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PEDAGOGICAL KNOWLEDGE AND COMPETENCY OF TEACHERS AS CORRELATES OF SATISFACTION IN TEACHING TECHNOLOGY AND LIVELIHOOD EDUCATION

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ABSTRACT

The significance of this study was determined by pedagogical knowledge and teaching competency based on the satisfaction of teachers teaching technology and livelihood education in the Division of Davao City, Philippines. Correlational and regression techniques were utilized in this study's quantitative, non-experimental research approach. The study's participants were 120 secondary TLE instructors from secondary schools who were chosen using a stratified sample method. Regression analysis and the mean were employed to analyze and interpret the data. Moreover, adapted standardized survey questionnaires were used to measure pedagogical knowledge, teaching competency, and satisfaction with teaching technology and livelihood education. The findings demonstrated that TLE instructors had high pedagogical knowledge, competency, and job satisfaction levels. In addition, the data showed a significant relationship between pedagogical knowledge, teaching competency, and job satisfaction of teachers teaching TLE. Overall, it was found that pedagogical knowledge and teaching competency influence job satisfaction. The specific domain in pedagogical knowledge that significantly influenced the

satisfaction towards teaching TLE in its singular capacity was teaching and classroom processes. Whereas for teachers, competency, development, and results influence job satisfaction.

Keywords: *education, pedagogical knowledge, teaching competency, job satisfaction, correlation, regression, Philippines*

Chapter 1

INTRODUCTION

Rationale

Due to inadequate finance and difficult working conditions, teachers have expressed frustration, demoralization, and dissatisfaction (Garca & Weiss, 2019). According to some arguments, unsatisfied instructors may feel unsure about their work, believe their managers pay them less attention, and consider their workplace to be untrustworthy, all of which may make them feel as though they are not active members of the company (Bashir, Amir, Jawaad, & Hasan, 2020). Also, dissatisfaction leads to a waning involvement, which results in burnout or job abandonment (Mustaqim, 2021). The study of Wang, Pollock, and Hauseman (2018) found that less pleased instructors are more likely to be in schools with decreases in professional development and time for cooperation with other teachers. Additionally, Reich (2020) noted that during the last decade, a wave of policies and technology promising to alter teaching and education significantly failed to generate expected outcomes and contributed to a drop in teacher morale, with substantial numbers abandoning the field.

In any profession, happy teachers and the content will support and assist their coworkers and superiors as needed. As a result, happy instructors will be more productive and perform better at work, resulting in the business's success (Baptiste, 2019). Teacher well-being benefits from teacher satisfaction because happy instructors are less likely to experience stress and burnout (Toropova, Myrberg, & Johansson, 2021). In addition, there are indications that teachers who are delighted with their teaching also have happier students. (Juva, Holm, & Dovemark, 2020).

Furthermore, satisfied teachers offer higher instructional quality and better student learning support (Dinh, Nguyen, Phan, Nguyen, & Nguyen, 2021). It was shown that happy teachers directly influenced teacher

retention, instructional performance, a pleasant school atmosphere, and higher student success (Naz & Rashid, 2021). Also, teachers who are satisfied with their jobs are more likely to indicate that their pupils are performing at a competent or advanced level than instructors who are dissatisfied with their jobs (Awuor, Weng, & Militar, 2022). Literature has shown links between pedagogical knowledge, teaching competency, and teacher satisfaction. Blömeke, Nilsen, and Scherer (2021), then Huang and Lajoie (2021) revealed that teachers with pedagogical content knowledge exemplify more career commitment and are less likely to quit the field, which is especially important during periods of significant teacher turnover.

Also, better pedagogical abilities lead to instructors who are more satisfied with their work and are less likely to quit the classroom, which is especially important during periods of high teacher turnover. The study's findings by Iqbal, Hussain, Parveen, and Javaid (2019) revealed that teaching competencies are directly related to satisfaction. Additionally, Boset, Asmawi, and Abedalaziz (2017) discovered that the relationship between teachers' job happiness and competency is statistically significant, positive, and has little effect. The findings also show that a teacher's proficiency and work happiness are unaffected by the number of years of experience. Similarly, Vroom's Expectancy Theory affirmed such links among the variables.

Finally, the researcher is prompted to investigate the relationship between TLE teachers' pedagogical knowledge, teaching competency, and teaching satisfaction. Many studies on job satisfaction use other variables; however, few studies have focused on using teachers' teaching competency and pedagogical knowledge in technology and livelihood education as predictors. According to the study of Elli and Ricafort (2020), teaching TLE may not be successful since the curriculum necessitates that instructors enhance their abilities to be able to provide high-quality instruction, and DepEd teachers encountered inequality in access to seminars and training because only the chosen few could take advantage of them. Moreover, in a study by Basal (2022), TLE teachers encountered problems with school facilities and equipment, a lack of instructional materials, extra-curricular activities, student misbehavior, insufficient administration support, negative attitudes of school administrators, and insufficient community support for instructional materials and dealing with students in Cagayan de Oro, Philippines. There are

undoubtedly areas that need to be determined. Using pedagogical knowledge and satisfaction in teaching is a means to comprehend contentment in teaching, according to the scant research on TLE instructors' satisfaction.

Research Objective

This study aimed to determine the predictive power of pedagogical knowledge and teaching competencies on satisfaction in teaching among TLE teachers in Davao City. Specifically, this study was focused on answering the following targets:

1. To describe the level of pedagogical knowledge of TLE teachers in terms of:
    1.1 student,
    1.2 teaching and classroom processes,
    1.3 theories of assessment, and
    1.4 professional responsibilities.
2. To ascertain the level of competency of TLE teachers in terms of:
    2.1 planning,
    2.2 development, and
    2.3 result.
3. To measure the level of satisfaction of teachers with their teaching in terms of:
    3.1 supervision,
    3.2 working relation,
    3.3 working conditions,
    3.4 pay,
    3.5 responsibility,
    3.6 work itself,
    3.7 advancement,
    3.8 security, and
    3.9 recognition.

4. To establish a significant relationship between:

4.1 pedagogical knowledge and satisfaction in teaching, and

4.2 competency and satisfaction in teaching of TLE teachers.

5. To determine the singular and combined influence of teaching competencies and pedagogical knowledge on job satisfaction in teaching of TLE teachers.

Hypothesis

The following hypotheses will be tested at the 0.05 level of significance:

1. There is no significant relationship between:

1.1 pedagogical knowledge and satisfaction in teaching, and 1.2 competencies and satisfaction in teaching of TLE teachers.

2. There is no significant influence between pedagogical knowledge and competencies on satisfaction in teaching among TLE teachers, both in an individual and aggregate capacity.

Review of Related Literature

Ideas, concepts, facts, information, points of view, and readings concerning pedagogical knowledge, competencies, and satisfaction in teaching among TLE teachers are presented and discussed in this portion. The study's independent variables are pedagogical knowledge and the teaching competency of teachers. *Pedagogical knowledge* comprises the following indicators: *students, teaching and classroom processes, theories of assessment,* and *professional responsibilities (SEI-DOST & MATHTED, 2011)*. The competency of a teacher consists of *planning, development,* and *results (Moreno-Murcia, Torregrosa, and Pedreo, 2015)*. Moreover, the study's dependent variable is *job satisfaction in teaching,* which consists of *supervision, colleagues, working conditions, play responsibility, work itself, advancement, security,* and *recognition (Lester, 1987)*.

Further, in this section, we present reviews of writing and studies that are related to the current study. The literature, studies, and articles deal with TLE's history and the legal basis. The meaning of teaching competencies, the required teaching competencies, competency-based training, and the information

provided by the review guide. The researcher should have a deeper understanding of the study of technology and livelihood education as a subject matter.

Pedagogical Knowledge

Knowledge of learning theory, classroom management, and student motivations are examples of non-topic-specific pedagogical knowledge (Auerbach & Andrews, 2018). Also, it showcases teachers' ability to connect theories and practice in the teaching and learning process (Figueiredo, Gomes, & Rodrigues; and Nganga, 2020). Teachers with good pedagogical knowledge can conduct effective teaching and learning sessions in the classroom (Buyong, Mohamed, Satari, Bakar, & Yunus, 2020). They know how to integrate the pedagogy, content, and implementation strategies to help children better understand (Dwyer & Schachter, 2020). They can also make the learning session fun and exciting. This approach has enhanced children's engagement, attention, focus, and interest (Nganga, 2020). Besides, the fun and exciting sessions with playful activities can help nurture and foster children's interest in learning (Buyong, Mohamed, Satari, Bakar, & Yunus, 2020).

Yet, since the knowledge applicable to this situation in the classroom must be activated and put into practice, successful teaching calls for more than simply knowledge. According to Kaiser, Blömeke, König, Busse, Doehrmann, and Hoth (2017), teachers must do this by watching, understanding, and responding to crucial classroom features. A teacher may observe students explaining concepts to one another and assisting one another in understanding complex topics throughout a class. By building on this knowledge, instructors can use it to inform their lesson planning (Williams, Ali, Devasia, DiPaola, Hong, Kaputsos, & Breazeal, 2022).

Most teachers express their full potential by looking at how motivated they are. Kolade and Owoseni (2022) noted a policy requirement for teaching and developing 21st-century skills, including problem-solving, cooperation, communication, and creativity. This may include retraining the present teacher workforce and improving the teaching profession's knowledge base. It's a massive question for teachers: are they skilled enough to teach the 21st century's learners? A teacher's capacity to impart information by determining what and how they arrange their instructional activity on its terms The way a student

develops reflects the effectiveness of a teacher's work and makes it possible to see its many elements, such as "internal and external conditions," "needs and objectives," "decision-making processes," "plans of action," "courses of execution," and so forth (Popova, 2019). Meanwhile, teachers employ their pedagogical expertise to accomplish the objectives of the lesson or teaching unit (Carlson, Daehler, Alonzo, Barendsen, Berry, Borowski, & Wilson, 2019). In determining which learning and teaching concepts and theories apply to their class, instructors must consider the size of the class as well as the resources and equipment accessible in the classroom (Sianipar, Hasugian, Sairwona, Zega, & Ritonga, 2022). In addition, knowledge about pedagogy helps teachers design and teach lessons, irrespective of the taught subject. Findings beyond school were sparse but pointed in the same direction. Thus, profound knowledge about pedagogy is an indicator of teaching expertise shared among professionals from different disciplines and teaching settings (Guerriero, 2017).

Furthermore, by designating pedagogical knowledge as a common teaching standard, it is implied that standards may be created or modified considering the evidence for the need for complete knowledge in major general pedagogy areas for professional teaching (Révai, 2018). Although standards for teachers exist in many nations, it is troubling that standards for teaching professionals in other contexts, such as teacher education and higher education, are frequently lacking. Such educational environments might also benefit from a unified declaration about the value of pedagogical expertise in the classroom (Rieu, Leuders, & Loibl, 2022).

Furthermore, instructors' efficiency depends on the quality of their educational courses and professional assistance. This is also a growing source of worry in certain OECD countries (Singh, Hoyte, Heimans, & Exley, 2021). Engaging in professional development classes, whether online or in person, may provide an opportunity to interact with others and exchange fresh perspectives (Kennedy, Moghli, Chase, Pherali, & Laurillard, 2019).

The first indicator of pedagogical knowledge is students. The better the student's pleasure with school, the greater the teacher's participation in the educational relationship, and the bigger the prospects for conversation and interactivity (Lin, Wang, & Lee, 2022). Teachers who are capable, committed, readily available, and concerned with their student's personal, social, and academic issues are valued by their

students (Ghasemi, 2022). Few studies have shown proof that markers of instructors' pedagogical competence predict the quality of education given to learners (Depaepe & König, 2018). However, recent evaluations indicate no research has examined the relationship between instructors' pedagogical expertise and students' accomplishments (Appiah, 2022). Also, researchers are now explicitly evaluating instructors as part of their pedagogical competency and connecting that to the caliber of education given to students in the educational setting (Haron, Zalli, Othman, & Awang, 2021).

On a daily basis, the most effective classroom teachers do more for kids than teach a set of skills (Reinsfield & Lee, 2022). These teachers encourage discipline, character, curiosity, and other non-cognitive qualities if feasible (Ochieng & Kamina, 2022). Non-cognitive skills in students have been shown to significantly impact academic success, employment, incomes, careers, drug misuse, and antisocial conduct in adulthood (Halpern-Manners, Raymo, Warren, & Johnson, 2020). Learners may copy significant elements of learning drive, willpower, and self-control, or their home environment may influence their conduct (Grigorescu, 2020). The second indicator of pedagogical knowledge is teaching and classroom processes. No one approach is recognized as the best for every teaching circumstance, so an effective teacher employs as many ways and strategies as possible (Kumar, 2020). Hence, the instructor can use various teaching techniques to promote learning in a single class. Every method's effectiveness is based on the teacher's abilities and level of expertise. Evidence from research suggests that teachers' classroom processes or resources significantly affect students' learning experiences. This has led educators to focus on the subject matter knowledge because it suggests that teachers lack essential pedagogical knowledge for teaching the subject (Olorunsola, 2019). The extent to which various teaching strategies foster student learning is constantly being investigated in research on teaching and learning (Simmie, 2021). Silalahi and Hutauruk (2020): It was discovered that cooperative teaching approaches might generate possibilities to attain educational goals and provide access to more significant mental activity. As a result, they suggested that by improving cooperative and participatory learning approaches, instructors might boost student learning levels. Cardino Jr. and Cruz (2020) also describe the teaching and practice-based learning of quality improvement (QI) procedures in

various ways, from individual students to coaches. They advised that attempts to accommodate different learning styles should be considered to enhance organizational processes and results.

The third indicator of pedagogical knowledge is theories of assessment. When instruction is over, teachers utilize evaluation to gauge their students' performance. Typically, grades are assigned, and parents are informed (Oyinloye & Imenda, 2019). Fine (2022) portrays assessment approaches as having interpretative power, allowing instructors to evaluate student responses as nuanced and complex rather than merely accurate or incorrect and modify teaching as necessary. Also, the strategy heavily emphasizes equity and differentiation in the classroom. At their foundation, both assessment and interpretive power theories are about listening to and respecting students and modifying teaching strategies in consideration of a goal.

This conventional assessment approach (model), according to the literature, is predicated on two unpopular tenets: first, that student anxiety must be stimulated and raised in order to promote learning; and second, that comparisons between low achievers and more successful students are necessary in order to inspire the latter to perform better (Oyinloye & Imenda, 2019). This assessment paradigm favors and encourages quick learners to prioritize and value their success on classroom assessments over their actual learning (Hudson, 2017). Although assessment for learning is a crucial part of teaching and learning, rather than being a one-time review, it should be a continuous process that enhances training. For classroom assessment to be more effective in promoting student learning, it must be adjusted (Ho & Nguyen, 2022). This can be accomplished by altering its format and content to boost learning and encourage the development of problem-solving abilities (Sun, Chang, & Chiang, 2022).

The last indicator of pedagogical knowledge is a professional responsibility. To capture and represent the complexity of teaching and learning, one popular technique for ensuring teachers' professional growth involves self-reflection on their teaching performance (Alonzo, Berry, & Nilsson, 2019). The culture of professional development activity shows teachers the value of working together while sharing with and observing each other while teaching (Batool & Malik, 2022). Developing sufficient topic knowledge and a comprehensive teaching repertoire that mediates learning necessitates significant efforts on the part of instructors' professional responsibilities. Teacher education programs can initiate and support this

content and repertory acquisition. Yet, many teacher education programs continue to equip instructors with the broad material they need to know, techniques courses relevant to teaching a specific subject, and teaching practicum in one or more schools (Neumann, Kind, & Harms, 2019).

Meanwhile, innovative approaches to teacher education are made to better prepare educators for the complex nature of the teaching process and to develop their pedagogical thinking abilities (Li, Liu, & Jiang, 2021). Increasing the number of professional responsibilities, practical training, and education in schools is another practical approach (Kidd & Murray 2020). While professional responsibility emphasizes theory learning, that might enhance their pedagogical knowledge (Kaiser, Blömeke, König, Busse, Doehrmann, & Hoth, 2017; Torbeyns, Verbruggen, & Depaepe, 2020). The notion that, as a dynamic and adaptable entity, it only becomes relevant in the classroom environment emphasizes the necessity of school-based teaching practice in increasing learners' pedagogical knowledge (Evens, Tielemans, Elen, & Depaepe, 2019).

Competency of Teachers

The competency of teachers is an essential element that they need to have in striving toward excellence (Buyon, Mohamed, Satari, Bakar, & Yunus, 2020). To be competent and professional educators, teachers must master pedagogical knowledge (Dwyer & Schachter 2020). Teachers can significantly influence students' views and values; hence, it is critical to assess teachers' skills in current settings. Instructors must modify their educational approaches to accommodate the new type of learner that they are experiencing in this new generation of learners (Sain, Kaware, & Douglas, 2018). Based on Iqbal, Hussain, Parveen, and Javaid (2019), instructors' abilities have a beneficial influence on the classroom atmosphere, which helps boost students' results at the university level.

Further, student learning is directly related to teaching; therefore, one must look deeper into what teachers know and do (Guerriero, 2017). This collection of knowledge and pedagogy can be referred to as teacher competencies, or the experience, talents, and attitudes that enable employees to carry out their duties as effectively as possible (Caena, F., & Redecker, C., 2019).

Modern perspectives on competency measurement stress the need to investigate teachers' situational cognition and the influence of individual variations in teaching experience and in-school learning opportunities throughout teacher development (Kaiser, Blömeke, König, Busse, Doehrmann, & Hoth, 2017). Though knowledge gained during teacher education and portrayed as declarative knowledge is likely to be of significant relevance, research on teacher expertise has found that both declarative and procedural knowledge contributes to the expert's performance in the classroom (Stigler & Miller, 2018, p. 431).

On the other hand, professional instructors need to improve more due to the mismatch between the competencies held and the subjects taught (Gunarathne, 2021). This can potentially influence the low quality of graduates these schools generate (Byrne, 2022). This suggests that a lack of competency can influence the hunt's bad performance (Heryanto, Sukmawati, & Sjafri, 2022).

Scholars have attempted to discover common ground for teacher competency across cultural cultures (Daum, Marttinen, & Banville, 2022). Regarding teacher competence, academics agree that it is multifaceted and dynamic rather than a static state of knowledge and abilities (Yang & Kaiser, 2022). As a result, measuring teacher competency is critical for teacher education and professional development since it is educable and progressive.

The first indicator of teaching competency is planning. The essential components of lesson planning, which allow instructors to incorporate a variety of additional selections, are the selection and creation of learning tasks as part of student activities in the classroom (Smith, 2022). A competent educator knows how to organize lessons and maximize opportunities in a realistic setting (Tursunovich, 2022). A teaching guide is required to start and sustain an efficient learning session and accomplish educational objectives (Figueiredo, Gomes, & Rodrigues, 2020). Studies indicated that experienced teachers showed better control over the content and professionalism than new teachers (Bruns, Eichen, & Gasteiger, 2017). However, other studies reported a different finding: teachers' teaching experience does not influence the planning of a lesson in the classroom (Wilson, Ritzhaupt, & Cheng, 2020).

The study of Siri, Supartha, Sukaatmadja, and Rahyuda (2020) indicates that planning is regarded as one of the management functions of organizations and the primary activity of organizational

management. Planning comes before implementation since planning is selecting where to go and defining the needs needed most efficiently and effectively.

Teachers must ensure that the new evaluation system in public schools properly aids pupils in learning at the most advanced level of the present global advancement of education. Hence, instructors continuously increase their knowledge and abilities to execute the best assessment in the classroom and ensure that students learn effectively (Darling-Hammond & Oakes, 2021). According to Zamri and Hamzah (2019), planning and implementing curricula that will generate students who can logically address increasingly complex real-life issues requires mastery of thinking and learning abilities. Many studies have demonstrated that improving student success is mainly influenced by teacher quality. A high level of teacher expertise is required for curriculum innovation, notably in measuring students' growth through assessments (Cabero-Almenara, Guillén-Gámez, Ruiz-Palmero, & Palacios-Rodríguez, 2022).

Also, one of the new responsibilities of teaching staff is to integrate and incorporate educational material to enhance learning effectiveness. Hence, one of the effective methods for guaranteeing such integration is teacher training and development focused on using and handling ICTs (Danna, Randall, & Mahabir, 2022). To leverage Web 2.0 tools and apps as yet another teaching resource in the classroom, school lecturers will need to add a fourth ICT expert function in addition to their usual lecturer, tutor, and researcher roles (Rapanta, Botturi, Goodyear, Guàrdia, & Koole, 2020), but also to carry out their teaching responsibilities in brand-new virtual situations.

As an effective teacher, it is necessary to be well-versed in these changes in our educational system. The ability to comprehend curricular designs for teaching and learning is connected to competencies (Majoko, 2019). If teachers wish to plan and execute effective teaching, they must have professional knowledge in teaching psychology, education sociology, methods and materials of teaching, and audio-visual measures (Nguyen & Pham, 2022). Furthermore, Somosot (2018) indicated that strategizing is always practiced.

The second indicator of the competency of a teacher is development. As a result of these developments, an increasing number of those involved in education concur that it is essential to improve teaching and learning techniques to meet the high standards in education (Burbules, Fan, & Repp, 2020). examining

how teachers' knowledge and abilities must improve to enhance and investigate their teaching methods. To recognize that these are the competencies necessary for learners' holistic development and for learners to become capable of adapting to change, the term "transversal competencies" has been used to encompass all these abilities, principles, and behaviors, including cooperation, self-control, resourcefulness, and respect for the environment.

Teachers must have the necessary professional knowledge and engage in the appropriate professional development activities to be effective educators (Figueiredo, Gomes, & Rodrigues, 2020), along with optimistic feelings and perspectives on learning (Nash, 2022). Also, teachers oversee generating exceptional and high-caliber students through efficient learning procedures (Zulkarnaim, Sidik, & Nurdin, 2022). Yet, a study shows that instructors' proficiency levels regarding topic knowledge, pedagogical abilities, resources, technology, and communication are inadequate (Oubibi, Zhao, Wang, Zhou, Jiang, Li, & Qiao, 2022). To achieve high-quality teaching and learning, it is essential to stress professionalism and competence (Şen & Yildiz Durak, 2022). To maximize the value of professional practice, all teachers must thus attain the three professional competencies established by the Ministry of Education in knowledge, skills, and attitudes (Lorensius, Anggal, & Lugan, 2022).

Furthermore, research and literature suggest that transversal skills are as significant predictors of success in school and career as academic abilities (Danner, Lechner, & Rammstedt, 2020). Teachers' competencies have grown concerning educational reform research, teacher education development, scientific findings in educational science, and other domains (F. Serrano & Dela Cruz, 2022). The teacher's development is greatly needed in our constantly changing environment. Moreover, Kelt, Briers, Brown, and Brook (2022) emphasize the creation of the curriculum, including skills in the areas of curriculum design, development, aspects, models, and design, as well as the curriculum development process. One of the results of these developments is information and communication technologies (ICT), which are based on using tools and technical equipment to access, disturb, and transfer knowledge. This category includes any technology that makes creating, modifying, storing, transmitting, or disseminating information easier (Sahut, Schweizer, & Peris-Ortiz, 2022).

The third indicator of the competency of a teacher is the result. In which a teacher's behavior being result-driven is one of the significant characteristics it has to offer for the benefit of the students, currently teachers in the country are lacking in other aspects like motivation (Viegas, Pavani, Lima, Marques, Pozzo, Dobboletta, & Alves, 2018), and quality or ability to transfer knowledge. Since one of the pillars of this revision is support for scientific-technical innovation and development processes, the adaptation calls for academic institutions to enhance the quality of their activities through systematic evaluation mechanisms, both internal and external, through systematic evaluation mechanisms, both internal and external This revision also calls for several organizational and pedagogical changes that may spark interest in innovative pedagogical methods. (Zacchia, Cipri, Cucuzzella, & Calderari, 2022). According to Pharis, Wu, Sullivan, and Moore (2019), teaching abilities are continuously improved as a result of teacher evaluation. Assessment of teacher effectiveness is followed by an effort to strengthen the identified problem areas by raising teacher abilities (Pharis Wu, Sullivan, & Moore, 2019).

Satisfaction in Teaching

Regarding its influence on instructors' attitudes toward work and the meeting of particular requirements of students, job satisfaction is one of the primary markers of the quality of working life (Navarro-Abal, Climent-Rodríguez, López-López, & Gómez-Salgado, 2018). A person strengthens relationships inside the team when they can communicate with their coworkers and share work-related information, questions about their well-being, or have a pleasant chat. As a result, the person feels supported and works in a welcoming environment, which helps them have a favorable view of their job (Bulinska-Stangrecka & Bagienska, 2021). Remember, a motivated, content, and industrious teacher is a school's biggest strength (Hee, Ong, Ping, Kowang, & Fei, 2019).

Additionally, the efficacy of the teacher, the learners, the school environment, and the educational system are all influenced by their happiness with their work as teachers (Lopes & Oliviera, 2020). Also, it impacts students' performance and contributes to school improvement, high-quality instruction, and student happiness, which are all essential components of any organization (Maqbool, 2017). Examining teacher satisfaction is crucial since it impacts how effectively instructors perform (Denton, Baliram, & Cole, 2021;

Hill & Uribe-Florez, 2020). Content instructors demonstrate a stronger passion for their profession, which is crucial when there is a high teacher turnover rate. They also give their learners better educational quality and learning assistance (Karsh, 2018; Kara, 2020; Toropova, Myrberg, & Johansson, 2021).

Teachers are crucial in adjusting student demands, cultural and social trends, information and communication technologies, and other factors to satisfy students' needs while still preserving social and traditional morals (Mania & Alam; Minken, Macalalag, Clarke, Marco-Bujosa, & Rulli; Sirisuthi & Chantarasombat, 2021). That also pertains to educational systems, which should be more frequently considered. (Solikhah & Budiharso, 2020; Chapagain, 2021). Nowadays, every country wants to benefit from effective educational practices, and developing solid educational systems depends on this. In countries with strong educational standards, striving to obtain better outcomes is preferable by outlining how school directors should oversee instructional activities while emphasizing a collaborative attitude toward instructors (Agostinelli & McQuillan, 2020; Zakariya, Bjorkestol, & Nilsen, 2020). Similarly, if a teacher is happy in their job and working environment (Toropova, Myrberg, & Johansson, 2021), the teacher will most likely be dedicated to working, passionate about the job, and therefore will endure the work demands; they are bound to perform better, enjoy a strong bond with the job and organization, and thus is sustained for a more extended period (Sharma & Nambudiri, 2020). It has been noted that if the teacher is happy about their job, the chances of being satisfied and content are greater (Irabor & Okolie, 2019). Also, happy instructors are enthusiastic about their profession, which leads to higher productivity (Szromek & Wolniak, 2020).

The first indicator of satisfaction in teaching is supervision. This refers to the ability of the school head to provide technical assistance and behavioral support (Mitchell, Hirn, & Lewis, 2017). By offering professional help to instructors, supervision aims to improve education and student progress (Maldrine & Kiplangat, 2020). Kwan (2020) characterizes the direct influence of supervision on instructional leadership in terms of five tasks: direct assistance, group development, staff development, curriculum creation, and action research (Chen, 2018). They thought that by combining these activities, instructors' requirements and educational objectives would be met (Maldrine & Kiplangat, 2020).

Meanwhile, supervisory solid working groups enhanced satisfaction with supervision (Talukder, 2019). By educating the respective heads to become better managers, teachers should receive the proper supervision and assistance to perform their jobs effectively (Calvert, 2019). Supervisory styles represent supervisors' unique approach to implementing supervision and responding to teachers (Li, Duys, & Liu, 2021). Positive correlations indicate that perceived supervisory styles directly influence teacher satisfaction with supervision. And yet, the relationship between supervisory styles and teacher satisfaction may be more complex than has been postulated (Gandolfi & Stone, 2018). The supervisory working alliance has also been highly connected with these factors and their significant correlation (Shaffer & Friedlander, 2017).

According to research on teacher supervision, the outcomes might change depending on the most recent supervision. The results of empirical investigations show that although principals value supervision, they do not devote enough time to it. Deficits in teacher instructional oversight are significant (Toropova, Myrberg, & Johansson, 2021). Yousaf, Usman, and Islam (2018) discovered that regardless of male or female enrollment in primary schools, staff development in principals' supervisory techniques significantly affects teachers' growth and job performance. In addition to the strong association of teacher satisfaction with supervisory styles, teacher satisfaction was also significantly related to many other factors, such as teachers' multicultural competence (Nordin, Mustafa, & Razzaq, 2020), their use of relational behavior in a specific session, their adherence to ethical guidelines, discussions of cultural variables in supervision, and supervisee nondisclosure (Shaffer & Friedlander, 2017).

The second indicator of satisfaction in teaching is the working relationship. Although coworkers may have a thorough awareness of the working experiences and circumstances, as well as rumors about organizational information that external employees cannot gain, this was referred to as the vital source of emotional support, career growth, and practical help (Mathieu, Eschleman, & Cheng, 2019). Also, it demonstrates beneficial interactions between two or more people who have an authoritative and social connection in an organizational setting (Buliska-Stangrecka & Bagieska, 2021). Through engaging and speaking with one another, workers who do the same tasks often have similar opinions on particular aspects of the job or the workplace environment. The extent to which work-related needs are met or

satisfied determines whether someone has a positive attitude about their work or is frustrated and dissatisfied with it (Pang & Lu, 2018). The information gathered about the tasks completed is used to set the workforce's expectations.

Further, in a working place, a worker must have a good working relationship with his peers (Bulińska-Stangrecka & Bagieńska, 2021). Employees must have a positive collaborative relationship to strengthen a harmonious working relationship (John-Eke & Akintokunbo, 2020). More likely, excellent communication between staff members and managers and a sense of belonging to the business are signs of good working relations (De Massis, Audretsch, Uhlaner, & Kammerlander, 2018). Because of the high quality of working relationships, the employee can access critical information resources to develop their expectations.

In addition, building working relationships provides people with many means and ways to have good working relations (Hampton Jr., 2019). Moreover, congenial and supportive colleagues will eventually help achieve job satisfaction because they provide the individual worker with support and encouragement (Uddin, Azim, & Haque, 2021). It is believed that people with harmonious relationships with their colleagues and superiors are more likely to have higher levels of job contentment (Felstead & Henseke, 2017). Further, Abun, Magallanes, Agoot, and Benedict (2018), considering that employee relationships affect work satisfaction among academic employees, predict that they will similarly increase IT employees' feelings of job fulfillment.

The third indicator of satisfaction in teaching is the work environment. It refers to the environment in which a teacher works (Short, 2018). One component of a teacher's employment that management of educational institutions should take into account is the state of the workplace, as it can have an impact on the welfare and job satisfaction of the instructors and their ability to perform at their best (Saidi, Michael, Sumilan, Lim, Jonathan, Hamidi, & Ahmad, 2019). Toropova, Myrberg, and Johansson (2019) reiterate the significance of the classroom working environment for student learning possibilities, teacher motivation, efficiency, and job satisfaction. The Teaching and Learning International Survey (TALIS) 2013, a global assessment of school learning settings and working situations, was used to analyze teacher data from 35 nations throughout the globe. In the study of Tan, Lew, and Sim (2021) in all nations,

it was discovered that collaboration between teachers and students and student behavior was positively correlated with teachers' work satisfaction.

Moreover, the work environment has a minor impact on job satisfaction. Clean and attractive environments make instructors like their work, enhancing job satisfaction (Esia-Donkoh, 2022). Decent working conditions make instructors more satisfied with their jobs. A clean and beautiful work atmosphere results in teachers with a happy disposition toward their functions, thus increasing job satisfaction (Osborne & Hammoud, 2017). Like for students, instructors' pleasure is greatly influenced by the environment in which they work. The environment of the working place has a tremendous effect on the teacher's feeling of self-worth: an individual's psychology might completely shift in response to the presence of pleasant and comfy seats, workstations, pavements, and recreational amenities like televisions in the common areas, internet access, and smart boards (Al-Omari & Okasheh, 2017).

Nevertheless, organizations must now give careful regard to working circumstances (Górny, 2017). This is because working conditions have emerged as a negative factor in increasing the energy level instructors function in any working environment (Jiménez, Winkler, & Dunkl, 2017). Besides the increased push for improved working circumstances, teachers nowadays seek better working conditions to carry out their duties (Wang, Pollock, & Hauseman, 2018). Furthermore, it is vital to equip teachers professionally and provide them with satisfactory working conditions (Guoyan, Khaskheli, Raza, Khan, & Hakim, 2021). Their working circumstances significantly impact a teacher's job happiness since instructors like to work in clean, safe and pleasant environments. In addition to having conducive working conditions, the administration should provide their teachers with a safe and healthy environment (Mundiri & Hamimah, 2022).

Moreover, Mgaiwa and Hamis (2022) indicated that secondary public teachers in Tanzania were not satisfied with the working conditions. Teachers were complaining about the learning resources and the unavailability of office furniture. Some offices lack the equipment that is necessary for teachers to function and do their daily tasks. More so, many students were seated outside while the lesson was in progress.

The fourth indicator of satisfaction in teaching is pay. This refers to the reward teachers receive for their service or contribution to the organization (Shoaib & Baruch, 2019). Thus, it is assumed that a teacher

will experience contentment when he or she has been rewarded for the service they render or the contribution they make to the achievement of organizational goals (Hanasono, Broido, Yacobucci, Root, Peña, & O'Neil, 2019). For most individuals, pay is a primary reason for working, and pay is a primary motivator for employees (Alam, Hassan, Bowyer, & Reaz, 2020). People look for jobs that not only suit their creativity and talents (Allal-Chérif, Aránega, & Sánchez, 2021), but also compensate them in terms of salary and other benefits accordingly. Additionally, Pepra-Mensah (2017) mentioned that pay refers to the benefits and incentives offered to employees to keep them employed by a firm. Compensation includes more than just regular incentives for work completed; it also includes efforts made by companies to keep instructors (Mustafa, Alzubi, & Bashayreh, 2021). It extends over this line and includes perks and other incentives in addition to pay.

Meanwhile, pay motivates outputs, and teachers' performance will improve if the pay is good. Money serves as the prize for service rendered by employees, allowing them to sustain the needs of their families (Ullah, Noor, Abid, Mendako, Waqas, Shah, & Tian, 2021). The teacher must maintain his or her body to fulfill the basics of his or her job and to provide for the needs of his or her family. The salary determines not only the standard of living and the comforts that it will give to his or her family but also his or her standing in society (Judge, Weiss, Kammeyer-Mueller, & Hulin, 2017).

Moreover, teachers are usually satisfied if they receive good pay. When workers believe their pay is fair given the demands of their jobs, their job satisfaction increases (Febriantina & Aliyyah, 2020). Together with advancement, acknowledgement, participation, and devotion at work, it is seen as a crucial aspect of job satisfaction. Thus, a salary's importance in fostering work happiness is demonstrated (Saban, Basalamah, Gani, & Rahman, 2020).

In addition, salaries must be sufficient to sustain primary needs. If the salary cannot sustain this, employees feel the need to have another source of income. When their salary fails to meet family needs, teachers look for additional income and do not focus on teaching in the class (Siddiquei & Kathpal, 2021). If teachers earn more from sidelines than from their regular salary, this can lead to a decrease in passion for their job to the extent of being negligent (Lawson & Frimpong, 2021).

The fifth indicator of job satisfaction is responsibility. It refers to taking over the task given to an employee. In a workplace, employees are assumed to be responsible (Rose, 2019). This also covers the responsibility shouldered by an employee in the workplace as well as the self-fulfillment from decision-making and supervision (Hitka, Štarchoň, Lorincová, & Caha, 2021). This addresses the accountability and power pertaining to the task (Reid, Parsons, & Green, 2021). This explained how instructors felt in charge of their work, had lots of independence and power, and were given new assignments (Macutay, 2020).

If teachers take ownership of their work, they will be more motivated to do their duties successfully. Giving instructors the autonomy and authority, they need to complete their work can help them feel more responsible for the end outcome. Provide instructors with the opportunity to take on more responsibility as they get better at their professions (Kadtong, Unos, Antok, & Midzid, 2017). Pettalongi, Kahar, and Cikka (2022) indicated that the duties that fall under the umbrella of a teacher's responsibilities include developing lesson plans, picking effective delivery strategies and media, assessing student progress, and providing remedial and enrichment services as needed.

Similarly, teacher job satisfaction improves when they are given varied tasks aside from class teaching (Subarto, Solihin, & Qurbani, 2021). These other responsibilities can include supervision, professional development, and community relations (Pettes, 2021). To enhance the status and performance of teachers, upgrading their qualifications is necessary; professional growth is encouraged when they work collaboratively. The component pertaining to school administration and rules considers discrepancies between obligation and authority.

The sixth indicator of satisfaction in teaching is the work itself. It incorporates the appearance of productive labor, interactions between school personnel and pupils, and simplifying procedures to increase their effectiveness (Macutay, 2020). Work is no longer an option for many individuals (Perryman & Calvert, 2020). Individuals use their income to support their necessities, live comfortably, engage in recreational activities, and generally have access to contemporary conveniences (Song, Gu, & Zhang, 2020).

Meanwhile, administrators organize and specify job duties and the work arrangements that make it possible for them to be completed through a process called work design (Kotter, 2019). The greatest work designs are those that provide a strong match with individual abilities and needs, fulfill organizational standards for high performance, and offer valuable chances for job happiness (Rahayu, Rasid, & Tannady, 2019).

Whether a work is described as exciting or dull, diverse or regular, creative or stifling, extremely easy or excessively tough, challenging or non-demanding, it depends, in general, on the actual substance of the job and its positive or negative impact on the employee (Utami, Widiatna, & Karyati, 2020). Teacher's overall career contentment in general and contentment with their works are vital to maintaining quality teaching (Baluyos, Rivera, & Baluyos, 2019) and to retaining motivated and excellent teachers in the teaching profession; thus, effective teaching and employing the best teaching methods inside the classroom are the results of job satisfaction (Shkoler & Kimura, 2020).

Further, in Kenya, the instructor is required by the Ministry of Education to attend a maximum of 27 lessons each week (Okinyi, Nyerere, & Kariuki, 2021). Depending on the needs of the school, teachers with extra duties, including department heads, assistant principals, and school heads, are expected to attend fewer classes (Alsaleh, 2022). Teachers carry more than 27 classes since most schools are understaffed with qualified instructors. Due to the increased workload they face in comparison to their poor pay, some instructors decide to leave the profession (García & Weiss, 2019; & Santoro, 2021). Teachers who are happy in their jobs are more likely to put in the work needed to complete duties like lesson planning, assignment marking, and progress monitoring of their students (Dugan, Hochstein, Rouziou, & Britton, 2019).

Nevertheless, heavy workloads and unbeatable deadlines cause stress (Jomuad, Antiquina, Cericos, Bacus, Vallejo, Dionio, & Clarin, 2021). Even the most devoted worker will experience a decline in job satisfaction as a result of this. Furthermore, inability to meet deadlines oftentimes leads to conflicts among employees and superiors, causing a lot of stress among the workers in any organization (Tiwari, 2022). Of all the major areas of job satisfaction, work itself best predicts overall job satisfaction, which

includes job challenge, autonomy, variety, scope, and other important outcomes like worker retention (Judge, Zhang, & Glerum, 2020; & Villajos, García-Ael, & Topa, 2019).

The seventh indicator of satisfaction in teaching is advancement. It relates to issues like instructors having sufficient job difficulties, regular and appropriate feedback, recognition and utilization of individual skills, and defined, attainable goals and expectations for their professions (Pascal & Tangi, 2022). Opportunities for progress are significant motivators for many people since they tend to be more motivated when professional routes are apparent and there are tangible goals to work toward (Whitehead & Greenier, 2019).

Promotion is commonly considered to mean climbing the corporate ladder, and it entails developing a new working environment, promoting growth, assisting in the improvement, development, and advancement of employees' expertise (Dachner, Ellingson, Noe, & Saxton, 2021). When an employee aspires to succeed, an author aims for publication, or a developer wants to learn more advanced technical skills while working, for instance, the company is more likely to expand (Rony, Lubis, & Rizkyta, 2019). Meanwhile, teachers are satisfied with their present job if they see a path where they will be given a chance to move into a higher position with higher compensation (Hayashi, 2022). When a teacher shows dedication and passion with his work, then it is expected that he or she is qualified for advancement (Guo, 2022). Teachers in public schools are encouraged to acquire more advanced skills that will increase their chances of promotion (Darling-Hammond & Darling-Hammond, 2022). For teachers to be more efficient and updated, they must be given further training courses and in-service training programs that facilitate teachers' progression toward effectiveness (Asghar, Afzaal, Iqbal, & Sadia, 2022). This can be organized through seminars, conferences, and workshops. Hope is created in teachers once opportunities for advancement are available (Sullivan, McDonagh, Connolly, Glenn, & Roche, 2022). This enables them to plan their career advancement since they will move to another level. This upward movement encourages teachers to work hard, and once they succeed, they feel satisfied. Due to performance, there is also a real shift in upward standing inside the organization. Greater opportunity modifications that don't result in a status upgrade are regarded as under responsibility (Taub, 2022).

The eighth indicator of satisfaction in teaching is job security. Employment security relates to how long instructors may anticipate keeping their current positions (Villajos, García-Ael, & Topa, 2019). Teachers typically want employment that they can hold for a long time, which is advantageous to the business. Some organizations provide extensive contracts that shield workers against job termination. According to Shi, Zhang, Xiao, Lin, Zhao, and Zhang (2022), social safety is strongly correlated with work security. Teachers in precarious positions will perform better to keep their high social status.

In addition, long-term workers have a higher feeling of loyalty than new hires, and job stability increases employee commitment. Seniority and lifetime employment alter employee performance and foster a sense of leadership (Triguero-Sánchez, Peña-Vinces, & Ferreira, 2022). Employee retention is influenced by a variety of personal characteristics, including age, education level, number of children, position level, and income. Job stability is more important as a worker ages and takes on more personal obligations. Long-term employees frequently possess better skill levels, which enable them to do jobs at a higher grade and produce more (Zhang, Chen, O'Kane, Xiang, & Wang, 2022).

Job security is a vital issue in an employee's commitment. Public school teachers' jobs are assured when their appointments are confirmed. The staff therefore has a tenure status. This only means that the employees cannot be dismissed from the job and therefore have job security (Okoye, Mbagwu, Moneke, & Abanum, 2018). Additionally, it gives the employee the assurance of keeping the job. Strong job security reduces the likelihood that employees may soon lose their jobs (Van Hootegem, Van Hootegem, Selenko, & De Witte, 2022).

Further, the overall performance of individuals, teams, and administration is significantly impacted by one's sense of job security. Several other factors might also have an impact on job security. The security of one's job is mainly dependent on one's profile, such as the skills developed, performance, and capabilities (Osborne & Hammoud, 2017).

The last indicator of satisfaction in teaching is recognition. Relates to the timely and meaningful faculty acknowledgment received by the institution for their major accomplishments and little wins (Macutay, 2020). Idenedo and Goodie-Okio (2022) evaluated teachers' recognition as a tool for achieving improved

performance. It is necessary that organizations formulate solid recognition approaches in line with teachers' skills and performance levels toward a company's goals and objectives (Chukwuma, 2019). Moreover, employees who are properly rewarded feel respected and committed to their task (Victor & Hoole, 2017). High-quality work is more likely to be produced by motivated staff (Sabir, 2017). According to research, highly motivated workers tend to perform better overall, have higher morale, and are more likely to have positive working relationships with their coworkers (Roman, Treven, & Čančer, 2017). As a result, inadequate incentives may hinder desirable behavioral outcomes, endangering an organization's capacity for effective and competitive operation (Victor & Hoole, 2021). Unmotivated workers may put out subpar work in addition to demonstrating a lack of dedication to their employer (Khumalo, 2021). Such characteristics might be problematic, especially for businesses that place a high value on the utilization of human resources. Hence, it is not surprising that managers and academics devote a lot of effort to identifying the essential components for raising motivated, productive, and content employees. Also, this can be related to gratitude given to employees for their achievements (Chukwuma, 2019). Every employee who is dedicated to his job deserves to be recognized (Sun & Bunchapattanasakda, 2019). Acknowledging instructors' excellent work has a significant impact on their output. The reward and recognition system highlights a crucial aspect of the connection between employees while managing them. Recognition only occurs after the behaviors have taken place (Pereles, Baldwin, & Omdal, 2021). If the standards for recognition are set, then it will lead to the achievement of both personal and organizational aims (Ayele, Tefera, & East, 2021).

Similarly, Forson, Ofuso-Dwamena, Opoku, and Adjavon (2021) examined how incentives and praise affected employees' motivation and work satisfaction in Ghana's private organizations. The study found that while job happiness and rewards did not significantly correlate, recognition had a favorable effect on work motivation. Conversely, Arooj, Jameel, and Khan (2022) in Pakistan investigated the relationship between reward, recognition, and employee work satisfaction. Excellent behavior, hard effort, and diligence, for example, increase morale and strengthen motivation when publicly recognized and acknowledged (Noviarita, Ahmad, & Fautau, 2021).

The literature above, which highlighted discussions on pedagogical knowledge, competencies of teachers, and their satisfaction in teaching, proved that these three variables displayed a correlation with each other. Also, this provides a glimpse at the outcome of this study. A great source of readings for these variables would mean relevance and significance in pursuing this kind of study. This provides an additional source of information with regards to the interaction among pedagogical knowledge, the competencies of teachers, and their satisfaction in teaching.

Correlation between Measures

At periods of high teacher turnover, it is especially important for teachers to have pedagogical topic knowledge since they show more job commitment and are less likely to quit their jobs (Blömeke, Houang, Hsieh, & Wang, 2017). Furthermore, instructors with superior pedagogical abilities are more satisfied with their jobs and are less likely to leave them, which is important in times of high teacher turnover (Blömeke, Houang, Hsieh, & Wang, 2017).

The findings of Dali, Daud, and Fauzee (2017) indicated that teaching competencies are directly linked to satisfaction. Additionally, Boset, Asmawi, and Abedalaziz (2017) revealed that the association between teachers' work happiness and their competency is statistically significant, positive, and low. The findings also demonstrated that the number of years of teaching experience had no bearing on a teacher's ability or sense of job satisfaction. The researchers suggest providing professional development opportunities and enhancing working circumstances for secondary school teachers in order to increase job satisfaction and enhance the results of the teaching-learning process.

Moreover, Sahito and Vaisanen (2020) showed that conducive working conditions, promotional opportunities like pedagogical skill enhancement, and the main elements influencing teachers' work satisfaction were found to be fair compensation, support from head teachers, peers, and the community, teacher empowerment, and friendships. The primary causes of job discontent were discovered to be an authoritarian management style, distrust, a non-transparent system, a work-life balance imbalance, an inefficient teaching and learning environment, and a lack of resources (Sadeghi, Ghaderi, & Abdollahpour, 2021).

Theoretical framework

This study was anchored on Vroom's (1964) Expectancy Theory. This was predicated on the idea that each person has a unique set of professional objectives and that people are motivated when they feel that their actions and results have a positive relationship, leading to a desirable reward that can meet their requirements. Within the framework of the study, the more teachers' efforts are supported by their employers, like sending them to trainings to enhance their pedagogic skills and competency, the more likely they are to remain committed and satisfied with their work.

This was supported by equity theory (Adams, 1965). This describes workplace happiness in terms of inputs and outputs, as well as fair and unfair resource allocation. Employees, according to this notion, strive to maintain fairness between their contributions to occupations and the outcomes they receive from their positions. Workers compare the relationships between the inputs and outcomes they get with those of other people at their level. When the connection between inputs and outcomes is like that of other coworkers at their company or in other companies with the same setting, equity occurs. When employees believe they are being treated unjustly or unequally, they are less content with their jobs, and a sense of inequity develops. In the context of the study, if enough resources are given to teachers, like enhancing their pedagogical skills and competencies, the more they will feel satisfaction with their job and the better will be their performance.

Additionally, this was supported by the job characteristics model (Hackman & Oldham, 1975). It states that job satisfaction arises when the work environment promotes intrinsically motivated traits. Three psychological states are influenced by five major work characteristics: skill diversity, task identity, task relevance, autonomy, and feedback. After that, the three psychological states can result in a variety of consequences, including work satisfaction. As a result, it is believed that enhancing the five fundamental job dimensions would result in a better work environment and higher job satisfaction from the perspective of a company. In the context of the study, improving skill variety, like the pedagogic skill and competence of teachers, leads to job satisfaction since the needs are catered for by the organization.

Conceptual Framework

The study's conceptual framework is shown in Figure 1. This demonstrates how the study's factors interacted. The independent variables are educational knowledge and teaching abilities the study's

factors interacted. The independent variables are educational knowledge and teaching abilities. Pedagogical knowledge refers to knowledge about teaching and learning. TLE This is comprised of the following indicators: student; teaching and classroom processes; theories of assessment; and professional responsibilities. Students refer to the recipients of instruction given by the teacher. Teaching and classroom processes refer to the learning activities designed by the teacher for the students' development and learning. Theories of assessment refer to the various applications of theories pertaining to the design of performance evaluations and written tasks. Professional responsibilities refer to teachers' duty to deliver the quality of education to their students, and this also displayed engagement in professional learning activities.

Another independent variable is competency in teaching. Competency in teaching refers to the skills and knowledge possessed by teachers in teaching TLE, which comprise planning, development, and resulting TLE, which comprise planning, development, and result. Planning refers to the process of organizing activities intended for students' development in TLE. Development refers to a teacher's use of various methods to deliver quality education. Result refers to teachers sharing of information pertaining to students' performance in the class.

In contrast, the dependent variable of the study is satisfaction with teaching. Satisfaction in teaching refers to teachers' contentment in the organization. This consists of the following: supervision refers to the abilities of the school head to provide technical assistance and behavioral support to their teachers; working relations is the degree to which fellow teachers are technically proficient and exhibit socially supportive organizational behavior; working conditions include the physical environment of the workplace, the quantity of work, the facilities for completing work, light, tools, temperature, space, ventilation, and the general look of the work place, as well as the income-related condition; pay is the amount of financial compensation provided by the school head for services rendered; Responsibility relates to a teacher having control over their own work or having accountability for the work of others; work itself measures the degree to which the person's employment gives them interesting duties; advancement refers to engagement activities that allow teachers to gain substantial knowledge; security

relates to how long instructors may anticipate keeping their jobs; and recognition refers to the reward given to a teacher for displaying an exemplary performance.

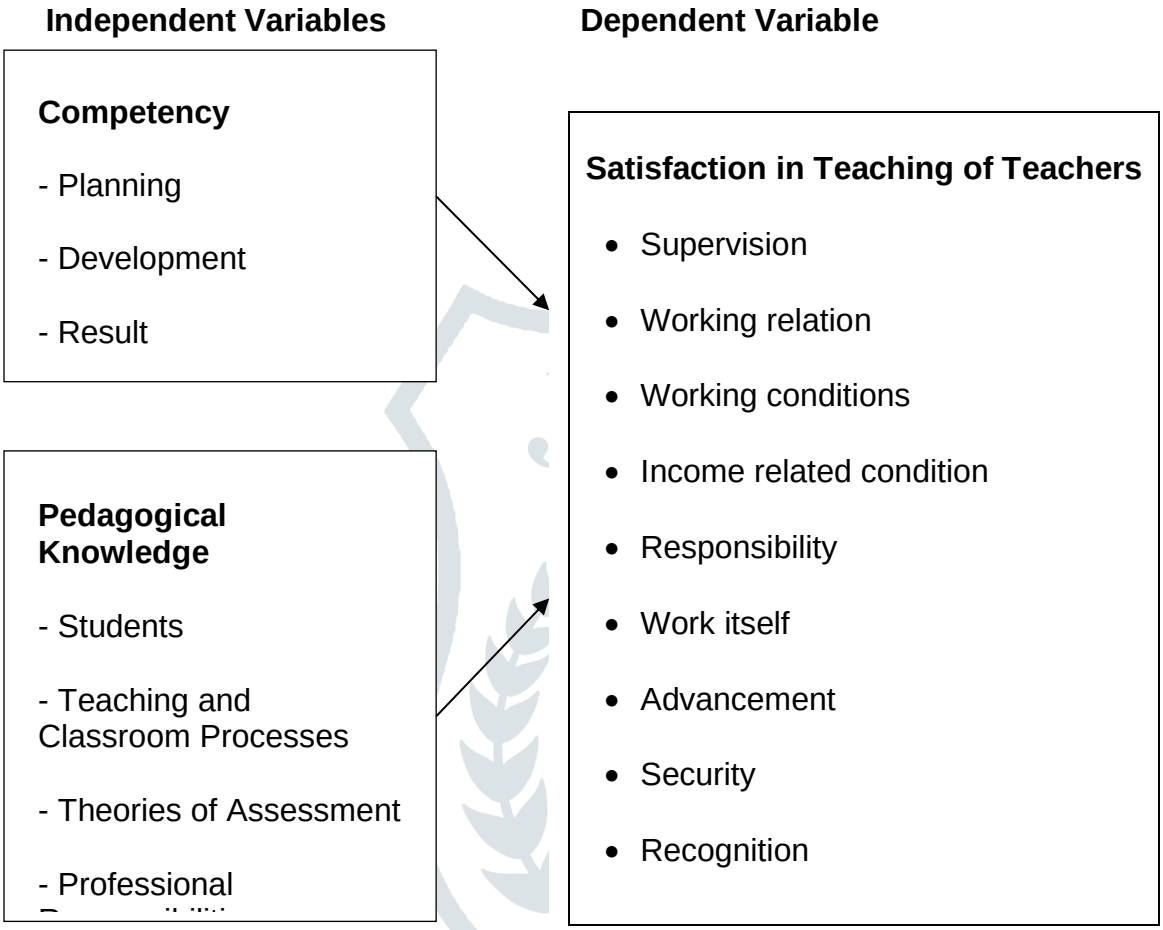

Figure 1. The Conceptual Framework illustrating the variables of the Study.

Significance of the Study

In a global stance, work satisfaction is a highly significant aspect of an employee's lifecycle and an incentive to remain loyal to and employed with a company (Sapta, Muafi, & Setini, 2021). Since content instructors are less likely to experience stress and burnout, it promotes teacher wellbeing (Benevene, De Stasio, & Fiorilli, 2020). Also, in a sociological context, it is crucial to the overall dedication and effectiveness of the educational system. The teachers' enthusiasm for their work as instructors had a big impact on how dedicated they were to the company (Farley & Chamberlain, 2021). Instructors that are happy with their jobs are dedicated to staying with the company. Employers' involvement and dedication to the organization are higher when they are happier in their jobs (Sahni, 2019). The success of the school is influenced by the teachers' overall job performance and how content or happy they are with the organization (Maqbool, 2017).

Also, school administrators, instructors, students, and future researchers will benefit from this study. To the school heads, this will allow them to acquire data on teachers' significant contributions in teaching. In doing so, they can visibly adopt the best practices of other teachers for other teachers to imitate. Additionally, the school heads may initiate means to sustain teachers' commitment to their jobs by constantly recognizing their immense contribution to teaching. For the teachers, this is a good avenue to reflect on and analyze their performance and commitment in the organization. This will give them a visual on what to contribute more to in their teaching, particularly in ensuring the delivery of quality education. To the students, they will largely benefit once teachers are satisfied in their jobs since they can give quality instructions in realizing the goal of education. To future researchers, the interaction of the variables would give additional insights on possible factors that may influence satisfaction in teaching. More so, they can validate the present findings or utilize other variables that may influence satisfaction in teaching TLE.

Definition of Terms

The following expressions are operationally defined:

Competency in teaching refers to planning, development, and results.

Pedagogical knowledge refers to student, teaching, and classroom processes, theories of assessment, and professional responsibilities.

Satisfaction in teaching relates to supervisory relationships, working conditions, remuneration, responsibility, the work itself, advancement, security, and recognition.

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Chapter 2

METHOD

This chapter highlights the study's methodology, including the research design, the study's demographics and sample, the research instrument utilized, the data collection process, and the statistical tools used.

Research Design

This study adopted a quantitative, non-experimental research methodology employing a descriptive-correlational approach. A non-experimental design is one that excludes the modification of an independent variable, the use of random assignment to control inconsequential factors, or both (Stevenson & Josefy, 2019). This evaluated the study's dependent variables, including pedagogical knowledge, competency, and satisfaction with teaching.

Meanwhile, a population, circumstance, or phenomenon that is being examined is described by a descriptive design. If a research problem existed, it concentrated on providing answers to the how, what, when, and where questions rather than the why. Also, the correlation design was used to characterize and quantify the degree of connection or link between two or more variables or sets of scores. In the context of the study, this measured the degree of pedagogical knowledge, competency, and satisfaction in teaching TLE (Taslim, Asrifan, Chen, & Nurdania, 2019). In the context of the study, this assessed the relationship

between pedagogical knowledge and satisfaction in teaching and competency and satisfaction in teaching. Further, regression techniques were used to establish the nature, intensity, and direction of the link between one dependent variable and a number of other factors (Wilms, Mäthner, Winnen, & Lanwehr, 2021). In the context of the study, this determined the influence of pedagogical knowledge and competency on satisfaction in teaching among TLE teachers.

Research Locale

The research was carried out in Region XI. Specifically, this was focused on the Division of Davao City, which highlighted four big schools with abundant respondents. The researcher wants to know the pedagogical knowledge and competency of teachers and the satisfaction of teachers employed in classrooms since the researcher is teaching in one of the identified schools. The identified schools used school codes instead of names for anonymity and data privacy, including 304356 at Venus Street, Crossing Bayabas Binugao, Davao City; 304393, Sta. Ana, Davao City; 304366 located at Sasa, Davao City; and 304360 located in Brgy. 10-A, F. Torres St., Davao City.

The four above-mentioned schools were some of the biggest schools in Davao Region, with more than 300 teachers, of whom 30 were technology and livelihood education teachers; they have more than 8000 students and 160 sections. 304360 is the biggest school in Davao City in terms of teacher population.

Figure 2 shows a map of the Philippines, with Davao City placed in Region XI, one of the 17 regions that make up the country. This figure also shows a location map of the respondents' public secondary schools in cluster II. Public secondary high school was categorized in three districts namely: first district which consists of 12 schools; second district consist of 21 schools and 39 schools for the third district which had the biggest number of schools. In the context of the study, this was the appropriate area where the study must be conducted due to the researcher's smooth access to the data to be gathered. Additionally, the researcher intended to assess satisfaction in teaching among technology and livelihood education teachers.

Figure 2. Map of the Philippines and Davao City

Population and Sample

The study's 120 technology and livelihood education instructors from the four large schools in Davao City's division served as the study's respondents. Using the most advantageous statistical methods, such as mean, standard deviation, and Cronbach's Alpha, the study data analysis was modified to account for 120 sample sizes (Rawashdeh, 2018). They were selected through stratified sampling. Stratified sampling refers to the selection of a sample where, into homogeneous subpopulations called strata, every member of the population studied should be in precisely one stratum (Campbell, Greenwood, Prior, Shearer, Walkem, Young, & Walker, 2020). The study's respondents were all the four institutions' technology and livelihood education instructors. Thirty teachers from each school served as respondents to the study. This study was conducted from October 2021 to May 2022.

Meanwhile, in the selection of the respondents, inclusion criteria were observed. Only technology and livelihood education teachers from junior high schools handling any tracks served as respondents to the study. These teachers must hold permanent positions. The research focuses on determining the work satisfaction of instructors who teach technology and lifestyle education alone, not how the school or even the institution manages its teachers. Those descriptions that did not fulfill the criteria were omitted from the study. Also, participants in the study were clearly informed that they had a choice to decline, refuse, or withdraw anytime without having to give a reason, and most importantly, there was no penalty to worry about.

Research Instrument

This study utilized an adapted questionnaire to measure the variables used in this study. The first adapted questionnaire was the pedagogical knowledge questionnaire developed by SEI-DOST and MATHTED (2011), which consists of 16 items and is categorized into four indicators, namely student, teaching, and classroom processes, theories of assessment, and professional responsibilities. The study of the responses' scoring guide was divided into five tiers. On a scale of 1 to 5, the five-point Likert scaling method was used to rate the following in the descriptive rating:

Meanwhile, the Cronbach's Alpha reliability score is 0.878, and the Cronbach's Alpha based on standard items scored 0.880. The result means that all 16 item questions were marked as acceptable.

Means Range	Descriptive Level	Analysis
4.20 – 5.00	ALWAYS	Pedagogical knowledge is always manifested.
3.40 – 4.19	OFTEN	Pedagogical knowledge is oftentimes manifested.
2.60 – 3.39	SELDOM	Pedagogical knowledge is sometimes manifested.
1.80 – 2.59	NEVER	Pedagogical knowledge is seldom manifested.
1.00 – 1.79	STRONGLY DISAGREE	Pedagogical knowledge is almost never manifested.

The second questionnaire was competency in teaching developed by Moreno-Murcia, Torregrosa, and Pedreno (2015), which encompasses three indicators, namely: planning, development, and result. A total of 28 items were indicated in the questionnaire. The following five orderable gradations, each with a variety of possible ways and descriptions, were taken into consideration while assessing the competency of instruction. However, the Cronbach's Alpha reliability score is 0.939, and Cronbach's Alpha based on standardized items scored 0.941; the result means excellent, with all 28 item questions marked as acceptable.

Means Range	Descriptive Level	Analysis
4.20 – 5.00	Very High	Teacher competency is always manifested.
3.40 – 4.19	High	Teacher competency is oftentimes manifested.
2.60 – 3.39	Moderate	Teacher competency is sometimes manifested.
1.80 – 2.59	Low	Teacher competency is seldom manifested.
1.00 – 1.79	Very Low	Teacher competency is never manifested.

The third questionnaire dealt with satisfaction in teaching among secondary school TLE teachers, which encompasses nine indicators, namely: supervision, working relations, working conditions, pay,

responsibility, the work itself, advancement, security, and recognition. This was adapted from Lester (1987), comprising 65 items.

On the other hand, the Cronbach's Alpha reliability score is 0.955, and Cronbach's Alpha based on standardized items scored 0.957; the result means excellent, with all 65 item questions marked as acceptable. The following are the numeric equivalent and descriptive interpretation used in determining the respondents' satisfaction with their teachers:

Means Range	Descriptive Level	Analysis
4.20 – 5.00	Very High	Satisfaction in teaching TLE is always manifested.
3.40 – 4.19	High	Satisfaction in teaching TLE is oftentimes manifested.
2.60 – 3.39	Moderate	Satisfaction in teaching TLE is sometimes manifested.
1.80 – 2.59	Low	Satisfaction in teaching TLE is seldom manifested.
1.00 – 1.79	Very Low	Satisfaction in teaching TLE is never manifested.

The questionnaires were subjected to validation by a panel of experts before they were administered to the respondents. The instruments obtained an overall mean rating of 32.4 from 5 validators; the *sustainability of items* got the highest score from the panel of 5, and the lowest was averaging 4.2 from the *clarity of direction and items*, *exhibition, and association of items; attainment of purpose; objectivity; and scale and evaluation rating scale* got 4.8, which is 5 being the highest and 1 being scaled as poor.

Data Collection

To enable the study, the following procedures were used for data gathering: Initially, the University of Mindanao's Professional School Dean granted authorization for the study to be carried out. Right after permission was granted, the researcher personally asked permission from the Office of the Superintendent in Davao City Division to perform the research. The Division Superintendent's authorized letter was attached to the letter for the principals of Davao City's secondary public schools, requesting that the researcher conduct the survey questionnaires.

Second, the participants were oriented on their role in the study. Informed consent was given to them. Third, the survey questions are distributed. The researcher personally distributes the research instruments to the respondents from May 2022 to July 2022. With the help of the TLE Department Head and teachers, all questionnaires were retrieved. The fourth was the retrieval and encoding of data. The data were encoded in the appropriate workspace. Lastly, the data were examined and interpreted using relevant statistical tools.

Statistical Tool

The data gathered were examined using the following statistical tools:

Mean. This was used to assess TLE instructors' pedagogical knowledge, competency, and teaching satisfaction.

Pearson r. This was utilized to find a substantial association between TLE instructors' pedagogical knowledge and work satisfaction in teaching, as well as their competency and job happiness in teaching.

Regression. This was used to determine the influence of pedagogical knowledge and competency on satisfaction in teaching among TLE teachers.

Ethical Consideration

This study was carried out in strict accordance with the ethical protocols and criteria established by the University of Mindanao Ethics Committee. A UMERC-2022-145 e-certificate was issued to the researcher to manifest the ethical soundness of the study. The researcher requested and received the required

clearance from important school administrators to do this research on time. Appropriate authorization and consent were also received from the study's sample, who were guaranteed that all of their rights would be adequately safeguarded, notably in the management of data such as, but not limited to:

Voluntary Participation. The researcher assured me that the participants in the study had voluntarily agreed to participate without any penalty. The objectives of this study were carefully explained and presented through a formal consent process to make sure that the respondents fully understood how they would be able to contribute to the study. Only those who accepted the invitation to participate were given survey questionnaires. Participants in the study were clearly informed that they had a choice to decline, refuse, or withdraw anytime without having to give an explanation.

Privacy and Confidentiality. All of the data from this study was kept private and confidential in order to protect the participants' names and locations as well as their rights.

Informed Consent Process. The researcher ensured that the respondents were fully aware of the benefits the school may receive from the study by using a clear and understandable survey form. The survey was carried out with the consent of both the respondents and the involved school administrations.

Recruitment. Only teachers from junior high schools teaching technology and livelihood education who handled any tracks served as respondents to the study. These teachers must be permanent. Descriptions that did not fit the criteria were excluded from the study. The methods used to acquire the data also described how the questionnaires were used and how samples from a population were chosen.

Risks. The population may encounter high-risk situations including physical, psychological, or economic issues, although none were included in this study. The study participants' rights were safeguarded and maintained.

Benefits. The results of this research can help the technology and livelihood education teachers since the findings of this study will give them new information in planning and implementing new methodologies based on the recommendations. Also, students will have a better learning experience as the teacher is satisfied and more teaching methodologies emerge. Lastly, administrators of the Technology and Livelihood Education curriculum can also gain new insight from this study since they have long been

exploring new mechanisms and factors for enhancing the Technology and Livelihood Education program to facilitate the Technology and Livelihood Education skills of the students.

Biosafety. This undertaking did not involve any scientific experiments that would harm biological and environmental subjects. Moreover, concerns about the process of authorship were observed in this study.

Plagiarism. The researcher took care to follow all of the proper and exact citation guidelines while using ideas from other authors and experts. This document was subjected to Grammarly's and Turnitin's plagiarism and grammar checks in order to accomplish this.

Fabrication. The researcher took care to avoid creating any fiction from his research because this study is based on multiple other investigations. As a result, every piece of information was meticulously recorded and referenced. Every source utilized in this study was taken from reputable scientific publications.

Falsification. There were no adjustments to the data collected for the study or misrepresentations of the work because this research followed the guidelines for the APA 7th edition citation style. The information and data collected were presented in the most accurate manner possible.

Conflict of Interest. The study only focused on the main interests of accomplishing the objectives and protecting the welfare of the respondents. Thus, it never influenced any secondary interest.

Deceit. No dishonesty of any kind was used in the writings in this study to undermine the respondents' wellbeing. The team of specialists reviewed and verified all the written information.

Permission from Organization/Location. An official letter was addressed to the administrators of the University of Mindanao Professional School and subsequently to the Davao City Schools Division to let them know that the research had been done in a way that was both formal and clearly in accordance with ethical standards. The approved letter shall be attached to the letter for the school heads of different schools. Only after receiving official clearance could the study be carried out.

Technology Issues. In the midst of a pandemic, the researchers understand the issues concerning technology. It is the best way for participants to submit data online or in any communication regarding the study to follow COVID protocols.

Authorship. Authorship provisions were made clear in writing this paper. Authorship qualifications and citations were based on their designations and significant contributions. All the writing was checked and approved before this paper was published.

Chapter 3

RESULTS

The data and analysis leading to conclusions based on the data acquired in this study are presented in this chapter. Discussions are arranged as follows: the level of pedagogical knowledge of TLE teachers; the level of competency of technology and livelihood education teachers; the level of satisfaction in the teaching of teachers; the significance of the connection amongst pedagogical knowledge and satisfaction in the teaching of teachers; the significance of the relationship between competency and satisfaction in the teaching of teachers; the significance of the singular influence of the pedagogical knowledge on the satisfaction in the teaching of teachers; and the significance of the combined influence of the pedagogical knowledge and competency on the satisfaction in the teaching of teachers.

Pedagogical Knowledge of TLE Teachers

The study initially aimed to assess instructors' pedagogical expertise in technology and livelihood education. Teachers' pedagogical competence in technology and livelihood education was assessed in terms of *student, teaching, and classroom processes, theories of assessment, and professional responsibilities.* Data on the degree of pedagogical competence of technology and livelihood education teachers are shown in Table 1. I got an overall mean of 4.48, which is *very high,* with a standard deviation of 0.36, which meant that pedagogical knowledge of technology and livelihood education teachers were often time

manifested. It was established that the four indicators, namely: *student, teaching, and classroom processes; theories of assessment; and professional responsibilities,* were described by the respondents as being *very high,* with mean ratings ranging from 4.40 to 4.54.

Table 1
Level of Pedagogical Knowledge

Indicator	SD	Mean	Descriptive Level
Student	0.42	4.40	Very High
Teaching and Classroom Processes	0.46	4.52	Very High
Theories of Assessment	0.41	4.44	Very High
Professional Responsibilities	0.43	4.54	Very High
Overall	**0.36**	**4.48**	**Very High**

Teaching Competency of TLE Teachers

The second purpose was to identify the degree of proficiency of technology and livelihood education instructors, measured in terms of *planning*, *development, and result*. The summary of the expertise of teachers of technology and livelihood education in public secondary schools is shown in Table 2. The overall mean score obtained by measuring teaching competence was 4.53, or very *high,* with a standard deviation of 0.35; this indicated that the teaching competency of technology and livelihood education teachers is always manifest. The entire indicator got a descriptive level of very high. Among the three indicators, development had the highest mean of 4.57 with a standard deviation of 0.37, followed by a mean of 4.51 for both planning and result, with standard deviations of 0.42 and 0.44 consecutively.

Table 2
Level of Competency

Indicator	SD	Mean	Descriptive Level
Planning	0.42	4.51	Very High
Development	0.37	4.57	Very High
Result	0.44	4.51	Very High
Overall	**0.35**	**4.53**	**Very High**

Job Satisfaction of TLE Teachers

The third goal was to assess instructors' levels of satisfaction with their instruction in terms of *supervision, working relations, working conditions, pay, responsibility, the work itself, advancement, security, and recognition.* Table 3 shows the level of satisfaction among teachers of technology and livelihood education. The overall mean score was 4.29, with a descriptive level of *"very high* and a mean deviation of 0.33. This point to the satisfaction of teachers teaching technology and livelihood education is always apparent. Among nine indicators, five got a descriptive level of *"very high*, and two indicators under the satisfaction of technology and livelihood education obtained the highest mean of 4.53; *responsibility* had a standard deviation of 0.46; and *work relations had a* standard deviation of 0.45, followed by the *work itself* indicator, which had a mean score of 4.49 and a standard deviation of 0.39; then, *advancement,* as reflected in Table 3, had a mean score of 4.43 and a standard deviation of 0.51; and *working conditions had," with a* 4.16 mean score for both *supervision with a* standard deviation of 0.54 and *recognition with a* standard deviation of 0.60, and *security with a* mean score of 4.03 and a standard deviation of 0.64, followed by *pay* with a mean score of 3.45 and a standard deviation of 0.63.

Table 3
Level of Satisfaction in Teaching TLE

Indicator	SD	Mean	Descriptive Level
Supervision	0.54	4.16	High
Working Relation	0.45	4.53	Very High
Working Conditions	0.46	4.29	Very High
Pay	0.63	3.45	High
Responsibility	0.46	4.53	Very High
Work Itself	0.39	4.49	Very High
Advancement	0.51	4.43	Very High
Security	0.64	4.03	High
Recognition	0.60	4.16	High
Overall	**0.33**	**4.29**	**Very High**

Significance on the Relationship between Pedagogical Knowledge and Satisfaction in Teaching of Teachers

The following study aimed to ascertain if teachers' pedagogical knowledge was associated with satisfaction among teachers teaching TLE. Presented in Table 4.1 is the statistical result using the Pearson R-Moment of Significant Test. The computation of the connection between pedagogical knowledge and satisfaction in teaching technology and livelihood education teachers in public secondary schools is revealed in the overall r-value of 0.495 with a p-value of 0.000, which is less than 0.05 level of significance. The finding was significant, and the null hypothesis, that there was no significant association between pedagogical knowledge and satisfaction in teaching technology and livelihood education, was therefore rejected.

When the domains of pedagogical knowledge were correlated with their satisfaction in teaching, the data showed that the teaching and classroom processes domain was significantly related with satisfaction in teaching technology and livelihood education, since the result of the computation yielded a r-value of

0.530 with a probability value of 0.05 or significant. As shown in the table, supervision, colleagues, working conditions, responsibility, work itself, and advancement were associated with the teaching and classroom processes domain. This implies that teachers tend to perform well in their jobs, as noble teachers despite the obstacles in the field of education.

Table 4.1

Significance on the Relationship between Pedagogical Knowledge and Satisfaction in Teaching of Teachers

Pedagogical Knowledge	Satisfaction in Teaching									
	Supervision	Colleagues	Working Condition	PAY	Responsibility	Work itself	Advancement	Security	Recognition	Overall
Student	.258**	.240**	.147	.256**	.280**	.190*	.353**	.033	-.011	**.294****
	.004	.008	.110	.005	.002	.038	.000	.718	.902	**.001**
Teaching and Classroom Processes	.289**	.472**	.355**	.217*	.397**	.355**	.582**	.243**	.236**	**.530***
	.001	.000	.000	.017	.000	.000	.000	.008	.010	*
										.000
Theories of Assessment	.265**	.466**	.308**	.196*	.356**	.339**	.440**	.138	.089	**.431***
	.003	.000	.001	.032	.000	.000	.000	.132	.331	*
										.000
Professional Responsibilities	.242**	.369**	.242**	.140	.485**	.475**	.516**	.053	.023	**.408***
	.008	.000	.008	.128	.000	.000	.000	.565	.800	*
										.000
Overall	**.312****	**.458****	**.312****	**.240****	**.451****	**.403****	**.563****	**.141**	**.103**	**.495***
	.001	**.000**	**.001**	**.008**	**.000**	**.000**	**.000**	**.124**	**.262**	*
										.000

Significance on the Relationship between Competencies and Satisfaction in Teaching of Teachers

Another goal of the study was to establish a significant connection between competency and satisfaction among teachers teaching technology and livelihood education. Presented in Table 4.2 significance on the relationship between competency and satisfaction in teaching by teachers, the result of significant

test computation of the correlation of competency and satisfaction in teaching by teachers revealed an overall r-value of 0.542 with a p-value of 0.000, which is less than 0.05 level of significance. As the outcome was significant, the null hypothesis that there was no connection between teacher skill and satisfaction was rejected.

When the domains in the competency were correlated with their satisfaction in teaching technology and livelihood education, the data showed that the result domain yielded an r-value of 0.578 with a probability value of less than 0.05 or significant. As shown in the table, the factors of satisfaction, which are working conditions, responsibility, supervision, colleagues, the work itself, advancement, and recognition, were associated with the result domain. This implied that the teachers are dedicated to their profession and are result-driven individuals.

Table 4.2
Significance on the Relationship between Competency and Satisfaction in Teaching of Teachers

Competency	Satisfaction in Teaching								
	Supervision	Colleagues	Working Condition	PAY	Responsibility	Work itself	Advancement	Security	Recognition	**Overall**
Planning	.074 .424	.419** .000	.273** .003	.053 .568	.291** .001	.409** .000	.448** .000	.156 .089	.056 .544	**.350**** **.000**
Development	.251** .006	.481** .000	.293** .001	.140 .128	.489** .000	.462** .000	.478** .000	.121 .187	.161 .079	**.468**** **.000**
Result	.423** .000	.496** .000	.380** .000	.203* .026	.529** .000	.366** .000	.573** .000	.144 .116	.327** .000	**.578**** **.000**
Overall	**.292**** **.001**	**.540**** **.000**	**.368**** **.000**	**.153** **.095**	**.507**** **.000**	**.476**** **.000**	**.582**** **.000**	**.165** **.071**	**.215*** **.018**	**.542**** **.000**

Significance of the Singular Influence of the Pedagogical Knowledge on the Satisfaction in Teaching of Teachers

As shown in Table 5.1, the regression coefficient was used to test the significant influence of every domain of pedagogical knowledge on teacher satisfaction when teaching TLE. Using the regression analysis, the

data revealed that the influence of pedagogical knowledge on the level of satisfaction had an F value of 12.999 and a p value of 0.05. This meant that the pedagogical knowledge significantly influenced their satisfaction in teaching since the probability value was 0.05. The R2 value of 0.311 implied that 31.10% of the pedagogical knowledge was influenced by satisfaction in teaching, while the other 68.90% was affected by other variables.As revealed by the F-value of 12.999 and the probability value of 0.000, which was less than the 0.05 level of significance set in the study, pedagogical knowledge influenced teacher satisfaction, and among the four indicators of pedagogical knowledge, teaching and classroom process were found to be the best predictors of teacher satisfaction. The conclusion of the null hypothesis was that there was no domain in the level of pedagogical knowledge that significantly influenced the teaching methods.

Table 5.1

Significance on the Singular Influence of Pedagogical Knowledge on the Satisfaction in Teaching of Teachers

	Satisfaction of Teachers			
Pedagogical Knowledge	*B*	β	*t*	*Sig.*
Constant	2.283		7.208	.000
Student	-.085	-.110	-1.010	.315
Teaching and Classroom Process	.314	.435	4.253	.000
Theories of Assessment	.080	.099	.734	.464
Professional Responsibilities	.134	.172	1.435	.154
R	.558			
R^2	.311			
ΔR	.287			
F	12.999			
ρ	.000			

Significance of the Singular Influence of Competency on the Satisfaction in Teaching of Teachers

Table 5.2 presents a coefficient to test the significant influence of every domain of competency of teachers on satisfaction in teaching. By means of regression analysis, the data showed that the influence of competency on the level of satisfaction in teaching among teachers had an F value of 22.069 and a p value of 0.05. This meant that the competency of teachers significantly influenced their satisfaction since the probability value was 0.05. The R2 value of 0.363 implied that 36.30% of the teaching competency was influenced by their satisfaction with teachers teaching technology and livelihood education, while the remaining 63.70% was influenced by other factors.

The F-value of 22.069, with the probability value of 0.000, which was less than the 0.05 level of significance set in the study, indicated that the competency of teachers influenced satisfaction in teaching, and among the three indicators of competency, the result was found to be a perfect judge of competency. As a result, the null hypothesis, which stated that there was no domain in the level of competency that significantly influenced the satisfaction of teachers, was rejected

Table 5.2

Significance on the Singular Influence of Competency on the Satisfaction in Teaching of Teachers

	Satisfaction of Teachers			
Competency	*B*	β	*t*	*Sig.*
Constant	1.953		6.131	.000
Planning	-.074	-.094	-.829	.409
Development	.232	.262	2.200	.030
Result	.356	.474	5.124	.000

R	.603[a]
R^2	.363
ΔR	.347

F	22.069
ρ	.000

Significance on the Combined Influence of the Pedagogical Knowledge and Competency on the Satisfaction in Teaching of Teachers

Considering that some indicators of pedagogical knowledge and competency showed a significant relationship with a p-value of 0.000 with a 0. 000, As shown in Table 5.3, the regression was used to test the significant influence of three variables, namely, pedagogical knowledge, competency, and satisfaction of teachers. It has an F value of 25.820 and a p value of 0.05. This indicated that these factors had a considerable impact on each other. The R2 value of 0.306 implied that 30.6% of pedagogical knowledge and competency were influenced by satisfaction in teaching and the remaining 69.4% were influenced by other factors.

As the table revealed in the F-value of 25.820, Having a probability value of 0.000, which was less significant than the study's established level of significance of 0.05, it is remarkable to notice that competency is a predictor of satisfaction in teaching with a significance value of 0.002, while pedagogical knowledge is 0.153. On the other hand, the null hypothesis states that there is no discernible impact between pedagogical knowledge and competencies on satisfaction in the teaching of technology and livelihood education teachers.

Table 5.3

Significance on the Combined Influence of the Pedagogical Knowledge and Competency on the Satisfaction in Teaching of Teachers

Satisfaction of Teachers					
(Variables)		*B*	β	*t*	*Sig.*
Constant		1.855		5.452	.000
Pedagogical Knowledge		.163	.179	1.437	.153
Competency		.376	.401	3.222	.002
R	.553				
R^2	.306				
ΔR	.294				
F	25.820				
ρ	.000				

Chapter 4

DISCUSSION

This chapter discusses the teachers' degree of pedagogical knowledge, competency, and happiness with their instruction. It also offers some suggestions.

Pedagogical Knowledge of TLE Teachers

Due to students, classroom procedures, evaluation theories, and professional duties, instructors in the fields of livelihood education and technology have extremely high levels of pedagogical knowledge. It signifies that teachers' pedagogical knowledge is remarkable. Teachers have a very high ability to respond when it comes to students, classroom processes, theories of assessment, and professional responsibilities. These findings are congruent with the statement of Figueiredo, Gomes, and Rodrigues (2018). Stating that ability to make a connection between theories and practice in the process of instructing and learning. Educators with good pedagogical knowledge can carry out an effective instructing and learning session in the four corners (Buyong, Mohamed, Satari, Bakar, & Yunus, 2020). They know how to integrate the pedagogy, content, and implementation strategies that will help children gain a better understanding (Dwyer & Schachter, 2019). They can also make the learning session fun and exciting.

Teaching Competency of TLE Teachers

Technology and livelihood education instructors are held to very high standards when it comes to planning, developing, and producing results. The overall result means that they are well versed in executing planning, development, and results. It supports the idea that the competency of teachers is an essential element that they need to have in striving toward excellence (Buyong, Mohamed, Satari, Abu Bakar, & Yunus, 2020). To impart knowledge to the learners, especially in this fast-changing environment, instructors need to change their educational models to meet the new sort of learner they are facing in this new generation of learners (Sain, Kaware, & Douglas, 2018). They must be knowledgeable in the field of pedagogy, the topic that needs to be planned, to adjust to the new developments and be result-oriented, as learning is the desire of learners.

Job Satisfaction of TLE Teachers

The very high degree of job satisfaction among instructors of technology and livelihood education is attributable to working relationships, the working environment, responsibility, the work itself, and advancement. In the study of Bulinska-Stangrecka and Bagienska (2021), as stated, a person strengthens relationships inside the team when they are able to communicate with their coworkers and share not just work-related information but also questions about their well-being or a pleasant chat. In turn, the person feels supported and works in a welcoming setting, both of which help the individual have a favorable view of their job. The teachers have a high level of fulfillment acquired from the different job activities and situations they encounter.

Teachers have a high ability to adjust and respond to the overall attitude and views towards supervision, pay, security, and recognition. It signifies that teachers are happy and feel contentment about their work when they evaluate their job experience based on factors that include salary, administration, supervision, and interpersonal relationships. To improve student outcomes in countries with high educational requirements, school administrators should monitor instructional activities while emphasizing a

collaborative attitude toward instructors (Agostinelli & McQuillan, 2020). The efficacy of the teacher, the pupils, the school environment, and the educational system are all influenced by their satisfaction with their work as teachers (Lopes & Oliviera, 2020).

Significance on the Relationship between Pedagogical Knowledge and Satisfaction in Teaching of Teachers

The study's null hypothesis is rejected by the results of the test for relationships among variables, which show a substantial association between instructors' happiness with their teaching and their pedagogical expertise. All four indicators of pedagogical knowledge, namely, student, teaching, and classroom processes, theories of assessment, and professional responsibilities, were found to be contributory to the overall positive and significant relationship. It implies that the pedagogical knowledge of teachers depends on their satisfaction; the ability of the teacher to deal with various aspects like students, teaching and classroom processes, theories of assessment, and professional responsibilities is remarkably high. Which gives the learners a positive effect on learning. The result is in conformity with the statement by Blömeke, Houang, Hsieh, & Wang (2017) that it is especially important during periods of significant teacher turnover that educators who are knowledgeable about pedagogical material are more committed to their jobs and less likely to leave the field. Knowing how to integrate the pedagogy, content, and implementation strategies that will help children gain a better understanding (Dwyer & Schachter, 2019) is crucial.

Significance on the Relationship between Competencies and Satisfaction in Teaching of Teachers

With regards to the relationship between competencies and satisfaction in teaching, the study uncovers a significant relationship, which rejects the null hypothesis of the study. All three indicators, namely planning, development, and result, were found to be significantly related and contribute to the overall positive picture. This implies that teaching competency is directly dependent on the satisfaction of teachers, teaching technology, and livelihood education.

It is observed in their enthusiasm for teaching, their creativity in planning and developing lessons, and their result-oriented nature as proof of being competent teachers. The results accord with the statement by Dali, Daud, and Fauzee (2017) stating that teaching competencies are directly linked to satisfaction. It was supported by Boset, Asmawi, and Abedalaziz (2017), who discovered that the relationship between teachers' job satisfaction and their competency is statistically significant, positive, and has a small effect. The outcomes also showed that the number of years of teaching experience had no impact on the competence or work satisfaction of teachers. In order to increase job satisfaction and enhance the results of the teaching-learning process, the researchers advise implementing professional development programs and improving teacher working conditions at public secondary schools.

Significance of the Singular Influence of the Pedagogical Knowledge on the Satisfaction in Teaching of Teachers

One of the important purposes of this study is to present the regression analysis determining which indicators of pedagogical knowledge best predict satisfaction in teaching among teachers. The study states that pedagogical knowledge is significantly influenced by teacher satisfaction in teaching. The best determinant was the indicator teacher and classroom process. The finding has bearing on Blömeke, Nilsen, and Scherer (2021). The best classroom teachers go above and beyond the required rigorous set of classroom delivery abilities to achieve more for their learners. The capacity of a teacher to impart information by outlining what and how he or she plans to conduct instruction on their own terms (Popova, 2019)

On the other hand, the result of an R2 value of 0.311 implied that 31.10% of the pedagogical knowledge was influenced by satisfaction in teaching, though the outstanding 68.90% was affected by other variables. This means that other factors, such as teachers' classroom processes or resources, significantly affect students' learning experiences, and this has made educators focus on the knowledge that is going back to the subject matter because it suggests that teachers lack essential pedagogical knowledge for teaching the subject (Blömeke, Nilsen, & Scherer, 202 In this study, every situation in the

classroom is the battlefield for the educator, whose knowledge of how to manipulate classroom processes is the key to success in learning that benefits the learner the most.

Significance of the Singular Influence of Competency on the Satisfaction in Teaching of Teachers

Another key objective of this study is to offer a regression analysis that identifies the competency indicators that most accurately predict instructors' satisfaction with their instruction. Regression analysis results show a strong association between instructors' teaching skill and satisfaction, refuting the study's null hypothesis. All three indicators of competency in teaching, namely planning, development, and result, were found to be contributory to the positive and significant relationship.

The best determinant was the indicator result. In the study of Renninger and Hidi (2017), teachers behavior being result-driven is one of the significant characteristics it has to offer for the benefit of the students; currently, teachers in the country are most lacking in other aspects like motivation and quality or ability to transfer knowledge; Since one of the pillars of this revision is support for scientific-technical innovation and development processes, the adaptation mandates that academic institutions improve the quality of their activities through systematic evaluation mechanisms, both internal and external. This revision also calls for several organizational and pedagogical changes that may spark interest in innovative pedagogical methods.

Meanwhile, it is clear that teachers with pedagogical knowledge or who are result-driven show, in classroom situations, fun and exciting sessions with playful activities that will help nurture and foster children's interest in learning (Buyong, Mohamed, Satari, Bakar, & Yunus, 2020).

Significance on the Combined Influence of the Pedagogical Knowledge and Competency on the Satisfaction in Teaching of Teachers

As for figuring out how competence and pedagogical knowledge individually and together affect instructors' pleasure with teaching technology and earning a living, the result using regression analysis

was clear that there is a significant relationship, which means the hypothesis from the beginning was null void.

As shown in Table 5.3, there is a significant relationship in terms of the combined influence of pedagogical knowledge and competency on the satisfaction in the teaching of teachers. Still, the competency of teachers is remarkable and the best determinant compared to pedagogical knowledge. This is parallel to the study of Dali, Daud, and Fauzee (2017), teaching competencies are directly linked to satisfaction. Moreover, according to Poudel and Subedi (2022): "What the teachers know and do must be looked at deeper; the competency of teachers is an essential element that they need to have in striving toward excellence (Buyong, Mohamed, Satari, Abu Bakar, & Yunus, 2020).

Conclusion

Based on the results of an extensive analysis, the study's conclusion is presented in this part. The data gathered and analyzed showed an association between pedagogical knowledge, competency of teachers, and satisfaction of teachers teaching technology and livelihood education. Respondents believed that there is a very strong correlation between pedagogical expertise and teacher satisfaction, and teaching and classroom processes were established to be the strongest indicators of pedagogical learning, which is parallel to the study of Somosot (2018) in his study of TLE teachers, who indicated that planning strategies are consistently practiced.

Respondents also demonstrated a very high level of importance for the competency of teachers and satisfaction in teaching, which was recognized as the most vital indicator. Like Boset, Asmawi, and Abedalaziz (2017) study, teaching competencies are directly linked to satisfaction. The combined influence of competency and pedagogical knowledge on the satisfaction of teachers in teaching technology and livelihood education indicated significance in the study. Still, it was remarkable to notice competency as a predictor of satisfaction in teaching.

The result of the study confirmed my anchored theory on Vrooms (1964), in which he pointed out that when teachers' efforts have been supported by their employers, like sending them to trainings to enhance

their pedagogic skills and competency, it is more likely they will remain committed and satisfied with their work. According to this statement, supported by Boset, Asmawi, and Abedalaziz (2017), there are high and low relationships between instructors' work happiness and their level of competence. The findings also demonstrated that the number of years of teaching experience had no bearing on a teacher's ability or sense of job satisfaction. Organizing professional development opportunities and enhancing working circumstances for secondary school teachers to increase job satisfaction and enhance the effectiveness of the teaching-learning process.

Recommendation

The following suggestions are made considering the findings and conclusion: The extremely high degree of pedagogical expertise that TLE instructors possessed showed in their consistently excellent performance in the classroom and throughout instruction. Instructors' practices and adherence must be maintained and even reinforced to ensure that the institution continues to enjoy its ongoing positive influence on the stakeholders and community. Interactive PowerPoint presentations, videos, and even mobile applications from the internet are also recommended. Allow students to solve problems using calculators or Microsoft Office Excel to make every activity more enjoyable. To further improve the quality of teaching, schools must have good facilities, such as better laboratories, equipment in TLE, and internet access for both students and teachers.

The high level of competency of teachers means the teachers must continue their planning methods, place more focus on the development of the learner, and be result-oriented as always to attain a high percentage of learning that suits the needs of the learner and focuses on the desired learning outcome so that students may have every opportunity to learn what they are expected to learn. Has strong skills in creating assessment tools, choosing assessment methods, conducting assessments, interpreting assessment data, and evaluating learning processes and outcomes.

The satisfaction will specifically come from those that will enhance supervision, like treating everyone equitably, observing the classroom regularly, and helping to improve instruction. To further raise the

standard of services, school administrators may pursue additional in-service training in management and leadership. The teachers might build feedback mechanisms to monitor their school head's leadership and administration.

The researcher finds a significant relationship between pedagogical knowledge, the competence of the teacher, and satisfaction with teaching. To this end, he recommends that school heads, as school leaders, place importance on maintaining teachers' high pedagogical knowledge and competency to perform better in teaching.

Future researchers who wish to conduct similar or related studies about pedagogical knowledge, competency in teaching, and satisfaction in teaching should explore other variables that could have a direct effect on them, employ other methodologies, or have the study implemented in other contexts to strengthen and make the results even more reliable.

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Pedagogical Knowledge and Competency Of Teachers As Correlates Of Satisfaction In Teaching Technology And Livelihood Education

Name (Optional): _____
School: _____ **Address:** _____

General Instructions: Please evaluate the following variables, your answer should represent your direct feelings. Be sure to keep the statement in mind when deciding how you feel about aspect of your job. Be frank. Give a true current picture of your feeling about your job satisfaction. Part I of this questionnaire deals on the teaching competence while the part II on job satisfaction of TLE teachers. Please, respond to all items given below by putting a tick (√) in the appropriate space using the following scales:

5 Always If the measure described in the item is manifested at all times.

4 Often If the measure described in the item is manifested in the majority of the cases.

3 Sometimes If the measure described in the item is manifested in many but not majority of the cases .

2 Seldom If the measure described in the item is manifested in a few instances.

1 Never If the measure described in the item is not or almost never manifested.

Part I. Pedagogical Knowledge

Please, respond to all items given below by putting a tick (√) in the appropriate space using the following scales that best indicates how you feel about each statement in the following questionnaires.

RATING SCALE AND DESCRIPTION:

5 STRONGLY AGREE (The statement is always true)
4 AGREE (The statement is often true)
3 MODERATELY AGREE (The statement is sometimes true)
2 DISAGREE (The statement is seldom true)
1 STRONGLY DISAGREE (The statement is almost never true)

A. Students

As a teacher…

No		5	4	3	2	1
1.	I use different learning theories and principles on educational psychology to understand my students, their social and cultural backgrounds, their individual differences, and unique contexts to encourage autonomy, responsibility and respect for others.					
2.	I use appropriate motivational strategies (including use of visual aids and appropriate technology) to arouse and sustain the interests of my students and build on and connect concepts.					
3.	I motivate my students by integrating the historical development of mathematics, contribution of cultures, communities, and real-life situations in appropriate lessons to develop meaningful conceptual understanding and connections to students' lives.					
4.	I use methods of inquiry that address the learning needs of my students and facilitates their conceptual understanding of mathematics.					

B. Teaching and Classroom Processes

As a teacher…

5.	I display knowledge of group work, practical work, investigative studies, and class presentations as different ways of teaching TLE to my students.					
6.	I set definite procedures for checking attendance and homework and can keep track of other procedures necessary to keep order in my teaching.					

C. Theories of Assessment

As a teacher…

7.	I use assessment methods and techniques and makes them an integral part of instruction to provide information and guidance in making instructional decisions.					
8.	I write useful and accurate assessments of my students.					

9.	I use variety of assessment methods to evaluate my students' understanding, progress, and performance.					
10.	I use assessment strategies to make students aware of their strengths and needs and encourage them to set their own personal goals for learning.					
11.	I use assessment results to diagnose my student learning needs, align, and modify my instruction and design teaching strategies.					
D. Professional Responsibilities						
As a teacher…						
12.	I incorporate the TLE principles and standards into the planning, designing and execution of instruction.					
13.	I display professionalism in meeting with parents, peers and supervisors.					
14	I keep neat and accurate records for reporting students' progress and achievements.					
15.	I render good judgment in handling and discussing sensitive issues involving my students.					
16.	I adhere to certain protocols and procedures of the institution when reporting students' progress and achievement.					

Modified and adapted from SEI-DOST & MATHTED, (2011).

Part II: Teaching Competence

A. Planning

As a teacher…

No		**5**	**4**	**3**	**2**	**1**
1.	I provide clear information about objectives, bibliography, tutorials, contents, and assessment methods in the subject's curriculum.					
2.	I design and relates the classroom content to the lab content.					
3.	I efficiently incorporate and employs ICTs (Information and Communication Technologies) in teaching TLE.					
4.	I have a good command of the contents of the course.					

B. Development						
As a teacher…						
5.	I present the minimum content of my subject matter, tailored to my students' knowledge.					
6.	I am easily accessible (tutorials, e-mails, etc.) to my students					
7.	I allow my student to organize and distribute part of the assignments to be performed in the class					
8.	I present the contents of the course following a clear and logical framework, highlighting the important aspects of it					
9	I allow and encourage student participation.					
10.	I promote individual work.					
11.	I promote teamwork.					
12.	I relate my teaching to my professional environment.					
13.	I provide initial and final overview of the session and/or subject in my class.					
14.	I encourage my student be interested and motivated to learn.					
15.	I facilitate student-student and student-professor interaction.					
16.	I attend and respond clearly to questions of my students asked in my class.					
17.	I adequately attend to the tutorial requested of my students.					
18.	I maintain an objective and respectful position with my students.					
19.	I organize activities for my students to actively participate in course assignments.					
20.	I interweave the content of the subject matter with other courses.					
21.	I interact satisfactorily with my students.					
C. Result						
As a teacher…						
22.	I inform the students of the competencies they will be expected to acquire.					
23.	I provide scientific information that allows me to gain a better and deeper understanding of the subject matter.					
24.	I foster research and a critical spirit in my students.					

25.	I apply the established curriculum with a certain amount of flexibility for a better class dynamic.					
26.	I use material resources that facilitate learning.					
27.	I design the content and develop the course to promote the acquisition of professional competencies.					
28.	I apply the assessment criteria of the activities as established in the subject's curriculum.					

Modified and adapted from Murcia, Torregrosa, Pedreño, (2015)

Part II: Job Satisfaction

A. Supervision

No		5	4	3	2	1
1.	My principal gives me assistance when needed.					
2.	My principal provides assistance for improving instruction.					
3.	My principal observes classroom instruction regularly.					
4.	My principal makes available the material needed.					
5.	My principal offers suggestions to improve teaching.					
6.	My principal back up me when necessary.					
7.	My principal is willing to listen to suggestion.					
8.	My principal makes me feel comfortable.					
9.	My principal supports every teacher.					
10.	My principal gives meaningful instruction					
11.	My principal praises good teaching.					
12.	My principal gives due recognition.					
13.	My principal explains what is expected of every teacher					
14.	My principal treats everyone equitably.					

B. Colleagues

15.	I like the people with whom I work.					
16.	I get along well with my co-teacher.					
17.	My co-teacher stimulates me to do better work.					
18.	I have made lasting friendships among my co-teachers.					
19.	My interests are similar to those of my co-teacher.					
20.	My colleagues seem reasonable to me.					
21.	I get cooperation from the people I work with.					
22.	My colleagues are highly critical of one another.					
23.	My colleagues provide me with suggestions or feedback about my teaching.					
C. Working condition						
24.	Working conditions in my school are good.					
25.	Working conditions in my school are comfortable.					
26.	The administration in my school clearly defines its policies.					
27.	The administration in my school communicates its policies well.					
28.	Working conditions in my school could be improved.					
29.	Working conditions in my school could not be worse.					
30.	Physical surroundings in my school are pleasant.					
D. Pay						
31.	Teacher's income is adequate for normal expenses.					
32.	Teaching provides me with financial security.					
33.	I am well paid in proportion to my ability.					
34.	My income is more than I deserve.					
35.	My pay is comparable with similar jobs in other school districts.					
36.	My income is enough to live on.					
37.	Sufficient income keeps me from living the way I want to live.					
E. Responsibility						

38.	I get along well with my students.					
39.	I do have responsibility for my teaching.					
40.	My students respect me as a teacher.					
41.	I am responsible for planning my daily lessons.					
42.	Teaching provides me the opportunity to help my students learn.					
43.	I am interested in the policies of my school.					
44.	I am responsible for my actions.					
45.	I am aware of the policies of my school					
F. Work itself						
46.	Teaching is very interesting work.					
47.	Teaching encourages me to be creative.					
48.	Teaching provides me the chance to develop new methods.					
49.	Teaching provides an opportunity to use a variety of skills.					
50.	The work of a teacher is very pleasant.					
51.	Teaching encourages originality.					
52.	The work of a teacher consists of routine activities.					
53.	I am interested toward teaching.					
54.	I have the freedom to make my own decisions when teaching.					
G. Advancement						
55.	Teaching provides a good opportunity for advancement.					
56.	Teaching provides an opportunity for promotion.					
57.	Teaching provides me with an opportunity to advance professionally.					
58.	Teaching provides unlimited opportunities for advancement.					
59.	I am getting ahead in my present teaching position.					
H. Security						
60.	I am not afraid of losing my teaching job.					

61.	Teaching provides for a secure future.					
62.	I feel secure in my teaching job.					
I. Recognition						
63.	I receive full recognition for my successful teaching.					
64.	One tells me that I am a good teacher.					
65.	I receive many recognitions as a teacher.					

Modified and adapted from Lester (1987)

Thank You:

JEFFERSON G. PALACA
Researcher

UM The University of Mindanao
PROFESSIONAL SCHOOLS
[/] Main [ ] Branch

LETTER TO THE VALIDATORS

LEILANIE TINGZON, PhD.
University of Mindanao
Professional Schools
Matina, Davao City

Dear Dr. TINGZON,

The undersigned would like to request your approval to be one of the evaluators in the research study entitled, **"Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"** as a requirement for the degree of Master of Arts in Education major in Technology and Livelihood Education. Undoubtedly, your expertise would make the instrument rich and substantive in content.

Attached to this request is the actual print-out of the interview guide, research objectives, population, and sample of the study. Your comments and suggestions will be a great help in the realization of this study. Looking forward for your favorable response on this request. Thank you and God bless.

Sincerely,

JEFFERSON G. PALACA
Researcher

Noted by:

Dr. ELLEINE ROSE OLIVA
Research Adviser

Rev. # 0/ Effectivity: July 14, 2020

UM The University of Mindanao
PROFESSIONAL SCHOOLS
[/] Main [ ] Branch

LETTER TO THE VALIDATORS

JOCELYN B. BACASMOT, PhD.
University of Mindanao
Professional Schools
Matina, Davao City

Dear Dr. Bacasmot,

The undersigned would like to request your approval to be one of the evaluators in the research study entitled, **"Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"** as a requirement for the degree of Master of Arts in Education major in Technology and Livelihood Education. Undoubtedly, your expertise would make the instrument rich and substantive in content.

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Sincerely,

JEFFERSON G. PALACA
Researcher

Noted by:

Dr. ELLEINE ROSE OLIVA
Research Adviser

Rev. # 0/ Effectivity: July 14, 2020

UM The University of Mindanao
PROFESSIONAL SCHOOLS
[/] Main [ ] Branch

LETTER TO THE VALIDATORS

MYLA MAE N. MASCARIÑAS, MAED
University of Mindanao
Professional Schools
Matina, Davao City

Dear Ma'am MASCARIÑAS,

The undersigned would like to request your approval to be one of the evaluators in the research study entitled, **"Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"** as a requirement for the degree of Master of Arts in Education major in Technology and Livelihood Education. Undoubtedly, your expertise would make the instrument rich and substantive in content.

Attached to this request is the actual print-out of the interview guide, research objectives, population, and sample of the study. Your comments and suggestions will be a great help in the realization of this study.

Looking forward for your favorable response on this request. Thank you and God bless.

Sincerely,

JEFFERSON G. PALACA
Researcher

Noted by:

Dr. ELLEINE ROSE OLIVA
Research Adviser

Rev. # 0/ Effectivity: July 14, 2020

UM The University of Mindanao
PROFESSIONAL SCHOOLS
[/] Main [ ] Branch

LETTER TO THE VALIDATORS

MARCELO ROCO, Ed.D.
Program Supervisor
Division of Davao City
Quirino St.,Davao City

Dear Dr. Roco,

The undersigned would like to request your approval to be one of the evaluators in the research study entitled, **"Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"** as a requirement for the degree of Master of Arts in Education major in Technology and Livelihood Education. Undoubtedly, your expertise would make the instrument rich and substantive in content.

Attached to this request is the actual print-out of the interview guide, research objectives, population, and sample of the study. Your comments and suggestions will be a great help in the realization of this study.

Looking forward for your favorable response on this request. Thank you and God bless.

Sincerely,

JEFFERSON G. PALACA
Researcher

Noted by:

Dr. ELLEINE ROSE OLIVA
Research Adviser

Rev. # 0/ Effectivity: July 14, 2020

UM The University of Mindanao
PROFESSIONAL SCHOOLS
[/] Main [ ] Branch

LETTER TO THE VALIDATORS

Dr. JOEL TAN
University of Mindanao
Professional Schools
Matina, Davao City

Dear Dr. Tan,

The undersigned would like to request your approval to be one of the evaluators in the research study entitled, **"Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"** as a requirement for the degree of Master of Arts in Education major in Technology and Livelihood Education. Undoubtedly, your expertise would make the instrument rich and substantive in content.

Attached to this request is the actual print-out of the interview guide, research objectives, population, and sample of the study. Your comments and suggestions will be a great help in the realization of this study.

Looking forward for your favorable response on this request. Thank you and God bless.

Sincerely,

JEFFERSON G. PALACA
Researcher

Noted by:

Dr. ELLEINE ROSE OLIVA
Research Adviser Rev.

0/ Effectivity: July 14, 2020

UM
The University of Mindanao

PROFESSIONAL SCHOOLS

[✓] Main [ ] Branch _____

VALIDATION SHEET FOR RESEARCH QUESTIONNAIRE

Name of Evaluator : Dr. Jocelyn B. Bacaamot
Degree : MAED,MS, PhD
Position : Program Coordinator
Number of Year of Teaching : 27
To the Evaluator : Please check the appropriate box for your ratings
Points of Equivalent : 5 - Excellent 2 - Fair
4 - Very Good 1 - Poor
3 - Good

ITEMS	5	4	3	2	1
1. Clarity of Directions and Items The vocabulary level, language, structure and conceptual level of questions suit the level of participants. The directions and the items are written in a clear and simple language.		/			
2. Presentation and Organization of Items The items are presented and organized in logical manner.	/				
3. Suitability of Items The Item is appropriate and represents the substance of the research. The questions are designed to determine the conditions, knowledge, perception and attitudes that are supposed to be measured.	/				
4. Adequateness of Items per Category or Indicator The items represent the coverage of research adequately. The questions per area category are adequate representations of all the questions needed for research.	/				
5. Attainment of Purpose The instrument fulfills the objectives for which it was constructed.	/				
6. Objectivity Each item questions only one specific answer or measures only one behavior and no aspect of the questionnaire is a suggestion of the researcher.	/				
7. Scale and Evaluation Rating Scale The scale adapted is appropriate for the items.	/				

Title of Approved Research: Pedagogical Knowledged and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education

Name of Researcher: Jefferson Palaca

Research Adviser: Dr. Oliva

Date of Evaluation of the Questionnaire: Oct. 21, 2021

Remarks of the Evaluator: Approved for administration

Dr. Jocelyn B. Bacaamot
Signature Above Printed Name

F-UESO-011/ Rev. # 3/ Effectivity: January 25, 2018

The University of Mindanao

PROFESSIONAL SCHOOLS

[✓] Main [ ] Branch _____

VALIDATION SHEET FOR RESEARCH QUESTIONNAIRE

Name of Evaluator : MYLA MAE N. MASCARINAS
Degree : MAED
Position : _____
Number of Year of Teaching : _____
To the Evaluator : Please check the appropriate box for your ratings
Points of Equivalent : 5 - Excellent 2 - Fair
4 - Very Good 1 - Poor
3 - Good

ITEMS	5	4	3	2	1
1. Clarity of Directions and Items The vocabulary level, language, structure and conceptual level of questions suit the level of participants. The directions and the items are written in a clear and simple language.		/			
2. Presentation and Organization of Items The items are presented and organized in logical manner.		/			
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6. Objectivity Each item questions only one specific answer or measures only one behavior and no aspect of the questionnaire is a suggestion of the researcher.	/				
7. Scale and Evaluation Rating Scale The scale adapted is appropriate for the items.	/				

Title of Approved Research: Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education

Name of Researcher: JEFFERSON PALACA

Research Adviser: DR. E. OLIVA

Date of Evaluation of the Questionnaire: OCTOBER 22, 2021

Remarks of the Evaluator: Review your questionnaire for typo errors, format and clarity of instructions.

(Sgd) MYLA MAE N. MASCARINAS

Signature Above Printed Name

F-13550-011/ Rev. # 3/ Effectivity: January 25, 2018

The University of Mindanao

PROFESSIONAL SCHOOLS

[✓] Main [ ] Branch _____

VALIDATION SHEET FOR RESEARCH QUESTIONNAIRE

Name of Evaluator : MARCELO ROCO, Ed.D.
Degree : Doctor of Philosophy
Position : _____
Number of Year of Teaching : _____
To the Evaluator : Please check the appropriate box for your ratings
Points of Equivalent : 5 - Excellent 2 - Fair
4 - Very Good 1 - Poor
3 - Good

ITEMS	5	4	3	2	1
1. Clarity of Directions and Items The vocabulary level, language, structure and conceptual level of questions suit the level of participants. The directions and the items are written in a clear and simple language.	/				
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6. Objectivity Each item questions only one specific answer or measures only one behavior and no aspect of the questionnaire is a suggestion of the researcher.	/				
7. Scale and Evaluation Rating Scale The scale adapted is appropriate for the items.	/				

Title of Approved Research: **"Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"**

Name of Researcher: JEFFERSON G. PALACA

Research Adviser: Dr. ELLEINE ROSE OLIVA

Date of Evaluation of the Questionnaire: December 4, 2021

Remarks of the Evaluator: _____

MARCELO O. ROCO, PhD
Signature Above Printed Name

F-13550-011/ Rev. # 3/ Effectivity: January 25, 2018

The University of Mindanao

PROFESSIONAL SCHOOLS

[/] Main [ ] Branch _____

VALIDATION SHEET FOR RESEARCH QUESTIONNAIRE

Name of Evaluator : **DR. JOEL TAN**
Degree: : CPA. DBA
Position : Research Coordinator
Number of Years of Teaching : 11 YEARS
To the Evaluator : Please check the appropriate box for your ratings
Points of Equivalent : **5 - Excellent 2 - Fair**
4 - Very Good 1 - Poor
3 - Good

ITEMS	5	4	3	2	1
1. Clarity of Directions and Items The vocabulary level, language, structure and conceptual level of questions suit the level of participants. The directions and the items are written a clear and simple language.	/				
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4. Adgory or indicator The items represent the coverage of research adequately. The questions per are category adequate representations of all the questions needed for research.	/				
5. Attainment of Purpose The instrument fulfills the objectives for which it was constructed.	/				
6. Objectivity Each item questions only one specific answer or measures only one behavior and no aspect of the questionnaire is a suggestion of the researcher.		/			
7. Scale and Evaluation Rating Scale The scale adapted is appropriate for the items.	/				

Title of Approved Research: PEDAGOGICAL KNOWLEDGE AND COMPETENCY OF TEACHERS AS CORRELATES OF SATISFACTION IN TEACHING TECHNOLOGY AND LIVELIHOOD EDUCATION

Name of Researcher: JEFFERSON PALACA
Research Adviser: DR. OLIVA
Date of Evaluation of the Questionnaire:
Remarks of the Evaluation: Kindly see marginal notes and comments on the modified instrument. Refer to the highlighted texts. Thanks.

DR. JOEL TAN
Signature Above Printed Name

E-13550-011/ Rev. #3/ Effective: January 25, 2018

Table 1

Level of Pedagogical Knowledge of TLE Teachers

Indicator	SD	Mean	Descriptive Level
Student	0.42	4.40	Very High
Teaching and Classroom Processes	0.46	4.52	Very High
Theories of Assessment	0.41	4.44	Very High
Professional Responsibilities	0.43	4.54	Very High
Overall	**0.36**	**4.48**	**Very High**

Table 1.1

Level of Pedagogical Knowledge of TLE Teachers in terms of Student

Item	SD	Mean	Descriptive Level
Using different learning theories and principles on educational psychology to understand my students, their social and cultural backgrounds, their individual differences and unique contexts so as to encourage autonomy, responsibility and respect for others.	0.49	4.39	Very High
Using appropriate motivational strategies (including use of visual aids and appropriate technology) to arouse and sustain the interests of my students and build on and connect concepts.	0.50	4.48	Very High
Motivating my students by integrating the historical development of TLE, contribution of cultures, communities and real life situations in appropriate lessons to develop meaningful conceptual understanding and connections to students' lives.	0.61	4.33	Very High
Using methods of inquiry that address the learning needs of my students and facilitates their conceptual understanding of TLE.	0.56	4.42	Very High
Overall	**0.42**	**4.40**	**Very High**

Table 1.2

Level of Pedagogical Knowledge of TLE Teachers in terms of Teaching and Classroom Processes

Item	SD	Mean	Descriptive Level
Displaying knowledge of group work, practical work, investigative studies and class presentations as different ways of teaching TLE to my students.	0.52	4.47	Very High
Setting definite procedures for checking attendance and homework and is able to keep track of other procedures necessary to keep order in my teaching.	0.51	4.57	Very High
Overall	**0.46**	**4.52**	**Very High**

Table 1.3

Level of Pedagogical Knowledge of TLE Teachers in terms of Theories of Assessment

Item	SD	Mean	Descriptive Level
Using assessment methods and techniques and makes them an integral part of instruction to provide information and guidance in making instructional decisions.	0.53	4.44	Very High
Writing useful and accurate assessments of my students.	0.55	4.46	Very High
Using variety of assessment methods to evaluate my students' understanding, progress and performance.	0.53	4.46	Very High
Using assessment strategies to make students aware of their strengths and needs and encourage them to set their own personal goals for learning.	0.51	4.39	Very High
Using assessment results to diagnose my student learning needs, align and modify my instruction and design teaching strategies.	0.58	4.47	Very High
Overall	**0.41**	**4.44**	**Very High**

Table 1.4

Level of Pedagogical Knowledge of TLE Teachers in terms of Professional Responsibilities

Item	SD	Mean	Descriptive Level
Incorporating the TLE principles and standards into the planning, designing and execution of instruction.	0.61	4.47	Very High
Displaying professionalism in meeting with parents, peers and supervisors.	0.50	4.64	Very High
Keeping neat and accurate records for reporting students' progress and achievements.	0.59	4.49	Very High
Rendering good judgment in handling and discussing sensitive issues involving my students.	0.50	4.55	Very High
Adhering to certain protocols and procedures of the institution when reporting students' progress and achievement.	0.51	4.57	Very High
Overall	**0.43**	**4.54**	**Very High**

Table 2

Level of Competency of TLE Teachers

Indicator	SD	Mean	Descriptive Level
Planning	0.42	4.51	Very High
Development	0.37	4.57	Very High
Result	0.44	4.51	Very High
Overall	**0.35**	**4.53**	**Very High**

Table 2.1

Level of Competency of TLE Teachers in terms of Planning

Item	SD	Mean	Descriptive Level
Providing clear information about objectives, bibliography, tutorials, contents, and assessment methods in the subject's curriculum.	0.53	4.42	Very High
Designing and relating the classroom content to the lab content.	0.55	4.45	Very High
Having efficiently incorporate and employs ICTs (Information and Communication Technologies) in teaching TLE.	0.54	4.58	Very High
Having a good command of the contents of the course.	0.49	4.61	Very High
Overall	**0.42**	**4.51**	**Very High**

Table 2.2

Level of Competency of T.L.E. Teachers in terms of Development

Item	SD	Mean	Descriptive Level
Presenting the minimum content of my subject matter, tailored to my students' knowledge.	0.51	4.43	Very High

Being easily accessible (tutorials, e-mails, etc.) to my students	0.61	4.37	Very High
Allowing my student to organize and distribute part of the assignments to be performed in the class	0.59	4.42	Very High
Presenting the contents of the course following a clear and logical framework, highlighting the important aspects of it	0.53	4.54	Very High
Allowing and encourage student participation.	0.54	4.61	Very High
Promoting individual work.	0.54	4.58	Very High
Promoting teamwork.	0.49	4.60	Very High
Relating my teaching to my professional environment.	0.50	4.55	Very High
Providing initial and final overview of the session and/or subject in my class.	0.50	4.55	Very High
Encouraging my student be interested and motivated to learn.	0.48	4.66	Very High
Facilitating student-student and student-professor interaction.	0.50	4.58	Very High
Attending and respond clearly to questions of my students asked in my class.	0.50	4.65	Very High
Having adequately attend to the tutorial requested of my students.	0.53	4.60	Very High
Maintaining an objective and respectful position with my students.	0.48	4.63	Very High
Organizing activities for my students to actively participate in course assignments.	0.52	4.67	Very High
Interweaving the content of the subject matter with other courses.	0.53	4.58	Very High
Interacting satisfactorily with my students.	0.51	4.59	Very High
Overall	**0.37**	**4.57**	**Very High**

Table 2.3

Level of Competency of T.L.E. Teachers in terms of Result

Item	SD	Mean	Descriptive Level
Informing the students of the competencies they will be expected to acquire.	0.51	4.65	Very High
Providing scientific information that allows me to gain a better and deeper understanding of the subject matter.	0.59	4.43	Very High
Fostering research and a critical spirit in my students.	0.61	4.38	Very High
Applying the established curriculum with a certain amount of flexibility for a better class dynamic.	0.55	4.55	Very High
Using material resources that facilitate learning.	0.56	4.56	Very High
Designing the content and develop the course to promote the acquisition of professional competencies.	0.62	4.51	Very High
Applying the assessment criteria of the activities as established in the subject's curriculum.	0.52	4.52	Very High
Overall	**0.44**	**4.51**	**Very High**

Table 3

Level of Satisfaction in Teaching of Teachers

Indicator	SD	Mean	Descriptive Level
Supervision	0.54	4.16	High
Working Relation	0.45	4.53	Very High
Working Conditions	0.46	4.29	Very High
Pay	0.63	3.45	High
Responsibility	0.46	4.53	Very High
Work Itself	0.39	4.49	Very High
Advancement	0.51	4.43	Very High
Security	0.64	4.03	High
Recognition	0.60	4.16	High
Overall	**0.33**	**4.29**	**Very High**

Table 3.1

Level of Satisfaction in Teaching of Teachers in terms of Supervision

Item	SD	Mean	Descriptive Level
My principal gives me assistance when needed.	0.75	4.12	High
My principal provides assistance for improving instruction.	0.77	4.06	High
My principal observes classroom instruction regularly.	0.74	4.08	High
My principal makes available the material needed.	0.74	4.11	High
My principal offers suggestions to improve teaching.	0.71	4.11	High
My principal back up me when necessary.	0.74	3.98	High
My principal is willing to listen to suggestion.	0.72	4.12	High
My principal makes me feel comfortable.	0.68	4.15	High
My principal supports every teacher.	0.68	4.14	High
My principal gives meaningful instruction	0.59	4.31	High
My principal praises good teaching.	0.67	4.27	Very High
My principal gives due recognition.	0.71	4.20	Very High
My principal explains what is expected of every teacher	0.61	4.34	Very High
My principal treats everyone equitably.	0.64	4.28	Very High
Overall	**0.54**	**4.16**	**High**

Table 3.2

Level of Satisfaction in Teaching of Teachers in terms of Working Relation

Item	SD	Mean	Descriptive Level
I like the people with whom I work.	0.52	4.01	High
I get along well with my co-teacher.	0.58	4.56	Very High
My co-teacher stimulates me to do better work.	0.55	4.62	Very High
I have made lasting friendships among my co-teacher.	0.56	4.55	Very High
My interests are similar to those of my co-teacher.	0.58	4.48	Very High
My colleagues seem reasonable to me.	0.57	4.49	Very High
I get cooperation from the people I work with.	0.55	4.55	Very High
My colleagues are highly critical of one another.	0.80	4.37	Very High
My colleagues provide me with suggestions or feedback about my teaching.	0.56	4.53	Very High
Overall	**0.45**	**4.53**	**Very High**

Table 3.3

Level of Satisfaction in Teaching of Teachers in terms of Working Conditions

Item	SD	Mean	Descriptive Level
Working conditions in my school are good.	0.60	4.22	Very High
Working conditions in my school are comfortable.	0.57	4.30	Very High
The administration in my school clearly defines its policies.	0.57	4.23	Very High

The administration in my school communicates its policies well.	0.55	4.28	Very High
Working conditions in my school could be improved.	0.57	4.35	Very High
Working conditions in my school could not be worse.	0.57	4.28	Very High
Physical surroundings in my school are pleasant.	0.64	4.35	Very High
Overall	**0.46**	**4.29**	**Very High**

Table 3.4

Level of Satisfaction in Teaching of Teachers in terms of Pay

Item	SD	Mean	Descriptive Level
Teacher's income is adequate for normal expenses.	0.84	3.92	High
Teaching provides me with financial security.	0.70	4.04	High
I am well paid in proportion to my ability.	0.70	4.05	High
My income is more than I deserve.	0.76	3.96	High
My pay is comparable with similar jobs in other school districts.	0.68	3.98	High
My income is enough to live on.	0.83	3.86	High
Sufficient income keeps me from living the way I want to live.	0.77	3.88	High
Overall	**0.63**	**3.95**	**High**

Table 3.5

Level of Satisfaction in Teaching of Teachers in terms of Responsibility

Item	SD	Mean	Descriptive Level

I get along well with my students.	0.58	4.48	Very High
I do have responsibility for my teaching.	0.61	4.48	Very High
My students respect me as a teacher.	0.52	4.55	Very High
I am responsible for planning my daily lessons.	0.56	4.48	Very High
Teaching provides me the opportunity to help my students learn.	0.54	4.62	Very High
I am interested in the policies of my school.	0.61	4.51	Very High
I am responsible for my actions.	0.58	4.57	Very High
I am aware of the policies of my school	0.58	4.55	Very High
Overall	**0.46**	**4.53**	**Very High**

Table 3.6

Level of Satisfaction in Teaching of Teachers in terms of Work Itself

Item	SD	Mean	Descriptive Level
Teaching is very interesting work.	0.61	4.51	Very High
Teaching encourages me to be creative.	0.50	4.63	Very High
Teaching provides me the chance to develop new methods.	0.51	4.59	Very High
Teaching provides an opportunity to use a variety of skills.	0.51	4.60	Very High
The work of a teacher is very pleasant.	0.53	4.47	Very High
Teaching encourages originality.	0.51	4.41	Very High
The work of a teacher consists of routine activities.	0.63	4.30	Very High

I am interested toward teaching.	0.52	4.52	Very High
I have the freedom to make my own decisions when teaching.	0.54	4.42	Very High
Overall	**0.39**	**4.49**	**Very High**

Table 3.7

Level of Satisfaction in Teaching of Teachers in terms of Advancement

Item	SD	Mean	Descriptive Level
Teaching provides a good opportunity for advancement.	0.56	4.48	Very High
Teaching provides an opportunity for promotion.	0.59	4.42	Very High
Teaching provides me with an opportunity to advance professionally.	0.59	4.45	Very High
Teaching provides unlimited opportunities for advancement.	0.58	4.44	Very High
I am getting ahead in my present teaching position.	0.60	4.34	Very High
Overall	**0.51**	**4.43**	**Very High**

Table 3.8

Level of Satisfaction in Teaching of Teachers in terms of Security

Item	SD	Mean	Descriptive Level
I am not afraid of losing my teaching job.	1.07	3.62	High
Teaching provides for a secure future.	0.72	4.25	Very High
I feel secure in my teaching job.	0.73	4.23	Very High
Overall	**0.64**	**4.03**	**High**

Table 3.9

Level of Satisfaction in Teaching of Teachers in terms of Recognition

Item	SD	Mean	Descriptive Level
I receive full recognition for my successful teaching.	0.74	4.13	High
One tells me that I am a good teacher.	0.64	4.22	Very High
I receive many recognitions as a teacher.	0.72	4.13	High
Overall	**0.60**	**4.16**	**High**

UM
The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)305-0645 Local 189

1st Endorsement
March 15, 2022

Respectfully endorsed to **REYNALDO M. GUILLENA,** CESO V, Schools Division Superintendent, Department of Education, Division of Davao City, the attached letter of **MR. JEFFERSON PALACA**, a student of the Professional Schools in this university requesting permission to conduct his study in your division.

For your approval.

EUGENIO S. GUHAO, JR., DM
Dean, Professional Schools

Not valid
w/out dry seal

UM
The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)305-0645 Local 189

May 31, 2022

ROLANDO R. CAPUL M.A.J.D.
PRINCIPAL III
F. Bangoy National High School
Sasa, Davao City

Sir:

Greetings!

The undersigned is currently working on his thesis entitled, "**Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"**

In this regard, the researcher would like to request your approval to conduct the study in your area of responsibility. Rest assured that the confidentiality of the data collected will be an utmost priority. Attached herewith is the sample of the survey questionnaire that reflects the topics and questions to be discussed.

Looking forward to your favorable response on this request.

Respectfully yours,

JEFFERSON G. PALACA
Researcher

5/31/2022

UM
The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)305-0645 Local 189

April 7, 2022

REYNALDO M. GUILLENA, CESO V
Schools Division Superintendent
Division of City Schools
Davao City

Dear Sir:

The undersigned is currently working on his thesis entitled, "**Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"** as a requirement for the completion of her Master of Arts in Education Major in Technology and Livelihood Education (MAED -TLE).

In this regard, the researcher would like to request your approval to conduct the study in your area of responsibility. Rest assured that the confidentiality of the data collected will be an utmost priority. Attached herewith is the sample of the survey questionnaire that reflects the topics and questions to be discussed.

Looking forward to your favorable response on this request.

Respectfully yours,

JEFFERSON G. PALACA
Researcher

Dr. ELLEINE ROSE OLIVA
Research Adviser

Noted by:

EUGENIO S. GUHAO, JR., DM
Dean

UM
The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)305-0645 Local 189

May 31, 2022

DAVAO CITY NATIONAL HIGH SCHOOL
RECEIVED
MAY 31 2022
BY:

EVELYN E. MAGNO
PRINCIPAL IV
Davao City National High School
F. Torres Street, Davao City

Madam:

Greetings!

The undersigned is currently working on his thesis entitled, "**Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"**

In this regard, the researcher would like to request your approval to conduct the study in your area of responsibility. Rest assured that the confidentiality of the data collected will be an utmost priority. Attached herewith is the sample of the survey questionnaire that reflects the topics and questions to be discussed.

Looking forward to your favorable response on this request.

Respectfully yours,

JEFFERSON G. PALACA
Researcher

EVELYN E. MAGNO
Principal IV

5-30-22

UM
The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)305-0645 Local 189

May 31, 2022

SEGUNDINA C. RAMOS
PRINCIPAL IV
Crossing Bayabas National High School
Crossing Bayabas, Toril, Davao City

Madam:

Greetings!

The undersigned is currently working on his thesis entitled, "**Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education**"

In this regard, the researcher would like to request your approval to conduct the study in your area of responsibility. Rest assured that the confidentiality of the data collected will be an utmost priority. Attached herewith is the sample of the survey questionnaire that reflects the topics and questions to be discussed.

Looking forward to your favorable response on this request.

Respectfully yours,

JEFFERSON G. PALACA
Researcher

RECEIVED: BERNABE B. CRUZ
31 MAY, 2022

UM
The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)305-0645 Local 189

May 30, 2022

LEO B. ASILO Ph.D.
PRINCIPAL III
Daniel R. Aguinaldo National High School
Matina, Davao City

Dear Sir:

The undersigned is currently working on his thesis entitled, "**Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"**
In this regard, the researcher would like to request your approval to conduct the study in your area of responsibility. Rest assured that the confidentiality of the data collected will be an utmost priority. Attached herewith is the sample of the survey questionnaire that reflects the topics and questions to be discussed.

Looking forward to your favorable response on this request.

Respectfully yours,

JEFFERSON G. PALACA
Researcher

DRANHS
RECEIVED
1:22 pm
5/30/2022
DATE

UM
The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)305-0645 Local 189

May 31, 2022

STA. ANA NATIONAL HIGH SCHOOL
Principal's Office
RECEIVED
By:
Date: 5/31/2022
Time: 1 pm

REUEL A. ALVAREZ, EdD. PhD
PRINCIPAL IV
Sta. Ana National High School
Brgy. 28-C Sta Ana, Davao City

Sir:

Greetings!

The undersigned is currently working on his thesis entitled, "**Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education**"

In this regard, the researcher would like to request your approval to conduct the study in your area of responsibility. Rest assured that the confidentiality of the data collected will be an utmost priority. Attached herewith is the sample of the survey questionnaire that reflects the topics and questions to be discussed.

Looking forward to your favorable response on this request.

Respectfully yours,

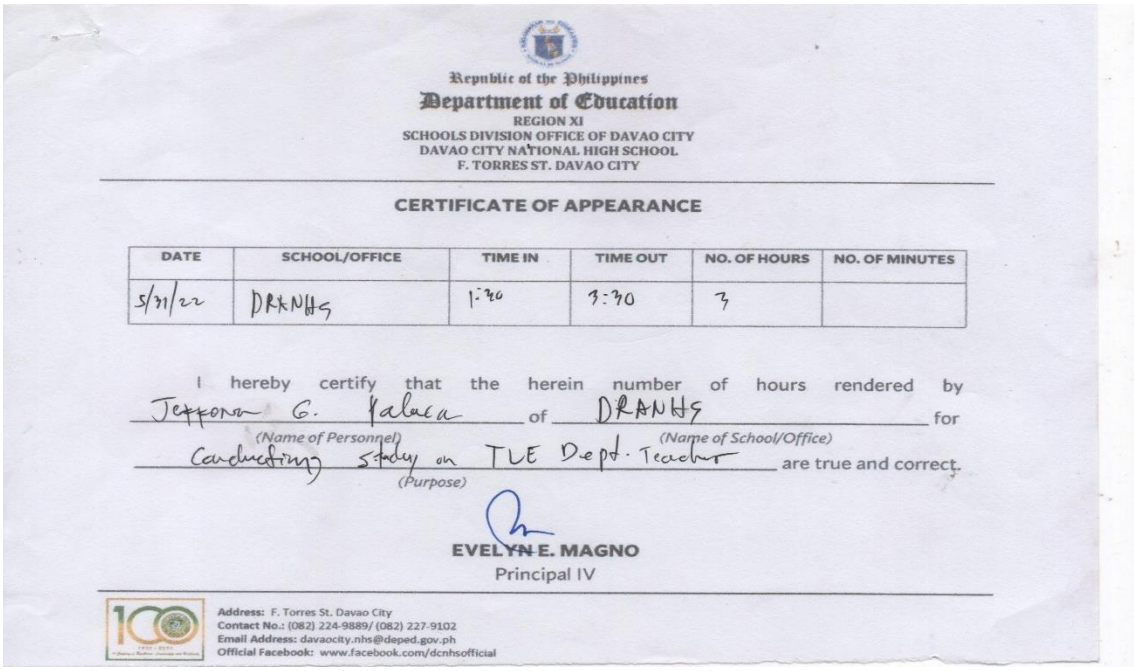
JEFFERSON G. PALACA
Researcher

Note!
Pls. accommodate him.

JETIR

APPENDIX J

Certificate of Appearance



Republic of the Philippines
Department of Education
REGION XI
SCHOOLS DIVISION OFFICE OF DAVAO CITY
DAVAO CITY NATIONAL HIGH SCHOOL
F. TORRES ST. DAVAO CITY

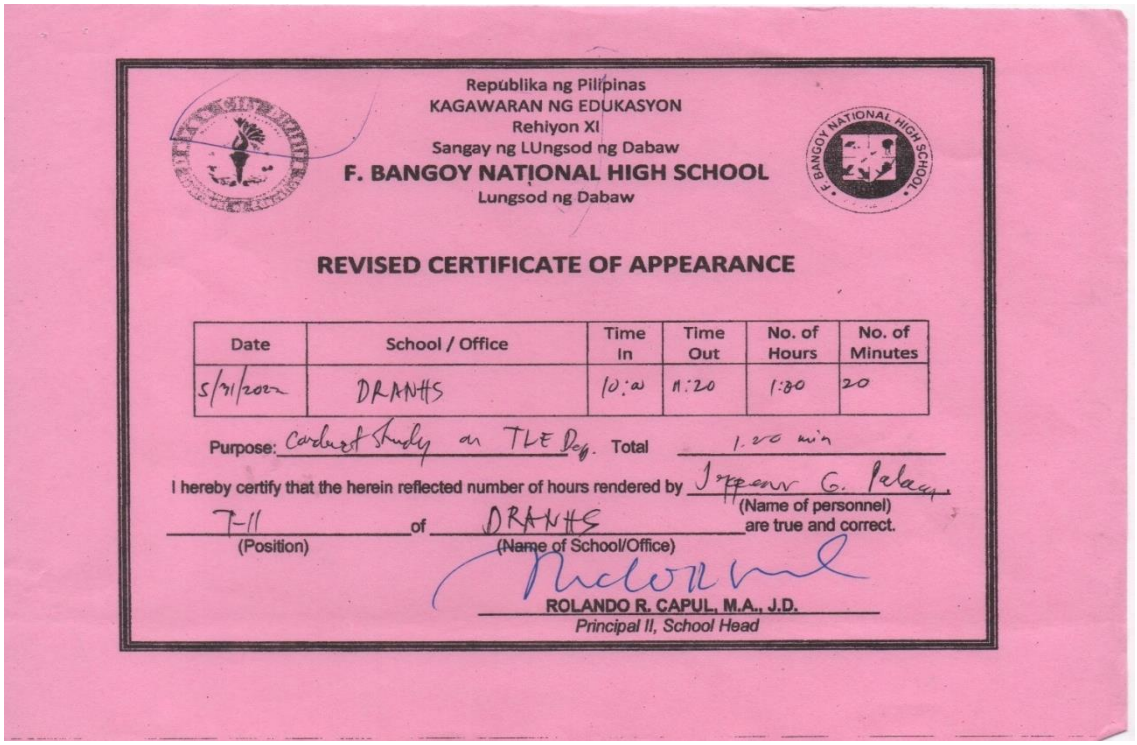
CERTIFICATE OF APPEARANCE

DATE	SCHOOL/OFFICE	TIME IN	TIME OUT	NO. OF HOURS	NO. OF MINUTES
5/31/22	DRANHS	1:30	3:30	3	

I hereby certify that the herein number of hours rendered by Jeffrow G. Palaca (Name of Personnel) of DRANHS (Name of School/Office) for Conducting study on TLE Dept. Teacher (Purpose) are true and correct.

EVELYN E. MAGNO
Principal IV

Address: F. Torres St. Davao City
Contact No.: (082) 224-9889/ (082) 227-9102
Email Address: davaocity.nhs@deped.gov.ph
Official Facebook: www.facebook.com/dcnhsofficial



Republika ng Pilipinas
KAGAWARAN NG EDUKASYON
Rehiyon XI
Sangay ng LUngsod ng Dabaw
F. BANGOY NATIONAL HIGH SCHOOL
Lungsod ng Dabaw

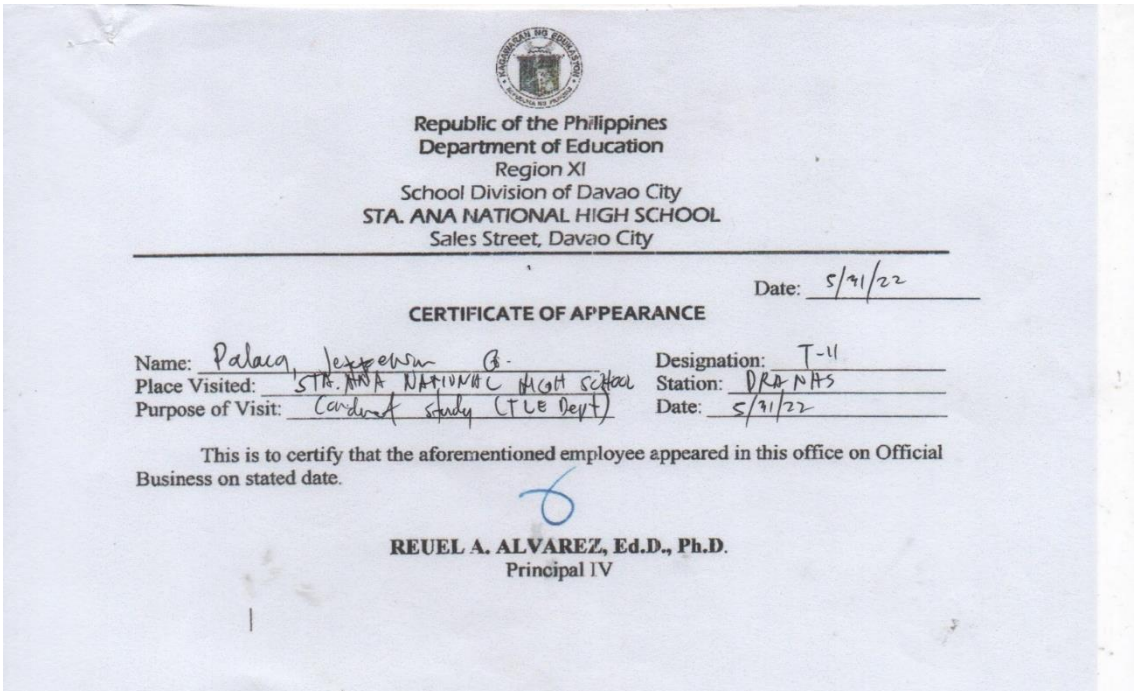
REVISED CERTIFICATE OF APPEARANCE

Date	School / Office	Time In	Time Out	No. of Hours	No. of Minutes
5/31/2022	DRANHS	10:00	11:20	1:30	20

Purpose: Conduct Study on TLE Dep. Total 1.20 min

I hereby certify that the herein reflected number of hours rendered by Jeffrow G. Palaca (Name of personnel)
T-II (Position) of DRANHS (Name of School/Office) are true and correct.

ROLANDO R. CAPUL, M.A., J.D.
Principal II, School Head



Republic of the Philippines
Department of Education
Region XI
School Division of Davao City
STA. ANA NATIONAL HIGH SCHOOL
Sales Street, Davao City

Date: 5/31/22

CERTIFICATE OF APPEARANCE

Name: Palaca, Jefferson B. Designation: T-II
Place Visited: STA. ANA NATIONAL HIGH SCHOOL Station: DRA NAS
Purpose of Visit: Cardinal study (TLE Dept) Date: 5/31/22

This is to certify that the aforementioned employee appeared in this office on Official Business on stated date.

REUEL A. ALVAREZ, Ed.D., Ph.D.
Principal IV

APPENDIX K

Informed Consent Form (ICF)

University of Mindanao

Informed Consent Form (ICF)

UMERC - 006
Rev. 01 / December 1, 2016
Approved by:

Control No.: _____

University of Mindanao Ethics Review Committee
Matina, Davao City

Informed Consent Form for Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education
Name of the Researcher(s): JEFFERSON G. PALACA
Institution: UNIVERSITY OF MINDANAO

INTRODUCTION

You are invited to participate in a research study conducted by **JEFFERSON G. PALACA**, at the University of Mindanao, because you fit the inclusion criteria for informants of our study.

Your participation is completely voluntary. Please read the information below, and ask questions about anything you do not understand, before deciding whether to participate. Please take as much time as you need to read the consent form. You may also decide to discuss participation with your family or friends.

If you decide to participate, you will be asked to sign this form. You will be given a copy of this form.

PURPOSE OF THE STUDY

This study aims to predict the significant relationship between pedagogical knowledge and satisfaction in teaching and competency and satisfaction in teaching of TLE teachers. Moreover, to determine the singular and combined influence of competencies and pedagogical knowledge on satisfaction in teaching of TLE teachers.

STUDY PROCEDURES

If you agreed to participate in this study, you are ask to answer the survey questionnaire.

POTENTIAL RISKS AND DISCOMFORTS

Discomfort is normal during the time of answering the survey questionnaire, in experiencing the physical, psychological, or socioeconomic will not last long because the topic is not too sensitive. If you feel distress in the process of interview, you are free to withdraw anytime without any obligation or penalty.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

The results of this study can help the Technology and Livelihood Education teachers since the findings of this study will give them new information in planning and implementing new methodologies based on the recommendations. Also, students will have a better learning experience as the teacher is satisfied more teaching methodologies will emerge. Lastly, administrators of the Technology and Livelihood Education curriculum can also gain new insight from this study since they have long been exploring for new mechanisms and factors in enhancing the Technology and Livelihood Education program to facilitate the Technology and Livelihood Education skills of the students.

CONFIDENTIALITY

Taking the confidentiality as far as the respondent is concern the data gathered here will be kept properly as permitted in by the law. Some distinguishable info obtained in connection with this study will remain confidential, except if necessary to protect your rights or welfare. This consent means that the researcher can resist the release of information about your participation to people who are not connected with the

study. When the results of the research are published or discussed in conferences, no information will be used.

PARTICIPATION AND WITHDRAWAL

Your participation in this study is important. On the other hand, your refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study.

INVESTIGATOR'S CONTACT INFORMATION

If you have any questions or concerns about the study, you may contact the researcher through the mobile number 09235178018 or through email at jefferson.palaca@deped.gov.ph .

RIGHTS OF RESEARCH PARTICIPANT

If you have questions, concerns, or complaints about your right as a research participant or the research in general and are unable to contact the research team, or if you want to talk to someone independent of the research team, please contact the University of Mindanao Professional Schools at 305-06-45

RESEARCH PARTICIPANT'S CONSENT

I have read the information provided above. I have been given a chance to ask questions. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form. I can withdraw my consent at any time and discontinue participation without penalty.

[redacted] 5/31/2022

Signature above Printed Name of Participant **Date Signed**

To be accomplished by the Researcher Obtaining Consent:
I have explained the research to the participant and answered all of his/her questions. I believe that he/she understands the information described in this document and freely consents to participate.

Jeffersson G. Palaca **5/4/2022**

Name of Person Obtaining Consent **Date Signed**

APPENDIX L

Editor’s Certificate

The University of Mindanao

Professional Schools
Ground Floor, PS Building
Matina, Davao City
Telephone: (082)297-6115

C E R T I F I C A T I O N

To Whom It May Concern:

This is to certify that the manuscript of **Jefferson G. Palaca,** entitled,**" Pedagogical Knowledge and Competency of Teachers as Correlates of Satisfaction in Teaching Technology and Livelihood Education"** has been checked and edited by the undersigned in accordance with the standard mechanics, format, spacing, and references set by the university.

This certification is issued on March 13, 2023

JERLYN G. BALONES, PhD
Reader

grammarly Report: PALACA PART2

PALACA PART2

by Jerlyn Balones

General metrics

31,358	4,393	573	17 min 34 sec	33 min 47 sec
characters	words	sentences	reading time	speaking time

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129	41	88
Issues left	Critical	Advanced

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grammarly Report: PALACA

PALACA

by Jerlyn Balones

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86,250	11,989	635	47 min 57 sec	1 hr 32 min
characters	words	sentences	reading time	speaking time

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96

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294	49	245
Issues left	Critical	Advanced

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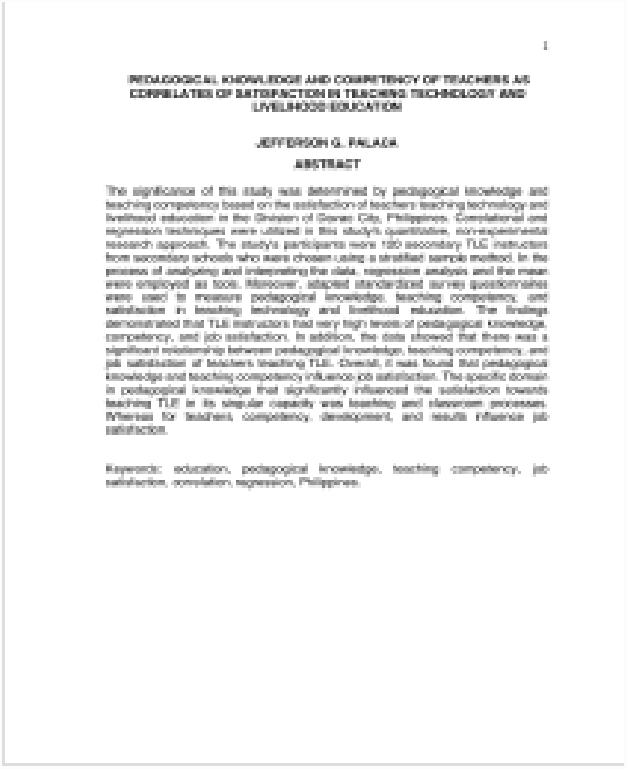
Submission title:	PEDAGOGICAL KNOWLEDGE AND COMPETENCY OF TEACHER...
File name:	PALACA.docx
File size:	327.12K
Page count:	76
Word count:	16,509
Character count:	96,805
Submission date:	09-Mar-2023 09:18AM (UTC+0800)
Submission ID:	2032559376



PEDAGOGICAL KNOWLEDGE AND COMPETENCY OF TEACHERS AS CORRELATES OF SATISFACTION IN TEACHING TECHNOLOGY AND LIVELIHOOD EDUCATION

JEFFERSON G. PALACA

ABSTRACT

The significance of this study was determined by pedagogical knowledge and teaching competency based on the satisfaction of teachers teaching technology and livelihood education in the Division of Davao City, Philippines. Correlational and regression techniques were utilized in this study's quantitative, non-experimental research approach. The study's participants were 120 secondary TLE instructors from secondary schools who were chosen using a stratified sample method. In the process of analyzing and interpreting the data, regression analysis and the mean were employed as tools. Moreover, adapted standardized survey questionnaires were used to measure pedagogical knowledge, teaching competency, and satisfaction in teaching technology and livelihood education. The findings demonstrated that TLE instructors had very high levels of pedagogical knowledge, competency, and job satisfaction. In addition, the data showed that there was a significant relationship between pedagogical knowledge, teaching competency, and job satisfaction of teachers teaching TLE. Overall, it was found that pedagogical knowledge and teaching competency influence job satisfaction. The specific domain in pedagogical knowledge that significantly influenced the satisfaction towards teaching TLE in its singular capacity was teaching and classroom processes. Whereas for teachers' competency, development, and results influence job satisfaction.

Keywords: education, pedagogical knowledge, teaching competency, job satisfaction, correlation, regression, Philippines.

JETIR

CURRICULUM VITAE

I. PERSONAL INFORMATION

Name: Jefferson G. Palaca
Date of Birth: August 22, 1987
Place of Birth: Maguindanao
Religion: Episcopal Diocese of Southern Philippines
Civil Status: Married
Spouse: Josie Calunsag Feliciano
Children: Thrysan Angelo F. Palaca
Myrth Gabrielle F. Palaca
Sheenline Alleah F. Palaca
Present Address: Block 2 Lot 2 Samantha Homes, Km. 8 Matina Pangi Davao City.
E-mail Address: jefferson.palaca@deped.gov.ph
ORCID No.: https://orcid.org/0009-0000-7730-1184

II. EDUCATIONAL BACKGROUND

A. Graduate Studies

Master of Arts in Education major in Technology and Livelihood Education
University of Mindanao
Matina Campus, Davao City
2017-2022

B. Tertiary

Teacher's Certificate for Non-Education Program (TCPNEP)
University of Southeastern Philippines
Inigo St. Barrio Obrero, Davao City
November 2014

Bachelor of Science in Agro-Forestry
Upi Agricultural School College
Upi Maguinadano
March, 2009

C. Secondary

National Housing Authority National High School
National Housing Authority, Tala, Caloocan City March, 2004

D. Elementary Education

Camp Siongko Elementary School Awang Datu Odin Sinsuat Maguindanao March 2000

III. WORK EXPERIENCES

Name of Company	Position	Date
Department Of Education - Daniel R. Aguinaldo National High School	T-II	October 2016- Present
Lyfe Marketing Inc.	Field Supervisor	March 2014- Sept. 2016
Montserrat Camp School De Davao	Department Head	June 2010 - March 2013

IV. ACADEMIC & CIVIC AWARDS

MERITORIOUS AWARD - FOSTER PARENT

V. SEMINARS AND TRAINING ATTENDED/CONDUCTED

- Virtual Inservice Training For Teachers - Department of Education (National) (August 30 – September , 2021)
- Online Training On DepEd Learning Management System - Department of Education (Regional) (August 3-7, 2020)
- Nutri-Gardening and Organic Agriculture Training - Daniel R. Aguinaldo National High School (July 22-26, 2019)
- Division Skills Enhancement And Upgrading For Technology And Livelihood Education in Shielded Metal Arc Works (NCII) - Division Of Davao City (June 24-29, 2019)
- District Echo Training-Workshop Livelihood Program (Mushroom Culture) - Department of Education Tibungco District, Davao City (January 20-21, 2017)