

Volume 5-Number 1-2023-4

Master Teachers as Instructional Leaders amidst the Challenges of 21st Century Teaching Learning

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ABSTRACT

This study, which utilized a parallel-convergent mixed-methods approach, describes in detail the challenges faced by Master Teachers at public secondary schools regarding 21st-century teaching and learning. It assessed the level of instructional supervision of the Master Teacher-respondents in public secondary schools based on the following indicators: classroom observation; obtaining learning aids; researching teaching methods; mentoring teachers; planning teacher training; and curriculum development. The study used a purposive sampling of sixty teachers in demographically diverse public secondary schools in the Division of Bulacan. Master teacher respondents completed a questionnaire online. Challenges facing education and learning in the 21st century were addressed in the questions. Through online interviews, the respondents answer through the Google form platform. Sixty (60) master teachers from Eddis II, Division of Bulacan, took part in a study about the challenges of education in the twenty-first century.

Data showed that *mentoring teachers* obtained the highest mean among the aspects of instructional supervision delivered by master teacher-respondents in public secondary schools. On the other hand, *research teaching methods* received the lowest mean. Most teacher-respondents confirmed that master teachers collaborate with the school head to exercise instructional supervision. It was suggested that a program of intervention be implemented to enhance the instructional leadership of master teachers in public secondary schools of Eddis II in Bulacan.

KEYWORDS –

21st-century learning refers to abilities that students need to possess, such as problem-solving, critical thinking, and literacy digitally, to succeed in the twenty-first century.

21st-century educators must progressively address the needs of learners in today's technologically advanced society. They must modify their education methods to meet modern learning modes and accommodate new technological advancements.

21st-century education adapts to the sociological, technical, and economic changes occurring at an accelerating rate. Through education, learners are ready for success in a world where change is the norm.

Instructional supervision ensures the school's educational objective carries off by supervising, supplying, and empowering educators to give students meaningful learning experiences.

21st-century skills. Refers to 21st-century skills that Master Teachers must have, such as understanding classroom observation, acquiring instructional materials, exploring new ways of instructing, mentoring educators, organizing teacher-training programs, and crafting educational curricula.

INTRODUCTION

Bulacan as to how they meet the expected standards, on fitness, competence, equal opportunity, transparency, and accountability. As per CSC Prescribed Qualification and DepEd Order 3, s. 2016; DepEd Order 27, s. 2016; and DepEd Order 51, s. 2017) Merit Selection for hiring Master Teacher position aiming to hire deserving people for the master-teacher position during ranking and reclassification.

Among the primary responsibilities of a master teacher is the implementation of training programs that foster the growth of higher-order cognitive abilities like critical thinking and creative problem-solving. Keeping students engaged in learning via positive and non-violent punishment and controlling the classroom's structure to encourage meaningful inquiry, hands-on activities, and discovery in various physical learning settings. Planned, organized, and implemented learning and teaching activities following a developmental sequence to satisfy the curriculum requirements and various educational contexts.

DepEd also shared that the entry had the lowest score in the Organization for Economic Cooperation and Development's Program for International Student Assessment (PISA). This was even more alarming than the NAT results. PISA is an international test that is given every three years to check how well 15-year-old students know science, math, and reading. Filipino learners ranked lowest among 79 countries in science and mathematics. According to the 2018 PISA results, the need for more master teachers is required to stop the deteriorating quality of primary education. (Gonzales, 2019). Master Teachers in the twenty-first century can foresee

and prepare for the future. They can encourage their students to navigate this rapidly evolving technological environment successfully. Based on the current trends and technological advancement, they can prepare students for the unknown based on current trends and technology; they can help students get ready for the future. Master teachers must therefore be able to accept change. Teachers must take and adapt to change to keep up with the rapid technological advances and student learning. Technology is constantly evolving, just like new instructional methods, testing procedures, and ways of learning and interacting with others. An effective teacher in the twenty-first century can adapt to anything and accept everything. However, it is necessary to identify 21st-century learning before understanding what teaching methods a twenty-first educator should employ. The phrase *21st-century learning* refers to the skills students must master, such as thinking critically and solving real-life problems digitally

The researcher believes that Master Teachers' instructional supervision can help inexperienced teachers develop their abilities, leading to more efficient instruction and learning. Through carefully designed courses and assignments, Master Teachers can help students develop their critical thinking and perspective by incorporating twenty-first-century education and learning abilities into the classroom today. Students will become more adaptable and flexible in our constantly changing environment, enhance their ability to collaborate across cultural boundaries and be ready to assume leadership roles that will benefit our nation and the rest of the world.

METHODOLOGY

A mixed-methods design was used in this research study. According to Creswell, Plano, and Clark, (2018), mixed methods research gathers and analyzes mixed quantitative and qualitative data in a single study. Convergent parallel design was used; parallel data collection, independent analysis, and merging of qualitative and quantitative data took place. The quantitative portion was set up as an online survey.

As a result, it is possible to compare teachers' levels of instructional supervision as determined by classroom observations, the acquisition of learning aids, the research of teaching techniques, the mentoring of teachers, the planning of teacher training, and curriculum development Brackett et al., (2012). Does the master teacher assist the school leader in his or her responsibilities for overseeing instruction? What difficulties are there for master instructors in the current pandemic? Semi-structured in-depth interviews with secondary school master teachers were undertaken for the qualitative portion. Interviews have the benefit of giving teachers greater room to speak candidly and extensively.

Also, their specific requirements and viewpoints might be better taken into account, as well as their surroundings and daily life. For a comparison to be formed and a more comprehensive understanding to emerge than that supplied by the quantitative or qualitative results alone, the integration entailed combining the qualitative and quantitative data outputs Heyvaert et al., 2013; Creswell & Plano Clark, (2018).

The researcher aims to gather data from all the Master Teachers from public secondary schools in Eddis II, part of the Department of Education's Schools Division of Bulacan in Region III. However, only sixty (60) out of seventy-nine (79) Master Teachers participated in the study.

Table 1 presents the frequency and distribution of respondents in Eddis II.

Table 1
Frequency and Distribution of Subjects of the Study

No.	Schools in Eddis II	Number of Master Teachers	Number of Respondents	Male	Female	Master Teacher I	Master Teacher II
1	Alexis G. Santos National High School	5	5		5	5	
2	Balagtas National Agricultural High School	11	9	2	7	7	2
3	Bunsuran National High School	6	5	1	4	5	
4	Dr. Felipe de Jesus Memorial High School	4	3		3	3	
5	F.C. Lipana High School	8	5		5	4	1
6	Guiguinto National Technical Vocational High School	15	12	4	8	9	3
7	Jose J. Mariano High School	2	2		2	2	
8	Lolomboy National High School	9	4	2	2	2	2
9	Mariano Ponce National High School	12	9	2	7	6	3
10	Taal High school	2	2		2	1	1
11	Tiaong National High School	1	1	1		1	
12	Virginia Ramirez Cruz High School	4	3		3	2	1
	Total (N)	79	60	12	48	47	13

Looking at the table, Master Teachers in the Schools Division of Bulacan were dominated by female respondents. Bongco, R. T., and A. P. David, (2020) 115 of the 160 respondents are female and predominate in the education field. This is consistent with the statistical evidence showing there are more female teachers than male instructors in the Philippines. Furthermore, more female teachers are embracing efforts for ongoing professional development (CPD) [15]. The majority of respondents, 136, or 85 percent of the overall sample, are full-time, followed by 24 part-time, or 15 percent of the sample. Due to a steadier salary, a greater number of teachers will now be able to pursue CPD and investigate further career opportunities.

The following requirements (KRAs) must be met to become a Master Teacher: As a highly proficient Teacher, a Master Teacher should exhibit excellent practice in integrating topic knowledge and pedagogy, demonstrating its integration across learning domains. On teaching-learning innovations, he or she must do in-depth investigations or action research. They should collaborate with coworkers to develop settings centered on learning that encourage learner accountability and accomplishment. Must be able to help coworkers in implementing diversified teaching practices in response to the diversity of learners. They should be in charge of the curriculum's development and enrichment. Highly Competent educators must develop initiatives and projects that strengthen the curriculum and its execution. Improving the teaching and learning process through creating, assessing, understanding, and implementing various assessment techniques. The learner's requirements, progress, and achievements are discussed with the parent(s) or guardian(s), depending on the situation. Improves the level of participation of both internal and external stakeholders in the educational process by strengthening ties between the school and the community. For the purpose of professional development, it is important to foster the formation of contacts with coworkers through attendance at professional events and membership in professional associations. Organizes/leads/serves as trainers/facilitators in teacher quality circles/learning action cells; provides technical assistance by way of demonstrative teaching, mentoring, coaching, class monitoring, and observation; offers observation opportunities. Does engaging in linked activities, which are essential for acquiring the skills necessary for the 21st century, encourage teaching and learning?

The frequency and distribution of individuals in the study are displayed in Table 1. Table 1 reveals that Guiguinto National Technical Vocational School had the most significant number of Master teachers in Eddis II, with 15 respondents, followed by Mariano Ponce National High School, with nine teachers, or 83 percent. It was followed by Balagtas National Agricultural High School (nine), which accounted for eighty percent of the total. Next is Bunsuran National High School, which has six Master Teachers or one hundred percent of its Master Teacher population. Alexis G. Santos National High School had the fifth-highest proportion of responses, with five out of five MTs. Since TNHS has only one master teacher, Tiaong National High School had the fewest respondents, with one (1) or 100 percent of its MT population. Data will be collected from these respondents during the 2020-2021 school year.

The sampling methods were acceptable because the selected Master Teachers worked in public secondary schools of varying sizes, types, and geographic locations. In 12 public secondary schools, there are 79 master teachers. Sixty (60) individuals were selected based on their availability and desire to participate in the study.

According to Shahnazarian et.al., (2012), the good news was that all teacher responders consented to participate and provide their time. They were reassured that the project would employ educational research approaches. Respondents were informed that they were under no obligation to complete this survey. Respondents were aware of and consented to participate in the study's purpose, duration, procedures, alternatives, risks, and advantages.

RESULTS AND DISCUSSION

The study examined the level of instructional supervision exercised by Master Teacher-respondents in public secondary schools regarding the following indicators: classroom observation; obtaining learning aids; researching teaching methods; mentoring teachers; planning teacher training; and curriculum development. The Master Teachers were evaluated by their school heads. Overall, the weighted mean on the level of instructional supervision of the Master Teacher-respondents in public secondary schools in terms of classroom observation is 4.37, interpreted as Highly Competent.

This finding is somewhat related to the study of Anike et al., (2015), who investigated the relationship between instructional and supervisory practices and teachers' effectiveness. Analysis of results revealed a significant positive relationship between the *instructional, supervisory classroom observation practice* and teachers' role effectiveness. The same study found a meaningful positive relationship between the instructional, supervisory method of checking teachers' lesson notes and points. It was assumed that closer, regular, and continuous instructional supervisory practice rather than short, unscheduled, and partial supervision is urgently needed, especially now that many changes have been introduced into the school curriculum. In the present study, this is much related to the first research question 1.1.

The overall weighted mean on the level of *instructional supervision* by Master Teacher-respondents in public secondary schools regarding *Obtaining Learning Aids* is 3.99, interpreted as Competent. The master teacher respondents *who utilize relevant and latest textbooks or modules* obtained the highest weighted mean of 4.43, interpreted as Highly Competent. MT *uses pictures, graphs, posters, charts, cartoons, etc., and* got the second-highest weighted mean of 4.40, also interpreted as Highly Competent. Meanwhile, MT *uses mannequins, skeletons, and other plastic models* to obtain the lowest weighted mean of 3.30, interpreted as Moderately Competent.

Moderately Competent is the interpretation of a weighted mean of 2.94 on Researching Teaching Approaches. While teachers' knowledge of research was minimal, Sato, M., & Loewen, S., (2019) found that it was generally compatible with researchers' practices. Instructors were open to using research since it provided them with psychological solace and guided them through the challenges of tackling uncharted territory in higher education's pedagogical realm.

Unfortunately, educators lacked the means to do study, including enough time, funding, and infrastructure. In order to foster the research-pedagogy conversation, they provided researchers with vital tips, such as the establishment of communities of practice and the implementation of research in the classroom.

The overall weighted mean on the level of instructional supervision by the Master Teacher-respondents in public secondary schools regarding *Planning Teacher Training* is 4.20, interpreted as Highly Competent. It helps build a culture of sharing and communicating new ideas and trends in education among brilliant teachers and practitioners, which can lead to a school administrative position. This culture significantly benefits school leadership and management Bush, Glover, Yoon, Mooi and Romero, (2015).

The level of instructional supervision by Master Teacher-respondents in public secondary schools regarding *Curriculum Development*. The overall weighted mean *instructional management* by master teacher-respondents regarding *Curriculum Development* is 4.03, interpreted as Competent. Master Teachers *provides support to meet the needs of students, and fellow teachers* obtained the highest weighted mean, 4.23, interpreted as Highly Competent; Master Teachers' *stresses the most excellent knowledge and skills as reflected in the curriculum*, received the second-highest weighted mean, 4.17, interpreted as Highly Competent. MT *explicitly explains how the structure of schooling for K-9 and 10-12 (e.g., timetables, graduation requirements) shape the direction of curriculum change*, obtaining the lowest weighted mean of 3.95, interpreted as Competent. The researcher proposes further developing Master Teachers' knowledge and skills in curriculum development.

Table 2 presents the perception of Master Teachers regarding their support for school heads in instructional supervision. All of the respondents agreed that the Master Teacher supports the school head in preparing and enriching the curriculum. Similarly, all of respondents agreed that the Master Teacher supports the school head in instructional supervision by assisting colleagues in implementing differentiated teaching strategies responsive to learner diversity. Furthermore, 95% (lowest in ranking) of the respondents that Master Teacher supports the school head in instructional supervision through leading colleagues in designing, evaluating, interpreting, and utilizing diverse assessment tools to improve the learning and learning process. The researcher proposes that master teachers may continue to innovate their assessment tools to enhance learning among their learners and support the school head in their instructional supervision. The overall extent of the master teacher support for School heads in Instructional Supervision comes to 98%.

Table 4
Frequency and Percentage Distribution of Instructional Supervision of
Master Teachers' Support for School Head

Description	No	Percentage, %	Yes	Percentage, %
1. Do you help your school head lead in preparing and enriching the curriculum?	0	0.00	60	100.00
2. Do you lead your colleagues in designing, evaluating, interpreting, and utilizing different assessment tools to improve the learning and learning process?	3	5.00	57	95.00
3. Do you work with colleagues to create a learning-focused environment that promotes learner responsibility and achievement?	2	3.33	58	96.67
4. Do you assist your colleagues in implementing differentiated teaching strategies responsive to learner diversity?	0	0.00	60	100.00
5. Do you help your school head provide technical assistance through demonstration teaching, mentoring, coaching, class monitoring, observation, organizing/leading/serving as trainers/facilitators in teacher quality circles/learning action cells?	1	1.67	59	98.33
Overall Weighted Average	6	2.00	58.80	98.00

CONCLUSIONS/RECOMMENDATIONS

Master Teachers were competent in performing their task as instructional leaders to assist school heads in improving the quality of education. Moreover, they are proficient mentors. However, regarding technological literacy, which is the ability to figure out how accurate Information on the web is and how to use all kinds of technology correctly, they need to be more competent to address the challenges that require technology application. It is said that master teachers who know how to use technology have been taught, shown, and used technology in the classroom. Master teachers must know how well they use ICT and how they apply it to teaching and learning.

To help Master Teachers develop their abilities, the school must provide them with assistance and support through improvement programs.

1. Master teachers could get better at what they do if they strengthened and showed confidence in their role as instructional leaders. Getting enough help from the school administration is the best way to do this.

2. The best teachers, especially those who teach science, should use a variety of ways to teach. For example, mannequins, skeletons, and plastic figures that look like people can be used.
3. Master teachers should foster a research culture in the classroom. They should be chosen to lead research initiatives in schools, districts, or divisions and serve as authors, panelists, and research concept generators.
4. Master Teachers should receive guidance from master teachers regarding curriculum improvement, teaching strategies, and content.
5. Master Teachers should show how the K to 12 programs can be smoothly implemented in high school.
6. Master Teachers should develop their IT abilities and mentor other teachers to use them in the classroom.
7. The school administration should conduct in-depth training to provide technical support.
8. The scope of this research could be extended to the regional level by future studies on the importance of Master Teachers in the educational system.

ACKNOWLEDGEMENT

Throughout the writing of this dissertation, the researcher has received a great deal of support and assistance.

She would like to thank first her mentor, Dr. Rainelda M. Blanco, critic Dr. Agnes R. Bernardo, the panel chair Dr. Rolando R. Gaspar and members Dr. Joseline Santos and Dr. Eugene B. Mutuc. Their expertise is invaluable in formulating the research questions and methodology, and their sharp criticism encouraged her to think more clearly and elevate this research.

The researcher expresses gratitude to the late Sir Nilo A. Abolencia, her former school head at Virgen de las Flores High School, and the present school head, Dr. Khristian S. Liwanag, for all their support in the pursuit of this research.

She would also like to thank the graduate school secretary, Dr. Eugene Burgos Mutuc, and his team for their valuable guidance throughout the study, and the graduate school librarian, Ma'am Sheila Mae Platon-Dela Cruz, for providing the right tools towards the completion of her dissertation.

Moreover, she would like to extend her sincere gratitude to her parents for their sage advice and understanding, as well as to her family, Karl Maryiel and Katharine Grace, for the stimulating discussions and happy distractions to rest her mind outside her research.

The researcher is very thankful for the opportunity given by the Municipality of Baliwag, especially our City of Baliwag Honorable Mayor Ferdie V. Estrella for the gracing the blessing of being “Iskolar ng Bayan”, as I promise I will share knowledge I have learned to my fellow Baliwagenos.

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