



Learning and Development Engagement in Improving the Teaching Competencies of Public Elementary School Teachers

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Abstract— This study was conducted to determine the significant relationship between Teachers' Learning and Development Engagement to Teaching Competencies in Public Elementary School Teachers in the Division of Sto. Tomas City SY 2023-2024. This descriptive correlational research employed statistical tools such Pearson product-moment correlation coefficient (r) test to analyze and interpret the data. The findings revealed a significant relationship between teachers' teaching competency and their engagement in Initial Teachers' Education, Continuous Professional Development (CPD) Engagement, and Non-Formal and Informal Learning Engagement. It recommends that Teacher Education Institutions continuously employ ITE programs that will equip future teachers with the knowledge, ideas, principles, attitudes, values, skills, and practices necessary in the evolving education landscape. Additionally, teachers may continue participating in training and professional development to stay updated on the latest content and strategies and to innovate and explore new techniques to solve education problems and gaps. Future studies may explore other learning and development engagement activities to further enhance teachers' competency.

Keywords— Continuous Professional Development, Initial Teachers' Education, Non-Formal and Informal Learning, Teaching Competency.

I. INTRODUCTION

Teachers are essential for the development of the nation as they serve as sources of wisdom and knowledge. They are the primary source of education and the ones who shape the nation's future (Patel, 2018). Teachers are called nation builders because they lead and motivate people to achieve their goals. Their dedication, devotion, and sacrifices created our character and individuality, propelling us to our final goal. Teachers are the foundation of a wealthy society, a knowledge-based economy, and thriving national growth (Saharan, & Sethi 2009).

Teachers have a significant role in the learner's education and character because they establish beliefs, attitudes, and conduct from a young age. A teacher's primary responsibility is to establish an engaging classroom environment, encourage learners to feel at ease with the teacher, and understandably impart information. Teachers must also be able to communicate knowledge in a way that helps students feel at ease and confident about their learning path (Kaur, 2019). All of these characteristics help a child grow into an ideal citizen.

Teachers are renowned educational leaders, contributing significantly to the profession and initiating collaborations. They significantly influence colleagues, students, and others, striving for professional advancement



and excellence in teaching quality and excellence. Through quality teachers, the Philippines can develop holistic learners who are steeped in values, equipped with 21st-century skills, and able to propel the country to development and progress (DepEd Order No. 42, s. 2017). This aligns with the Department of Education's vision of producing: "Filipinos who passionately love their country and whose values and competencies enable them to realize their full potential and contribute meaningfully to building the nation". Improving teacher quality and maintaining high teaching standards should be prioritized for long-term and sustainable nation-building (Gepila,2020). Teachers' qualities, character, qualifications, and professional competencies are the foundations for successful national education (Apriliyanti,2020). Teacher competency is viewed as a framework that describes the special personal attributes that teachers require to satisfy the high demands of their profession (Fauth, Decristan, Decker, Büttner, Hardy, Klieme, & Kunter, M. (2019). Additionally, teacher competence may serve as an important lever that can be used to improve the quality of teaching and student outcomes (Kleickmann, Tröbs, Jonen, Vehmeyer, & Möler, 2016).

In the Philippines, the K-12 Basic Education Curriculum was implemented starting SY 2012-2013 and fully implemented in SY 2017-2018. The implementation of the curriculum is to prepare the learners for the tertiary level so that they will be more equipped to deal with a much higher level of learning when they enter college education. The other one is the readiness to join the workforce, it empowers the SHS graduates be to equipped with skills in their chosen field and lastly, it prepares the skill competency of the learners in the global job market, it aims to improve Filipino student's mathematical, scientific, and linguistic competencies to become globally competitive.

The implementation of this K-12 Basic Education Curriculum program faced several challenges that affected the teaching competencies of teachers. According to Labastida (2023) in his journal, the Philippines noted by the World Bank, the country experienced an educational crisis. According to its research, just 10% of our Grade 5 pupils are capable of meeting global academic standards typically English, and the majority of the Filipinos aged 15 have poor knowledge of simple math skills. The main reason for this educational crisis is the lack of proficiency in instructions, lack of qualified teachers, crowded classrooms, the dearth of high-quality teaching and learning resources, and insufficient funding allotted for education (Labastida, 2023). Additionally, in the study of Solomo (2021), the challenges faced by the teacher that affect the teaching and learning competency are spiral progressions of topics, use of learning modules and technology, grading system which is based on level of proficiency, heavy teaching load, other assigned task/ designation, many required paper works, lack of instructional materials, lack of laboratory equipment and chemicals, a limited number of classrooms, scheduling of classes, sudden changes in the class schedule without prior consultation and limited time allotted for the subject.

The recommendation in her study is to conduct training or seminar workshops for teachers is highly suggested. This recommendation is also supported in the study of Gümüs (2022) to adapt to the rapidly changing environment and style, new student profile, and transformation in social life and the business world, teachers recommend having holistic goals in pre-service, in-service, and professional development. Learning and development engagement enables teachers to acquire sufficient knowledge and skills to deliver quality education and is essential to promoting student achievement. Trained and skilled teachers are positive societal change agents



who have a multiplier effect by touching the lives and molding the hearts of their students. As a result, teachers' qualifications, competence, commitment, and motivation to provide high-quality education are critical to meeting educational objectives (Morales 2016). A vital component required to achieve teacher quality is derived from these goals – excellent pre-and in-service teacher training (UNESCO 2014).

Therefore, this study aimed to determine the relationship between teachers' learning and development engagement in teaching competencies in public elementary school teachers in Sto. Tomas South District, Division of Sto. Tomas City.

II. LITERATURE REVIEW

This study is anchored on the principle of Adult Learning Theory developed by Malcolm Knowles in 1968. According to Merriam (2018), adult Learning focuses on how adulthood can be distinguished from childhood learning. A humanistic perspective on learning emphasizes personal growth and development rather than the more mechanistic change in behavior. Adult learning has resulted in adult education becoming a recognized field of practice with its own professional associations, journals, and conferences. The three major foundational theories of adult learning are andragogy, self-directed learning, and transformative learning. Each framework is associated with the characteristics of adult learning.

Andragogy is an adult learning theory that was imported to the U.S. by Malcolm Knowles in the late 1960s. He introduces andragogy as a new label and a new technology distinguishing adult learning from children's learning or pedagogy. Self-directed learning is a major adult learning wherein learners learn on their own. It is learning something new that he could decide. SDL can be found in all aspects of adult life, such as the workplace, continuing professional development, and the health and medical fields. The third adult learning theory is the transformative learning theory. The cognitive process is central to the transformative learning theory. This learning is founded on adult life experience and a more mature level of cognitive functioning than that found in childhood (Merriam,2018).

Guerriero and Revai (2017) founded the conceptual framework of teachers' professional competencies with the broad term "teacher learning" that included the different forms and scenes of teachers' opportunities to learn. Based on the framework Initial Teachers' Education (ITE), Continuous Professional Development (CPD), and Non-formal and Informal learning are the opportunities to shape teachers' professional competencies continuously. The framework is based on the premise that high-quality initial teacher education is only the first step in a continuous professionalization process that also includes Continuous Professional Development (CPD) and the regular updating of teachers' knowledge and skills through informal and non-formal learning. Initial teacher preparation is a crucial site to initiate teachers into the foundations of knowledge and skills about teaching and learning. Further to the scientific content taught in initial teacher education programs, this would also include opportunities for pre-service teachers to actively participate in the process of research and inquiry, and to learn how to interpret, validate and apply research. This latter is guaranteed through access to experiential opportunities that allow applying knowledge in practice. It is initial preparation that provides teacher candidates

with the opportunity to observe professionals in their teaching roles, to practice teaching accompanied by mentors, and to learn by reflecting on their practice.

Initial teacher education is the recognized and organized, private and public education program designed to train future teachers to formally enter the profession at a specified level of education. Initial teacher's education programs include subject content; pedagogic content knowledge; professional studies/education studies; and teaching practice (Lewin, 2004).

Teachers need to be lifelong learners so that they can meet the complex expectations set in a rapidly changing environment. Formal continuous professional development courses provide them with opportunities to broaden and update their knowledge base regularly (Guerriero and Revai 2017). There are various means of professional development including self-development, self-reflection, peer observation, in-service training, short-term courses, seminars, conferences, mentoring, and in-house training sessions (Al Asmari 2016).

Lohman (2006) outlined the non-formal and informal learning process within the school context as learning that takes place for the teachers and staff in the school district outside of formal in-service days, professional development, and furthering education. There are three types of informal learning in a school-based context: knowledge exchanging, experimenting, and environmental scanning. Knowledge exchanging is a shared experience with others, oftentimes reflecting on the information given by others. Experimenting refers to an active experiment similar to that of incidental learning and is typically a conscious decision by the learner. Finally, environmental scanning is any type of learning done outside of the school on the teachers' own time. This includes attending a library to do outside research, surfing the web, or using social media to gain knowledge.

Teacher competencies involve encouraging diversity in practice and addressing innovation in teaching. Being able to adapt to different students and environments, engaging students, using various forms of evaluation and classroom management are shared elements of teachers' competence across the professional standards. Standards that distinguish different professional stages describe increasingly more complex requirements as teachers progress in their careers (Guerriero and Revai 2017).

States et al., (2017) reported in their research that the four classes of teachers' competencies are Instructional delivery, Classroom management, Formative Assessment, and Personal competencies (soft skills). Instructional delivery are essential practice that teachers must master for effectively instruct students to maximize knowledge and skill acquisition. Better learning happens in a dynamic setting in which teachers offer explicit active instruction than in situations in which teachers do not actively guide instruction and instead turn control over content and pace of instruction to students.

Classroom management is one of the most persistent areas of concern voiced by school administrators, the public, and teachers (Evertson & Weinstein, 2013). Classroom management was associated with an increase of 20% in student achievement when classroom rules and procedures were applied systematically. Research highlights four important areas that classroom teachers should be proficient in to create a climate that maximizes learning and induces a positive mood and tone: rules and procedures, proactive classroom management, effective classroom



instruction, and behavior reduction. Formative assessment and progress monitoring are indispensable in promoting teacher and student success. It is frequently listed at the top of interventions for school improvement (Walberg & Paik, 2000). Formative assessment consists of a range of formal and informal diagnostic testing procedures, conducted by teachers throughout the learning process, for modifying teaching and adapting activities to improve student attainment. Personal competencies (soft skills), this competency make teachers inspire learners by stimulating their interest in learning. Teachers display enthusiasm and excitement for the subjects they teach. More than just generating excitement, they provide a road map for students to reach the goals set before them.

III. MATERIALS AND METHODS

This study used the descriptive-correlational research design. It includes the collection of data to test the hypotheses. Correlational research designs are used by investigators to describe and measure the degree of relationship between two or more variables or sets of scores (Creswell, 2012) It describes the current state of teachers' learning and developing engagement in improving the competency of elementary teachers in the Division of Sto. Tomas City.

The respondents of the study are 109 public elementary teachers in the Division of Sto. Tomas City school year 2023-2024. The researcher randomly chose the seven respondent schools in the Division of Sto. Tomas City, including one large school, four medium schools, and two small schools.

The study used a survey questionnaire, composed of three (3) parts. Part I gathered the data on the profile of the respondents in terms of age, gender, position, and length of service. The second part is about teachers learning in terms of Initial Teacher's Education (ITE), Continuous Professional Development (CPD), and Informal and Non-Formal Training. Lastly, the third part of the survey covered the data on the teaching competencies in terms of instructional delivery, classroom management, formative assessment, and soft skills. The questionnaires are derived from various resources, including the pedagogic content knowledge adopted from Fikriyah et al. (2021), the teaching practices questionnaire adopted from Amankwah et al. (2017), peer observation questions adopted from Abdallah (2018), the training questionnaire adopted from Shakir et al. (2019) and the mentoring questionnaire adopted from Promisee-Bynum (2010). On the other hand, Education Studies, self-reflection, knowledge exchange, experimenting, and environmental scanning are teacher-made questionnaires that are crafted from the literature review. The last part of the survey questionnaire covered the data on teachers' competencies. Instructional Delivery and formative assessment questionnaires were adopted from TALIS (2013) while Classroom Management was adopted from Díaz et. al. (2018) and the soft skills questionnaire was adopted from De Pietro et al. (2019).

The instrument focused on answering the statement of the problem. The questionnaires were distributed to the respondents. The legend helped the researcher to analyze the results of conducting data-gathering. It was validated by three Supervisors, three School Heads, and two Master Teachers. To ensure reliability, Cronbach's alpha internal reliability was employed. The study used inferential statistics to test whether a significant



relationship exists between the independent and the dependent variables, the Pearson product-moment correlation coefficient (r).

III. RESULTS AND DISCUSSION

Table 1: Relationship between Initial Teacher's Education Engagement and Teaching Competencies

Initial Teachers' Education Engagement	Teaching Competencies			
	Instructional Delivery	Classroom Management	Formative Assessment	Soft Skills
	r-value	r-value	r-value	r-value
Pedagogical Content Knowledge	0.338**	0.475**	0.536**	0.486**
Education Studies	0.407**	0.561**	0.465**	0.502**
Teaching Practice	0.395**	0.522**	0.514**	0.440**

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows that all the dimensions in Initial Teachers' Education Engagement are significantly related to teaching competency. The data revealed that teaching competency in terms of instructional delivery has r-values of 0.338; 0.407; and 0.395 respectively. This means that the relationship between the Initial Teachers' Education Engagement and Teaching Competency in terms of instructional delivery are significantly associated. In the Philippines context, the initial teachers' education program employed by the higher education institutions with the partnership of DepEd, the future teachers undergo practicum teaching as a requirement to be a teacher, in the practicum teaching experience, through the guidance, monitoring, and help of the cooperating teachers or supervisor teacher, the student's teachers learn on how to deliver the lesson and develop teaching materials to be used in class. This indicated that the initial teacher education is important in developing instructional delivery skills enabling future teachers to organize, prepare, and design instructional materials in the actual classroom setting.

Meanwhile, it also reveals the relationship between the Initial Teacher's Education engagement and Teaching Competency in terms of classroom management. The data shows that teaching competency in terms of classroom management has an r-value of 0.475; 0.561 and 0.522 respectively. This means that variables in initial teacher education engagement and teaching competency in terms of classroom management have a significant relationship. This suggests that the engagement of teachers in initial teachers' education is correlated with the improvement of classroom management of teachers, enabling teachers to effectively keep students organized, orderly, focused, attentive to task, and academically productive during a class.

In addition, it also displays the relationship between initial teacher education and formative assessment skills. The data reveal that the r-values for formative assessment and initial teacher education are 0.536, 0.465, and 0.514, respectively. As a result, the relationship between initial teacher education and teaching competency in terms of formative assessment is also significant. These findings underscore the importance of initial teacher education in assessing the students, learning pedagogy helps the teachers to determine what kinds of assessment to be given to the different kinds of learners.



On the other hand, the correlational test between the variables of initial teachers' education and to soft skills of teachers has a moderately correlational relationship presented in Table 1. The data shows that the teaching competency in terms of soft skills to all dimensions of initial teachers' education has an r-value of 0.486; 0.502; and 0.440, respectively. The findings suggest that the initial teachers' education trained teachers and taught various disciplines that developed teachers' personal qualities and enabled teachers to perform tasks and ability to communicate with students effectively, interacting with their colleagues, parents, and co-workers. Teachers with strong soft skills are an asset because they boost productivity and effectiveness inside the classroom.

Table 2: Relationship between Continuous Professional Development Engagement and Teaching Competencies

Continuous Professional Development Engagement	Teaching Competencies			
	Instructional Delivery	Classroom Management	Formative Assessment	Soft Skills
	r-value	r-value	r-value	r-value
Self- reflection	0.425**	0.510**	0.469**	0.472**
Peer Observation	0.469**	0.471**	0.414**	0.530**
Training	0.496**	0.555**	0.552**	0.475**
Mentorig	0.547**	0.591**	0.527**	0.581**

** . Correlation is significant at the 0.01 level (2-tailed).

Table 2 presents the relationship between continuous professional development and teaching competency. The finding reveals that all the variables of continuous professional development engagement have a significant relation to teaching competency. The data shows that teaching competency in terms of instructional delivery to all variables of continuous professional development has r-values of 0.425; 0.469; 0.496 and 0.547, respectively. This means that Continuous Professional Development and Teaching Competency in terms of instructional delivery have a significant relationship. Through the engagement of teachers of different training, teachers gain knowledge and techniques that help them to create engaging lessons and instructional materials that are appropriate to the learners' needs. For instance, during observation and mentoring, teachers learned various strategies that enable the teachers to become innovative in teaching. These suggest that the engagement of teachers in continuous professional development is important in delivering the lesson to the teachers.

Data also displays the relationship between Continuous professional development and Teaching Competency in terms of classroom management. The data shows that teaching competency in terms of classroom management has an r-value of 0.510; 0.471; 0.555; and 0.591, respectively. This means that variables in continuous professional development and teaching competency in terms of classroom management are also significant. This suggests that as teachers continue to update and upgrade their learning, teachers improve the necessary knowledge and skills in their professional practices and productivity, especially in classrooms, enabling them to manage properly the classroom, deliver the lesson, and instruction, strengthen their confidence in their teaching, and dealing with different kinds of learners. Furthermore, the engagement of teachers in the training and development enhances



their classroom management skills to create a positive learning environment conducive to learning and effectively managing their classrooms.

Moreover, data demonstrates the relationship between continuous professional development and teaching competency in terms of formative assessment competencies. The data show that the r-values for formative assessment for all variables of continuous professional development are 0.469, 0.414, 0.552, and 0.527, indicating that the relationship between continuous professional development and teaching competency in terms of formative assessment is also significant. These findings underscore the significance of training in selecting and utilizing appropriate assessments for learners. Through engagement in training, teachers become competent in developing and administering formative assessments which help the teacher monitor the level of understanding of the learner, address the gaps, and provide information or data that can be used in giving feedback.

On the other hand, the correlational test of continuous professional development and teaching competencies in terms of teachers' soft skills shows a significant relationship. The statistics demonstrate that the teaching ability in terms of soft skills for all variables in continuous professional development has an r-value of 0.472; 0.530; 0.475; and 0.581, respectively. This indicates that the relationship between continuous professional development and teaching ability is somewhat notable. The findings suggest that continuous professional development helps teachers develop the interpersonal abilities that enable them to effectively communicate with learners, parents, and colleagues. For instance, teachers with good communication skills boost learners' motivation to love learning, this also builds a strong relationship with the parents and stakeholders and promotes harmonious relationships in the working environment. Overall, teachers with better communication skills can motivate students, cultivate connections through empathy, and perform duties effectively.

Table 3: Relationship between Non-Formal and Informal Learning and Teaching Competencies

Non-formal and Informal Learning	Teaching Competencies			
	Instructional Delivery	Classroom Management	Formative Assessment	Soft Skills
	r-value	r-value	r-value	r-value
Knowledge Exchanging	0.529**	0.547**	0.596**	0.462**
Experimenting	0.538**	0.460**	0.503**	0.378**
Environmental Scanning	0.564**	0.585**	0.569**	0.462**

** . Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows all the variables in Non-Formal and Informal Learning have a significant relation to teaching Competency. The data illustrates the correlational test of non-formal and informal learning and teaching competency in terms of instructional delivery. The findings demonstrate that teaching competency in terms of instructional delivery for all variables of Non-Formal and Informal Learning has r-values of 0.529, 0.538, and 0.564, respectively. This suggests that there is a correlation between non-formal and informal learning and instructional delivery competency. This means that embracing the teachers in innovation and incorporating new methods of teaching and new learning resources enables the teachers to create new instructional materials,

concepts, and practices in the classroom that are suited to the learner's needs and transmit successful learning inside the classroom.

The data also shows the relationship between non-formal and informal learning and teaching competency in terms of classroom management. The statistics demonstrate that teaching competency in classroom management had r-values of 0.547, 0.460, and 0.585, respectively. This suggests that there is a correlation between non-formal and informal learning and teaching skills in terms of classroom management. This means that non-formal and informal learning has significant importance in managing the classroom. For instance, teachers' collaboration with their colleagues enables the teachers to adopt techniques that may help them manage the classroom properly and motivate learners to create a healthy learning environment.

Furthermore, it demonstrates the relationship between non-formal and informal learning and teaching competency in terms of formative assessment competencies. The data show that the r-values for formative assessment for all variables of non-formal and informal learning are 0.596; 0.503; and 0.569, indicating that the relationship between non-formal and informal learning and teaching competency in terms of formative assessment is also correlated. These findings underscore the importance of non-formal and informal learning engagement of teachers in improving formative assessment. These suggest that this learning development helps teachers to create assessments that enable the teachers to measure the learning status of the learners. Through these learning engagements, teachers acquire or develop different worksheets or activity sheets that can be used in formative assessment. For example, by browsing social media platforms, teachers can adapt different formative assessment materials shared by others, which helps them develop assessments that are suited to the different kinds of learners and give feedback.

On the other hand, the correlational test for non-formal and informal learning and teaching competencies in terms of instructors' soft skills reveals a correlation relationship. The data show that the teaching capacity in terms of soft skills for all variables in non-formal and informal learning has r-values of 0.462, 0.378, and 0.462, respectively. This suggests that the association between non-formal and informal learning and teaching skills is rather significant. This means that this learning engagement helps the teachers develop the personal skills enabling them to foster a love for learning, persevere, adapt to changing conditions, communicate empathy, demonstrate cultural sensitivity, solve problems effectively, collaborate well, and manage time effectively. For example, through teachers' collaboration, teachers can acquire or gain different ideas from their colleagues on how to communicate effectively with the students or to handle the learners in every situation. From these activities also teachers gained information on how to deal with the parents and stakeholders and build a strong relationship which may help to solve any problems that arise inside the classroom.

IV. CONCLUSION

The researcher reached the following conclusions based on the data that was collected: First, the respondents perceived a very high level of engagement in Initial Teacher's Education Engagement in all independent variables such as Pedagogic Content Knowledge, Education Studies, and Teaching Practice. Second, the respondents perceived a very high level of engagement in continuous professional Development in all independent variables

such as self-reflection, peer observation, training, and mentoring. Third, the respondents perceived a very high level of engagement in Non-formal and Informal Learning Engagement in terms of knowledge exchanging, while in terms of experimentation and environmental scanning, they perceived a high level of engagement. Fourth, the respondents perceived an extensive perception of their teaching competencies in all dependent variables, such as instructional delivery, classroom management, formative assessment, and soft skills. Fifth, there is a significant relationship between Initial Teachers' Education and Teaching Competencies. Sixth, there is a significant relationship between Continuous Professional Development and Teaching Competencies. Lastly, there is a significant relationship between Non-formal and Informal Learning and Teaching Competencies.

V. RECOMMENDATIONS

Considering the findings and recommendations of the study, the following suggestions are made: First, since the initial teachers' education and teaching competency have a significant relationship, Teacher Education Institutions may continue to employ and promote initial teacher education programs to equip future teachers with the necessary knowledge, ideas, principles, attitudes, values, skills and practices that are required in the field of teaching. In addition, continuous Professional Development showed a significant impact in enhancing the competency of teachers, teachers, and educators may participate in continuing training/seminars for professional development and enhancement of their competency, as well as to stay up to date on the latest content and teaching strategies to integrate into their teaching. Moreover, since Non-formal and Informal Training Engagement plays a significant relationship to the competency of teachers, teachers may continue to innovate and explore different ideas to discover new techniques that help to solve problems and gaps in education. Lastly, further researchers may do a study on other learning and development engagement activities of teachers that enhance the competency of teachers.

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