspective of the observer for me to improve my teaching and eliminate the unnecessary practices. It made me also uphold to the curriculum and grow professionally abiding to the standards.</i>	Improve teaching and eliminate unnecessary practices to grow professionally.	
<i>Receives technical assistance on the strategies to use before doing/conducting the Classroom Observation. IDI_06</i>	Teachers received technical assistance on the strategies to use.	Receiving Technical Assistance
<i>The heads give the teachers constructive feedback, technical assistance and give some suggestions. The objective should be simple and achievable. IDI_08</i>	Teachers received constructive feedback, technical assistance and suggestions.	
<i>The supervisor/school head give technical assistance to the teacher to improve/give insights for their teaching. IDI_09</i>	Teachers received technical assistance to improve teaching	

Guide for Improvement

This theme generated from the research question comprised the help of systematic classroom observation to behavioral competencies of teachers. This serves as guide for improvement not just in performance but in seeking and innovating new ways to improve practices and focus learners' improvement as well. This implies that systematic classroom observation encourages teachers to not settle and stagnate but improve for the benefit of the learners. This theme was pointed out by participants 2, 3 and 4 with their significant statements as follows:

"Classroom observation seems as my guide to improve my teaching performance and help me to deliver the lesson well.CO improves the teacher's performance by making the lesson more understandable and lead him/her in the right track in the teaching learning process" IDI_02

"When teachers absorb and digest the constructive criticism of the raters as well as encourages ourselves to improve and seek for new and innovate ways of teaching, make one's lesson creative and student centered, maybe teacher's behavioral growth uphold." IDI_03

"This is to help teachers improve teaching practices and student's performance." IDI_04

In this result, teachers are guided to seek improve every day. This is parallel to the study of Schermer and Fosker (2020), that the role of teacher's improvement in a class' success. Classroom observation is frequently mentioned as having the potential to make learning process possible. Classrooms are incredibly busy environments where a group of learners are trying to acquire academic knowledge and skills. The positivist tradition, which gave rise to systematic classroom observation, postulated that by using a methodical approach to code classroom interactions, it would be possible to predict student behavior, gain a better understanding of teachers' practices, and ultimately apply these insights to enhance teaching and learning.

Evaluation and Assessment

This theme generated from the research question comprised the help of systematic classroom observation to behavioral competencies of teachers. This serves as evaluation and assessment as to practices as a teacher. This implies that systematic classroom observation enables teachers to self-assess their practices inside the classroom and identify own strengths and weaknesses. This theme was pointed out by participants 3, 4, 9 and 10 with their significant statements as follows:

"The role of SCO in teachers' performance is to standardized the learning through evaluation and assessment" IDI_03

"Through identifying your strengths and weaknesses as a professional teacher. How the teachers design tasks, share authority and evaluate pupil's progress" IDI_04

"Classroom observation is an essential step in the assessment process to learn about from our students and performing on this classroom." IDI_09

“To monitor and evaluate teacher’s performance in delivering standards and competencies to learners. Since it will assess my performance in the perspective of my observer, it gave me the idea on what to improve more through the constructive criticism” IDI_10

In this result, teachers are able to evaluate themselves and eliminate practices unnecessary. This is agreed to the study of Van Der Schaafet al. (2019), that the provision of excellent feedback on teachers' practices is essential to achieving a high level of education that has a positive impact on students' learning. Since the assessments themselves can be viewed as "interventions" in teachers' practices and frequently necessitate reflection, feedback, and collaboration, they can be very beneficial in promoting further professional development. It is pertinent to include teachers' professionalization as an aim in itself more prominently because teachers' core practices may stimulate teachers' development within the social cultural work context. To put it another way, since teachers learn on a daily basis and most informal learning is based on experiences gained at work.

Ability to Accept Constructive Criticism

This theme generated from the research question comprised the help of systematic classroom observation to behavioral competencies of teachers. Result showed that it helped teachers having ability to accept constructive criticism. This implies that systematic classroom observation enables teachers to reflect from the feedback and constructive criticism given by their observers during post-observation. This theme was pointed out by participants 1, 8 and 10 with their significant statements as follows:

“It helps me develop my self-confidence and accept constructive criticism religiously. IDI_01

“It helps me develop my self-confidence and accept constructive criticism religiously. IDI_08

“My advice is for my fellow teachers to accept classroom observation not a distressing procedure but consider it a help for professional and behavioral growth through constructive criticism Moreover, my suggestion to the observer to help teacher grow through uplifting words and not degrading comments.IDI_10

In this result, teachers are able to accept constructive feedback to make them improve as a teacher. This is parallel to the findings of Fonsecaet al. (2015), that promoting teachers' effective use of feedback in the classroom is necessary. Involvement in the sessions and the subsequent classroom application improved teacher involvement, knowledge, competencies, and positive feelings in the use of feedback strategies, according to observations and teacher reports. It is possible to effectively encourage participants' involvement, knowledge, and competencies in the use of feedback, as well as their perspective on the significance of these strategies.

Advocate Professional Growth

This theme generated from the research question comprised the help of systematic classroom observation to behavioral competencies of teachers. Result showed that it helped teachers advocate professional growth and not stagnate since change is fast in this 21st century learners. This implies that systematic classroom observation enables teachers to desire for growth continuously. This theme was pointed out by participants 3, 9 and 10 with their significant statements as follows:

“SCO develops my professional growth through constant encouragement and constructive criticism of the raters. It encourages me to do well and improve my abilities to further elevate myself as a teacher. IDI_03

“Enhances by teaching styles/strategies to promote professional growth. IDI_09

“It gave me a glimpse of what I am doing in the classroom from the perspective of the observer for me to improve my teaching and eliminate the unnecessary practices. It made me also uphold to the curriculum and grow professionally abiding to the standards. IDI_10

In this essential theme, teachers are able to desire for professional growth and enhancing strategies and teaching styles. This is congruent to the findings of Van der Klinket al. (2017), that as they progressed in their careers, teacher educators' concerns changed. At first, their main concern was usually just getting by, but as their careers progressed, they began to worry more about their own personal and professional identities as well as the personalities of the students they were teaching. Teachers made plans for their continued professional development, but they occasionally anticipated obstacles, such as a lack of time and resources, that would prevent them from carrying out their plans. The concerns of teacher educators from various nations appear to be similar, and their plans for future professional development and ongoing professional development are also quite similar.

Received Technical Assistance

This theme generated from the research question comprised the help of systematic classroom observation to behavioral competencies of teachers. Result showed that it helped through the technical assistance they received from observer or school head or supervisor. This implies that systematic classroom observation enables teachers to receive necessary support to deliver quality education to learners. This theme was pointed out by participants 6, 8 and 9 with their significant statements as follows:

“Receives technical assistance on the strategies to use before doing/conducting the Classroom Observation. IDI_06

“The heads give the teachers constructive feedback, technical assistance and give some suggestions. The objective should be simple and achievable. IDI_08

“The supervisor/school head give technical assistance to the teacher to improve/give insights for their teaching. IDI_09

In this essential theme, teachers receive necessary technical assistance for improvement of strategies, teaching styles and related teaching process needs. This is parallel to the findings of Dias-Lacy and Guirguis (2017), that a new teacher might experience stress, not have the necessary support, and feel unprepared to deal with students' behavioral and academic issues. In addition to being advantageous for new teachers, the implementation of mentoring programs and technical assistance from school administrators and between new and experienced teachers helped them deal with and face their anxieties during their first year in the classroom.

Convergence of the Impact of Systematic Classroom Observation to Teaching Performance and Behavioral Competencies

Convergence of the Impact of Systematic Classroom Observation to Teaching Performance and Behavioral Competencies showed how both quantitative and qualitative results converge, diverge and contradicts.

Table 4.
Convergence of the Impact of Systematic Classroom Observation to Teaching Performance and Behavioral Competencies

Variables/Factors	Quantitative Result	Qualitative Essential Themes
The Impact of Systematic Classroom Observation to Behavioral Competencies	<ul style="list-style-type: none"> -Level of Behavioral Competencies of Teachers is 4.14 described as Consistent - Extent of Systematic Classroom Observation is 4.16 described as Frequent -Level of Teachers Performance is 4.18 described as Very Satisfactory -There is significant relationship between systematic classroom observation and behavioral competencies with p-value = .000 at .05 level of significance -There is significant relationship between systematic classroom observation and teacher performance with p-value = .000 at .05 level of significance -There is significant influence of behavioral competencies and systematic classroom observation on teachers' performance with p-value = .000 at .05 level of significance 	<p>Systematic Classroom Observation Impacted Teachers' Performance in:</p> <ul style="list-style-type: none"> -Assessing Content Knowledge - Develop Teaching Strategies <p>Systematic Classroom Observation Challenged Teachers in terms of:</p> <ul style="list-style-type: none"> - Learners' Behavior -Class Size - Classroom Management -Cause Stress <p>Systematic Classroom Observation Help Teachers' Behavioral Competencies in terms of:</p> <ul style="list-style-type: none"> -Guide for Improvement -Evaluation and Assessment -Ability to Accept Constructive Criticism -Advocate Professional Growth -Received Technical Assistance

Table 4 showed convergence of systematic classroom observation to teaching performance and behavioral competencies. This is supported with the qualitative essential themes generated from the in-depth interviews. This implies that systematic classroom observation enables the teachers to improve teaching practices as this will serve as evaluation and assessment of the content knowledge, strategies implemented and improvement of planning and skills during the teaching and learning process. This is aligned to the result of the study about evaluation system of teaching performance conducted by Steinberg and Kraft (2017) with results stated that the incorporation of multiple measures of teacher performance, the use of multiple performance rating categories, and the development of professional support and incentive structures tied to teachers' ratings have been the three main system design features that have been the focus of efforts to reform teacher evaluation systems. Deciding which performance metrics to include in their evaluation systems has involved district policymakers in great detail.

Moreover, this implies that systematic classroom observation enables the teachers to develop behavioral growth through constructive feedback received during post-observation conference. This is congruent to the findings of Mathew, Mathew and Peechattu (2017), stating that emerging global trends in education as well as people's general needs and aspirations are taken into consideration during professional growth. The caliber of the teaching and the teachers affects the level of quality of the education. A key factor in raising quality is the way teachers are trained and periodically monitored. The process of reflective practice, which aids in teaching, learning, and understanding, is crucial to teachers' professional development. They understand themselves, their practices, and their students when student teachers engage in systematic self-reflection. They continually develop professionally by reflecting on their own behaviors and experiences.

CONCLUSIONS

Based on the results of the study, the researcher has come up with the conclusion that the behavioral competencies as perceived by elementary school teachers is consistent. All the indicators for this variable also reflected a descriptive equivalent of consistent. Additionally, systematic classroom observation among elementary school teachers is frequent. All the indicators for this variable also reflected a descriptive equivalent of frequent. This implied that the systematic classroom observation among elementary school teachers is much observed.

Moreover, the teaching performance of the elementary school teachers is very satisfactory. All the indicators for this variable also reflected a descriptive equivalent of very satisfactory. This implied that the teachers demonstrate performance that exceeded expectations. Furthermore, the results also revealed that there is significant relationship between systematic classroom observation and teaching performance among elementary school teachers. This study also revealed that there is significant relationship between systematic classroom observation and behavioral competencies of elementary school teachers. Additionally, it revealed that the behavioral competencies and systematic classroom observation significantly predicts the teaching performance among elementary school teachers.

Also, study widened the idea on the perceived impact of systematic classroom observation to the performance of elementary teachers with emerging themes in the structured theme are improvement of planning and teaching skills; assessing content knowledge; and develop teaching strategies. Additionally, the perceived challenges of elementary teachers in the systematic classroom observation revealed emerging themes in the structured theme are learners' behavior; class size; classroom management and cause of stress. Furthermore, perceived help of the systematic classroom observation to the behavioral competencies of elementary teachers

revealed emerging themes such as guide for improvement; evaluation and assessment; ability to accept constructive criticism; advocate professional growth; and receives technical assistance.

Lastly, this study revealed that the significant relationship of systematic classroom observation to both teaching performance and behavioral competencies converge with the emerging themes of its impact to both teaching performance and behavioral competencies.

REFERENCES

- Ancho, I. V., & Arrieta, G. S. (2021). Filipino teacher professional development in the new normal. *Educ. Self Dev*, 16, 25-43.
- Altmiller, G., Deal, B., Ebersole, N., Flexner, R., Jordan, J., Jowell, V., ... & Walker, D. (2018). Constructive feedback teaching strategy: A multisite study of its effectiveness. *Nursing education perspectives*, 39(5), 291-296.
- Arthur, Y. D., Boadu, S. K., & Asare, B. (2022). Effects of Peer Tutoring, Teaching Quality and Motivation on Mathematics Achievement in Senior High Schools. *Int J EduSci*, 37(1-3), 35-43.
- Bal-Gezegin, B., & Seferoglu, G. (2019). Continuing professional development for language teachers. *Research trends in English language teacher education and English language teaching*, 59-75.
- Bell, C. A., Dobbelaer, M. J., Klette, K., & Visscher, A. (2019). Qualities of classroom observation systems. *School effectiveness and school improvement*, 30(1), 3-29.
- Berryman, M., Lawrence, D., & Lamont, R. (2018). Cultural relationships for responsive pedagogy. *SET: Research information for teachers*, 1, 3-10.
- Birdwell, T., & Harris, T. (2022). Active Learning Classroom Observation Tool: Improving Classroom Teaching and Supporting Institutional Change. *Journal of Learning Spaces*, 11(1).
- Bostic, J., Lesseig, K., Sherman, M., & Boston, M. (2021). Classroom observation and mathematics education research. *Journal of Mathematics Teacher Education*, 24(1), 5-31.
- Bower, J. M., van Kraayenoord, C., & Carroll, A. (2015). Building social connectedness in schools: Australian teachers' perspectives. *International Journal of Educational Research*, 70, 101-109.
- Brooks, C. D., & Springer, M. G. (2022). Evaluating Teacher Effectiveness: A

review of historical developments and current trends. *The Routledge Handbook of the Economics of Education*, 127-149.

- Burić, I., & Kim, L. E. (2020). Teacher self-efficacy, instructional quality, and student motivational beliefs: An analysis using multilevel structural equation modeling. *Learning and Instruction*, 66, 101302.
- Campbell, S. L., & Ronfeldt, M. (2018). Observational evaluation of teachers: Measuring more than we bargained for?. *American Educational Research Journal*, 55(6), 1233-1267.
- Charalambous, C. Y., & Praetorius, A.-K. (2020). Creating a forum for researching teaching and its quality more synergistically. S
- Christ, A. A. (2021). A systematic review on the indirect effects of teaching quality on student outcomes.
- Clarke-Vivier, S., & Lee, J. C. (2018). Because Life Doesn't Just Happen in a Classroom: Elementary and Middle School Teacher Perspectives on the Benefits of, and Obstacles to, Out-of-School Learning. *Issues in Teacher Education*, 27(3), 55-72.
- Cochran-Smith, M., Grudnoff, L., Orland-Barak, L., & Smith, K. (2020). Educating teacher educators: International perspectives. *The New Educator*, 16(1), 5-24.
- Comighud, S. M. T., & Arevalo, M. J. (2021). Motivation in relation to teachers' Performance
- Corcoran, R. P., & O'Flaherty, J. (2022). Social and emotional learning in teacher preparation: Pre-service teacher well-being. *Teaching and Teacher Education*, 110, 103563.
- Da Fonte, M. A., & Barton-Arwood, S. M. (2017). Collaboration of general and special education teachers: Perspectives and strategies. *Intervention in School and Clinic*, 53(2), 99-106.
- Dias-Lacy, S. L., & Guirguis, R. V. (2017). Challenges for New Teachers and Ways of Coping with Them. *Journal of Education and Learning*, 6(3), 265-272.
- Fauth, B., Decristan, J., Decker, A. T., Büttner, G., Hardy, I., Klieme, E., & Kunter, M. (2019). The effects of teacher competence on student outcomes in elementary science education: The mediating role of teaching quality. *Teaching and Teacher Education*, 86, 102882.

- Fonseca, J., Carvalho, C., Conboy, J., Valente, M. O., Gama, A. P., Salema, M. H., & Fiuza, E. (2015). Changing teachers' feedback practices: A workshop challenge. *Australian Journal of Teacher Education (Online)*, 40(8), 59-82.
- Ford, T. G., Urick, A., & Wilson, A. S. (2018). Exploring the effect of supportive teacher evaluation experiences on US teachers' job satisfaction. *Education Policy Analysis Archives*, 26, 59-59.
- Fox, R. K., Dodman, S., & Holincheck, N. (2019). Moving beyond reflection in a hall of mirrors: developing critical reflective capacity in teachers and teacher educators. *Reflective Practice*, 20(3), 367-382.
- Gass, S. M., & Mackey, A. (2020). Input, interaction, and output in L2 acquisition. In *Theories in second language acquisition* (pp. 192-222). Routledge.
- Gitomer, D. H. (2021). *Methods for Observing Classroom Interactions*. *Research Methods and Methodologies in Education*, 221.
- Gore, J. M. (2021). The quest for better teaching. *Oxford Review of Education*, 47(1), 45-60.
- Harmsen, R., Helms-Lorenz, M., Maulana, R., & Van Veen, K. (2018). The relationship between beginning teachers' stress causes, stress responses, teaching behaviour and attrition. *Teachers and Teaching*, 24(6), 626-643.
- Hernandez, S. (2021). Exploring Secondary Teachers' Willingness to Differentiate Instruction for ELLs. *INTESOL Journal*, 18(1), 75-112.
- Howard, S. K., Tondeur, J., Ma, J., & Yang, J. (2021). What to teach? Strategies for developing digital competency in preservice teacher training. *Computers & Education*, 165, 104149.
- Jamil, F. M., & Hamre, B. K. (2018). Teacher reflection in the context of an online professional development course: Applying principles of cognitive science to promote teacher learning. *Action in Teacher Education*, 40(2), 220-236.
- Jerome Freiberg, H., Oviatt, D., & Naveira, E. (2020). Classroom management meta-review continuation of research-based programs for preventing and solving discipline problems. *Journal of Education for Students Placed at Risk (JESPAR)*, 25(4), 319-337.
- Jones, E., Wind, S. A., Burcham, J., Hart, A., & Dailey, T. (2022). A Case Study of

a Multi-Faceted Approach to Evaluating Teacher Candidate Ratings. *The Teacher Educator*, 1-21.

- Keller, M. M., Neumann, K., & Fischer, H. E. (2017). The impact of physics teachers' pedagogical content knowledge and motivation on students' achievement and interest. *Journal of Research in Science Teaching*, 54(5), 586-614.
- Kim, S., Raza, M., & Seidman, E. (2019). Improving 21st-century teaching skills: The key to effective 21st-century learners. *Research in Comparative and International Education*, 14(1), 99-117.
- Kraft, M. A., & Christian, A. (2022). Can teacher evaluation systems produce high-quality feedback? An administrator training field experiment. *American Educational Research Journal*, 59(3), 500-537.
- Lazarides, R., Fauth, B., Gaspard, H., & Göllner, R. (2021). Teacher self-efficacy and enthusiasm: Relations to changes in student-perceived teaching quality at the beginning of secondary education. *Learning and Instruction*, 73, 101435.
- Liu, K. (2020). Toward a Transformative Teacher Education Community. In *Critical Reflection for Transformative Learning* (pp. 129-135). Springer, Cham.
- Maloney, K. (2020). The Effects of Class Size on Student Achievement.
- Mathew, P., Mathew, P., & Peechattu, P. J. (2017). Reflective practices: A means to teacher development. *Asia Pacific Journal of Contemporary Education and Communication Technology*, 3(1), 126-131.
- Martínez, J. P., Méndez, I., Ruiz-Esteban, C., Fernández-Sogorb, A., & García-Fernández, J. M. (2020). Profiles of burnout, coping strategies and depressive symptomatology. *Frontiers in psychology*, 11, 591.
- Moorhouse, B. L., Li, Y., & Walsh, S. (2021). E-classroom interactional competencies: Mediating and assisting language learning during synchronous online lessons. *RELC Journal*, 0033688220985274.
- Mulyani, S., Gaffar, M. F., & Wulansari, S. (2021, February). The Development of Academic Services Model in Enhancing Better Graduates Quality. In *4th International Conference on Research of Educational Administration and Management (ICREAM 2020)* (pp. 81-85). Atlantis Press.
- Odden, T. O. B., & Russ, R. S. (2019). Defining sensemaking: Bringing clarity to a fragmented theoretical construct. *Science Education*, 103(1), 187-205.

- Podolsky, A., Kini, T., & Darling-Hammond, L. (2019). Does teaching experience increase teacher effectiveness? A review of US research. *Journal of Professional Capital and Community*.
- Poulou, M. S., Reddy, L. A., & Dudek, C. M. (2019). Relation of teacher self-efficacy and classroom practices: A preliminary investigation. *School Psychology International*, 40(1), 25-48.
- Praetorius, A. K., & Charalambous, C. Y. (2018). Classroom observation frameworks for studying instructional quality: looking back and looking forward. *Zdm*, 50(3), 535-553.
- Seago, N., Koellner, K., & Jacobs, J. (2018). Video in the middle: Purposeful design of video-based mathematics professional development. *Contemporary Issues in Technology and Teacher Education*, 18(1), 29-49.
- Schermer, M., & Fosker, T. (2020). Reconsidering methods for systematic classroom observation: the measurement and analysis of categorical time-series observations. *International Journal of Research & Method in Education*, 43(3), 311-326.
- Sheaffer, A. W., Majeika, C. E., Gilmour, A. F., & Wehby, J. H. (2021). Classroom behavior of students with or at risk of EBD: Student gender affects teacher ratings but not direct observations. *Behavioral Disorders*, 46(2), 96-107.
- Smith, A. R., & Smalley, S. (2018). Job Stress, Burnout, and Professional Development Needs of Mid-Career Agricultural Education Teachers. *Journal of Agricultural Education*, 59(2), 305-320.
- Steinberg, M. P., & Kraft, M. A. (2017). The sensitivity of teacher performance ratings to the design of teacher evaluation systems. *Educational Researcher*, 46(7), 378-396.
- Troelsen, S. (2018). An invitation you cannot refuse – analysis of the final exam in written production with a special focus on the writing order. *Nordic Journal of Literacy Research*, 4 (1).
- Van der Klink, M., Kools, Q., Avissar, G., White, S., & Sakata, T. (2017). Professional development of teacher educators: What do they do? Findings from an explorative international study. *Professional development in education*, 43(2), 163-178.
- Van Der Schaaf, M., Slof, B., Boven, L., & De Jong, A. (2019). Evidence for measuring teachers' core practices. *European Journal of Teacher Education*, 42(5), 675-694.

- Wahyuddin, W., Rusdin, N. Q., & Nur, M. A. (2022). The impact of affective skills toward on the mathematics learning outcomes at senior high school students. *Jurnal Elemen*, 8(2), 391-410.
- Wambugu, P. W., Stutchbury, K., & Dickie, J. (2019). Challenges and opportunities in the implementation of school-based teacher professional development: A case from Kenya. *Journal of Learning for development*, 6(1), 76-82.
- Wesely, P. M., Vyn, R., & Neubauer, D. (2021). Teacher beliefs about instructional approaches: Interrogating the notion of teaching methods. *Language Teaching Research*, 1362168821992180.
- Wilden, E., & Porsch, R. (2019). The impact of teaching quality and learning time on primary EFL learners' receptive proficiency: Preliminary findings from the TEPS study. *AILA Review*, 32(1), 160-177.
- Zhang, S., Liu, Q., & Cai, Z. (2019). Exploring primary school teachers' technological pedagogical content knowledge (TPACK) in online collaborative discourse: An epistemic network analysis. *British Journal of Educational Technology*, 50(6), 3437-3455.