DEVELOPMENT AND VALIDATION OF CLASSROOM OBSERVATION TOOL FOR PRE-SERVICE TEACHERS BASED ON THE CAREER STAGE 1 OF THE PROFESSIONAL STANDARDS FOR TEACHERS

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Abstract – *Many recent educational reforms prioritize teacher quality to improve student achievement. For this purpose, the Department of Education implemented the Philippine Professional Standards for Teachers (PPST), a tool that defines the domains, strands, and indicators that provide measures of professional learning, and teaching competency of in-service teachers. However, there has been no classroom observation tool (COT) designed for pre-service teachers aligned with PPST. Feedback on teaching skills also plays an important role in promoting teacher quality. This study aimed to develop and validate a classroom observation tool that focuses on providing feedback on the teaching skills of pre-service teachers. This study employed a developmental research design. The classroom observation tool for pre-service teachers underwent different phases of planning, design, and development. Focus group discussions (FGD) were conducted for the try-out phase. Through purposive sampling, participants from FGD which comprised cooperating teachers (n=10), supervising teachers (n=2), and pre-service teachers (n=14) were involved in teaching internship programs. Responses were analyzed using thematic analysis. The results revealed participants found the classroom observation tool useful in identifying weaknesses and improving teaching practices and competencies aligned with professional standards for teachers in both face-to-face and online modalities. It is recommended that the tool be used by other teacher education institutions within the region.*

Keywords: Philippine Professional Standards for Teachers; feedback; classroom observation tool

INTRODUCTION

There has been a wide consensus that teacher quality is the single most important school variable influencing student achievement (OECD, 2005; Rothstein 2014; Klein et al., 2010; Strong et al., 2011; Sirait, 2016). Even though the construct of teacher quality may be understood in a variety of ways (Darling-Hammond, 2017; Darling-Hammond & Lieberman, 2012; Hilton, Flores, & Niklasson, 2013), research indicates that teacher quality is highly influenced by the quality of teacher education programs (Flores, 2016; Strong et al., 2011). In the Philippines, pre-service teachers enroll in four-year elementary or secondary education programs (Zeegers, 2012) which encompass several education and discipline-related courses such as professional education or foundation courses, pedagogical content knowledge courses, specialization or major courses, and experiential learning courses including practice teaching (CMO 74 s. 2017).

Practice teaching is the total immersion of the preservice teacher in the real classroom situation for becoming a teacher (Ganal & Andaya, 2015). Practice teaching is essential for preservice teachers as it provides training in real-world scenarios by putting into practice the educational theories and philosophies, teaching approaches and strategies, and instructional technologies (Velcado et. al, 2017; Mugot & Sumbalan, 2019). During this component of the teacher training course, the preservice teachers go through the cyclical process of planning, actual teaching, and evaluating learning with the support of a mentor, called a cooperating teacher (Ganal & Andaya, 2015). The cooperating teacher plays a key role in the success of preservice teachers (Eck & Ramsey, 2019; Clark et.al, 2014) as the model desired teaching behaviors expected of preservice teachers (Eck & Ramsey, 2019; Clark et.al, 2014). However,

the feedback the preservice teachers received about their teaching performance may not be aligned with the PPST.

While there has been established literature exploring the use of instruments to evaluate the teaching quality and efficacy of in-service teachers (Molina et. al, 2018; Barrogo, 2020; RPMS, 2015; Bituin and Dacany, 2018), there are limited studies investigating the utilization of these classroom observation tools particularly in providing useful feedback to improve teaching performance and practices (van der Lans, van de Grift & van Veen, 2018) in the context of preservice teachers. This study intends to address this gap by developing a classroom observation tool for preservice teachers based on Career Stage 1 of the Philippine Professional Standards for Teachers. It also aims to determine the validate a classroom observation tool in providing appropriate and practical feedback to improve the teaching performance and competence of preservice teachers. Finally, the designed tool intends to improve the teaching competency of Filipino preservice teachers in terms of instruction, classroom management, and assessment.

OBJECTIVES

This study aimed to develop and validate a classroom observation tool for preservice teachers that is based on career stage 1 of the professional standards for teachers. The pre-service teachers are those taking elementary and secondary education and enrolled in the teaching internship program. Specifically, the study sought to answer the following questions:

1. How is the classroom observation tool being developed and validated?
2. What are the perceptions of the supervising/cooperating and preservice teachers on the use of the classroom observation tool, in terms of:
a. modes of delivery
b. providing feedback?
3. What is the extent of the usability of the classroom observation tool?

METHODOLOGY

Research Design

This study employed an exploratory qualitative research design. Exploratory research is a methodological approach that investigates research questions that have not previously been studied or need to know more about the topic with very little information (George, 2021; Elman et al., 2020).

Participants

The participants of this study who were purposively selected consisted of 10 cooperating teachers, 2 supervising teachers, and 14 preservice teachers. These participants are involved in teaching internship programs at one of the universities in Mindanao, Philippines.

Data Gathering Procedure

In data gathering, this study followed the stages of research and development study. According to Gay (1990), the major purpose of R & D efforts is not to formulate or test a theory but to develop effective products for use in schools, which in the context of the study focuses on the development of COT for preservice teachers aligned with PPST.

Stage 1: Planning. In this stage, Results-based Performance Management System (RPMS) tools for public school teachers were reviewed to develop an observation tool intended for the preservice teachers in which the domain and competencies are aligned with the Philippine Professional Standards for Teachers (PPST). The classroom observation tool was also designed for face-to-face and online instruction.

Stage 2: Construction. In the construction of the classroom observation tool, researchers developed the classroom observation tool by determining the 5 domains specified in the PPST for Career Stage 1 that are solely focused on classroom instruction. Nine (9) indicators were considered as shown below:

Domains	Indicators/Strands
I. Content Knowledge & Pedagogy	1. Demonstrate content knowledge and its application within and/or across curriculum teaching areas. 2. Demonstrate knowledge of teaching strategies that promote literacy and numeracy skills. 3. Apply teaching strategies that develop critical and creative

	thinking, and/or other higher-order thinking skills.
II. Learning Environment	4. Demonstrate knowledge of managing classroom structure that engages learners, individually or in groups, in meaningful exploration, discovery and hands-on activities within the available physical learning environments. 5. Demonstrate knowledge of managing classroom structure that engages learners, individually or in groups, in meaningful exploration, discovery and hands-on activities within the available physical learning environments.
III. Diversity of Learners	6. Demonstrate knowledge and understanding of differentiated teaching to suit the learners' gender, needs, strengths, interests, and experiences.
IV. Curriculum & Planning	7. Prepare developmentally sequenced teaching and learning processes to meet curriculum requirements. 8. Show skills in the selection, development, and use of a variety of teaching and learning resources, including ICT, to address learning goals.
V. Assessment & Reporting	9. Demonstrate knowledge of the design, selection, organization, and use of diagnostic, formative, and summative assessment strategies consistent with curriculum requirements.

We patterned the 5-point scales from Career Stage 2 (in-service teachers) with revision to fit Career Stage 1 (pre-service teachers). A feedback mechanism was also added to provide an authentic assessment of teaching performance.

Stage 3: Tryout. The observation tool underwent face and content validity by experts to determine the acceptability of the various indicators. It was revised based on their comments on appropriateness (language and competencies) to the preservice teachers, and clarity of instructions and indicators of the instrument. After the revision, the tool was used by the cooperating and supervising teachers to determine the usability of the tool for both face-to-face and online instruction. Before administering the instrument, participants were given an informed consent form in both administrations to properly inform them of the nature of the study, how their responses would be used, and the confidentiality of information obtained from them. They were specifically asked to complete the informed consent form and sign it to indicate that they accepted the invitation to participate in the study.

Stage 4: Evaluation. Data collected in the tryout was used in this stage. This means that the various indicators in the instrument were evaluated by the participants through interviews and FGD. Thematic analysis was used in analyzing the data.

Stage 5: Revision/Finalization. In this stage, the COT was revised based on the result of the evaluation. A final format of the instrument (classroom observation tool) was made for the actual implementation.

DATA ANALYSIS

The data collected were analyzed through thematic analysis described by Braun and Clarke (2006). The first step is familiarizing the data. It entails repeated and active reading through the data. The second step is generating initial codes which involve taking notes on potential data items of interest, questions, connections between data items, and other preliminary ideas. Next is searching for themes. It is the examination of the coded and collated data extracts to look for potential themes of broader significance. Themes are constructed by the researcher through analyzing, combining, comparing, and even graphically mapping how codes relate to one another. The themes are reviewed using a two-level analytical process. In the first level of analysis, researchers look at coded data placed within each theme to ensure proper fit. They review all relevant codes and data extracts under each theme. In level two,

the researcher re-reads the entire data set to reexamine themes and to re-code for additional data that falls under the themes that have been newly created or modified in this phase then revises the thematic map accordingly. Once the thematic map has been refined, step 5 finds the researcher creating a definition and narrative description of each theme, including why it is important to the broader study question. The names of themes to be included in the final report are reviewed to ensure they are brief and adequately descriptive. The final step is producing the report/manuscript which involves writing up the final analysis and description of findings.

RESULTS AND DISCUSSION

Development and Validation of COT

Classroom Observation Tool for Pre-Service Teachers based on the Career Stage 1 of the Philippine Professional Standards for Teachers (PPST) is designed to provide relevant and effective feedback to pre-service teachers during their classroom/online teaching demonstration to improve teaching competence. The significant feature of this tool is the provision of a wide box area where the cooperating/ supervising teacher can write important feedback to the pre-service teachers about their face-to-face/online teaching demonstration.

During the development of the COT, a Results-based Performance Management System (RPMS) was reviewed to construct an observation tool responsive to the needs and competencies of pre-service teachers. This tool which is presented in a rubric format consists of 5 domains (Content Knowledge and Pedagogy, Learning Environment, Diversity of Learners, Curriculum and Planning, and Assessment and Reporting) consisting of 9 indicators that encapsulate observable teaching skills in an actual face-to-face/ online teaching. This tool is used not to give evaluation or pass judgment about teaching performance, but to provide appropriate feedback to pre-service teachers about their actual teaching skills and use these feedbacks to highlight their strengths and reveal areas for improvement.

The last 3 levels in the rubric such as Organizing, Developing, and Applying are directly taken from the RPMS (Results-based Performance Management System, DepEd) including the descriptions and features of practice under each level. The first two levels (Emerging and Beginning), however, were added to make the classroom observation tool suitable for pre-service teachers. Small boxes are provided under each description where the cooperating/ supervising teacher can put a mark to indicate the actual teaching competence of a pre-service teacher during the teaching demonstration.

The observation tool underwent face and content validity by experts to establish the acceptability of the various indicators. It was revised based on their comments on appropriateness (language and competencies) to the preservice teachers, and clarity of instructions and indicators of the instrument. After the revision, the tool was used by the cooperating and supervising teachers to determine the usability of the tool for both face-to-face and online instruction.

Perceptions on the use of COT

A.   Modes of Delivery

Based on the focus group discussion and interview, the results revealed that all the participants agreed that the classroom observation tool is useful for both face-to-face and online modalities. However, important observations were noted regarding the challenges in using COT. Both cooperating/supervising and preservice teachers perceived that certain indicators in the COT (such as handling misbehavior, establishing rules of conduct, sustaining student-teacher interaction due to poor internet connection, and applying differentiated instruction and assessment) can be difficult to assess during online classes. However, a few of the preservice teachers find the COT easier to use in online instruction as compared to face-to-face because less preparation of instructional materials and technology resources are required. This implies that preservice teachers showed deep understanding in the selection, development, and use of teaching and learning resources including ICT.

According to the TPACK model, when teachers are competent at designing technology-enhanced teaching and learning in specific contexts, they can rethink course elements that are difficult to teach in traditional ways and transform their instruction into better representations using technologies (Angeli & Valanides, 2009; Jang, 2008).

Additionally, a study by Ghavifekr and Wan Athirah (2016) found that many teachers are aware of the importance of ICT and digital technology in the classroom to access more current resources, which

enhances their instruction. Furthermore, according to Abu Bakar (2013), the advantages of digital technology in the classroom include attractiveness, practicality, multimodality, relevance, interactivity, and importance. With these, teachers should be able to successfully incorporate them into the teaching and learning process. However, the effectiveness of the technology integration depends on the teachers' level of TPACK as well.

B. Feedback on the Improvement of Teaching Competence

The use of the classroom observation tool is useful in providing feedback on improving the teaching competencies of the preservice teachers. The table below shows the summary responses of the participants on the use of COT classified into three categories: Teacher Knowledge, Teacher Self-Efficacy, and Social, Contextual, and Environmental Effects. These categories are not stages but overarching components of the Social Learning theory.

Table 1. Summary Responses on the Use of COT in Providing Feedback

Responses	Category
a. Improving teaching practice and competence e.g. delivery of instruction, preparedness, and classroom management skills b. Using varied strategies to make lessons interactive and engaging including integration of ICT.	Teacher knowledge
a. For assessment e.g. formative assessment, and self-assessment b. Determining weaknesses of teaching practice and competence e.g. classroom management skills, knowledge of content and pedagogy, application of deep understanding, and transfer of learning	Teacher Self-efficacy
a. Providing immediate feedback and open discussion with peers, supervising, and cooperating teachers b. Clarity of expected teaching practice and competence	Social, Contextual, and Environmental Effects

Table 1 shows the summary responses on the use of COT in providing feedback. As shown, the three categories are teacher knowledge, teacher self-efficacy, and social, contextual, and environmental effects. Teacher knowledge corresponds with aspects of data where the teacher refers to their knowledge and the effects on their knowledge in the context of their teaching (Watson, 2013). This category is also aligned with the following domains in PPST: Pedagogy & Content Knowledge, and Curriculum and Planning. The use of COT allows preservice teachers to gain knowledge of their current teaching skills and whether such knowledge has improved or changed over the course of their internship program. The responses of the participants suggest that feedback from the COT shows improvement in pre-service teachers' knowledge of teaching practice and competence (e.g. delivery of instruction, preparedness, and classroom management skills and using varied strategies as well as integration of ICT). According to one of the CTs/STs:

"Naka improve jud sya sa performance sa akong practice teachers…mura na jud daw siya ug teacher. Iyaang mga strategies nga gigamit ba, everytime sya magklase, lahi2 jud ang pamaagi in a way nga maka ignite jud sa interest sa iyaang mga students." (ST1) [It helped to improve the performance of my practice teacher. He/she is like a real teacher. Every time he/she conducts class, he/she uses different strategies to ignite the interest of his/her students.]

The COT enables them to improve the performance of her preservice teacher because she acts like a real classroom teacher. She uses varied activities including ICT integration to stimulate the interest of the learners.

Meanwhile, teacher self-efficacy involves a self-regulatory process and reflects cognitive capacity. It also incorporates affective components and has direct reference to confidence, motivation, or willingness to include innovative processes in teaching (Watson, 2013). The COT was used for pre-service

teachers to reflect (e.g. through self-assessment) on their weaknesses in teaching practice and competence e.g. classroom management skills, knowledge of content and pedagogy, application of deep understanding, and transfer of learning. One of the PTs said:

".. feedback based sa COT, they were so specific sa mga parts that I needed to improve… So, ako, I have to adjust my lesson plan, ang mga learning modalities nga akong ginagamit para ma fit nako sa mga needs sa akong mga students…" (PT1) [The feedback based on the COT was very specific in terms of the parts I need to improve. So, I must adjust my lesson plan, and the learning modalities that I use to fit the needs of my students.]

This response implies that the feedback from the COT helps the preservice teacher to increase self-consciousness and willingness to innovate. Teachers who persist with innovation have been shown to demonstrate high levels of self-efficacy in the context of teaching (Berman & McLaughlin, 1978, as cited in Watson, 2013).

According to Watson (2013), social, contextual, and environmental effects refer to aspects of teachers' experience that are related to student, parent, or colleague expectations that may have a bearing on what the teacher does in the classroom. In PPST, this category relates to the Diversity of Learners and Learning Environment. The COT was utilized to provide immediate feedback as well as open discussion with peers, supervising, and cooperating teachers. It also assists preservice teachers to understand what is expected of them in the teaching profession. During the FGD, the participants noted that:

"Sa akoa is useful…kay nagprovide jud siya ug details…mas defined and mas klaro kung unsay specifics ani" (ST2) [For me, it is useful because it provides defined and clear details about the specific parts.]

"Nakahelp pud ang COT para makita katong mga naay definition description… how to attain this type of domain and its indicator. I think mao to siya ang help sa COT" (ST3) [The COT also helped to see the definition, description, and how to attain this type of domain and its indicator. I think that's the usefulness of the COT.]

These responses suggest that the use of COT helps the ST/CT to communicate the desired expectations that preservice teachers need to demonstrate based on the professional standards for teachers.

However, participants noted the following issues and concerns that must be addressed first to maximize the benefits of the use of COT.

1. There was difficulty tracking the progress of the preservice teachers if the COT was rarely used by the cooperating teacher/ supervising teacher.

2. Both the cooperating teacher/ supervising teacher and the preservice teachers lack readiness to shift from face-to-face to online instruction

3. Both the cooperating teacher/ supervising teacher and the preservice teachers lack understanding regarding the differentiated instruction in the online modality

4. Both the cooperating teacher/ supervising teacher and the preservice teachers lack knowledge in conducting assessments in an online modality.

5. There were no observation indicators for personal attributes (i.e., clarity of voice, and communication skills) in the COT.

6. There was difficulty in keeping students engaged in online classes due to a lack of internet connectivity and gadgets.

Extent of Usability of COT

This part discusses the extent of usability of the COT. There were two (2) questions, namely: (1) Have you used the classroom observation tool? If yes, how often; and (2) Would you recommend COT to be used by other schools?

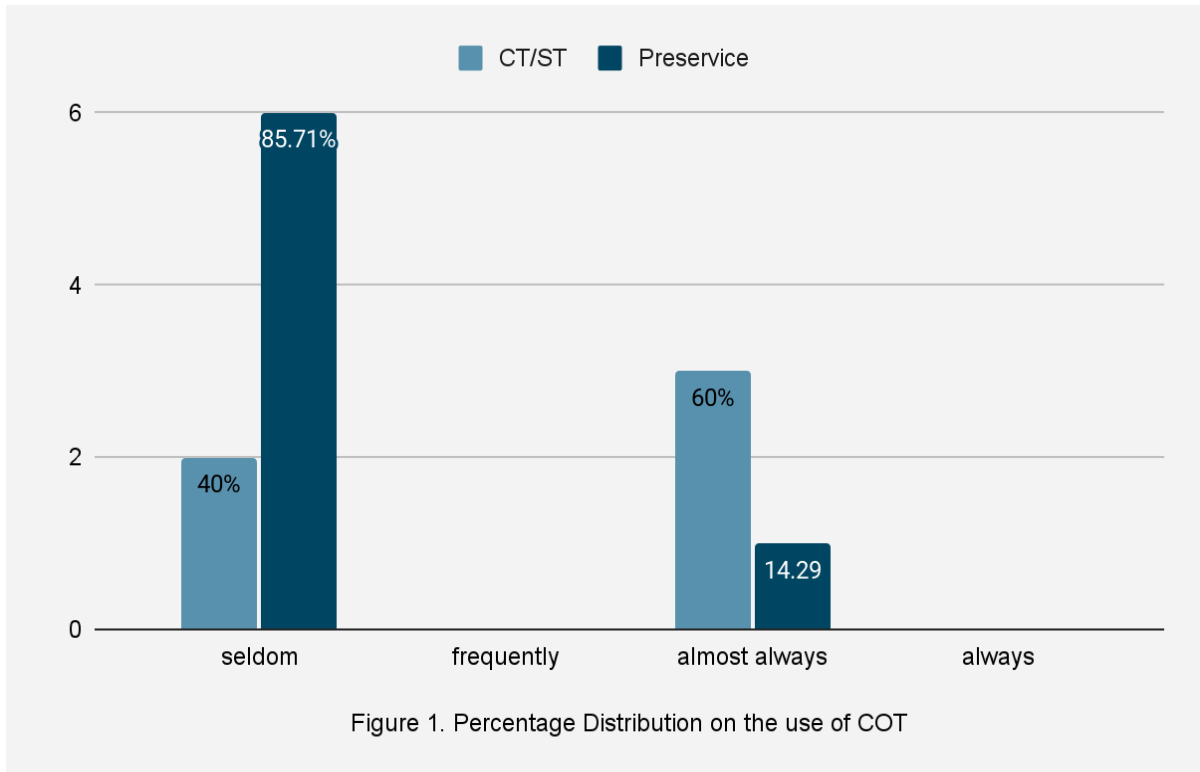Figure 1. Percentage Distribution on the use of COT

Figure 1 shows the percentage distribution on the use of the classroom observation tool. The results indicated that most (85.71%) of the pre-service teachers seldom use the tool while the majority (60%) of the cooperating/supervising teachers almost always use the tool.
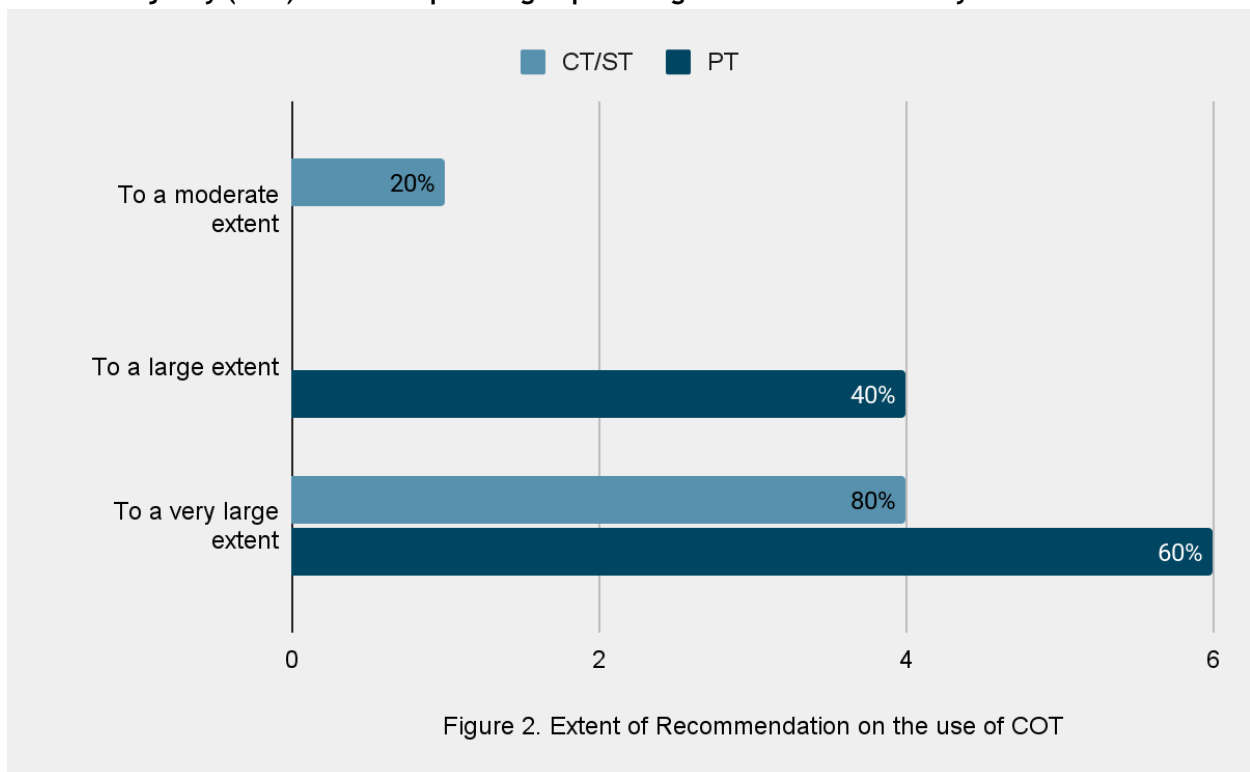

Figure 2. Extent of Recommendation on the use of COT

Figure 2 displays the percentage distribution of the extent of recommendation on the use of the classroom observation tool (COT) to other schools. The results revealed that the majority (60%) of the pre-service teachers will recommend COT to a very large extent while most (80%) of the cooperating/supervising teachers will recommend it to a large extent.

CONCLUSION

The importance of teacher quality in the overall performance and achievement of students cannot be overstated. The influence of teacher education programs in enhancing the quality of the involved teachers is therefore something that merits importance.

By creating a classroom observation tool that emphasizes providing useful feedback aligned with the PPST appropriate to career stage 1 of preservice teachers, this study attempted to address the lack thereof in current pedagogies. After the revisions were made based on the opinions of experts, the tool was used by the supervising teachers to determine its usability. In these tests, the consensus of the participants was that it was useful for both online and face-to-face modalities, but there likewise were challenges such as factors exclusive to one modality or the other. Most participants would recommend that the COT be used in other schools, however. This suggests that, while there are challenges in its current state, the benefits of using the COT are enough to warrant further studies and refinement of the aforementioned.

Recommendation

Considering the research findings, the researcher wishes to make the following recommendations:

For the end-users of the classroom observation tool (supervising/cooperating teachers and preservice teachers), clear orientation and simulation on the use of COT in both online and face-to-face instructions to administer the best supervisory observations and advice.

To further test the validity and reliability of the instrument, future researchers may conduct using a larger sample including preservice teachers from Teacher Education Institutions (TEIs) in both rural and urban settings.

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