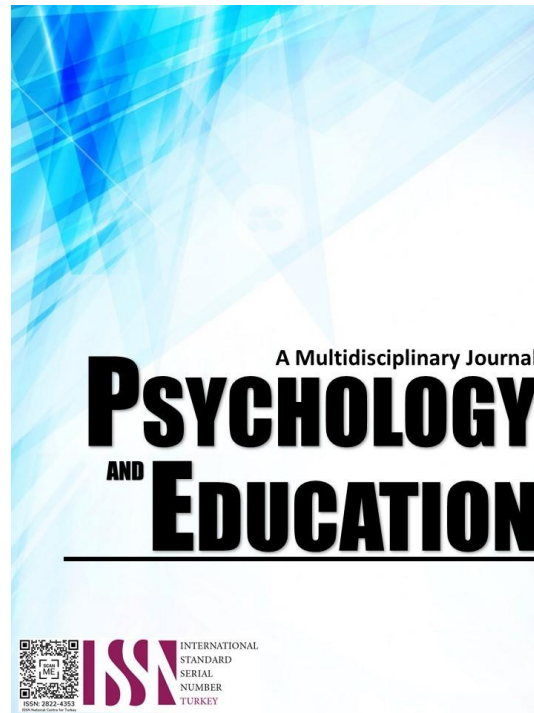


**INSTRUCTIONAL COMPETENCIES OF
TECHNOLOGY AND LIVELIHOOD EDUCATION
TEACHERS IN STA. CRUZ DISTRICT,
STA. CRUZ, ZAMBALES**



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Instructional Competencies of Technology and Livelihood Education Teachers in Sta. Cruz District, Sta. Cruz, Zambales

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Abstract

This action research aimed to determine the instructional competencies of Technology and Livelihood Education (TLE) teachers in Sta. Cruz District and the significant relationships in the level of instructional competencies of these teachers with their profile. The total population sampling method was used to identify the forty-nine TLE teachers of Sta. Cruz District, Sta. Cruz, Zambales as respondents of this study. The study utilized a descriptive survey method. The statistical tools used were frequency and average count, weighted mean, and Chi-Square Test. The findings of the study show that the level of competency of teachers in exploratory courses of Home Economics (HE) and Agri-Fishery Arts (AFA) is "Intermediate." In contrast, exploratory courses in Industrial Arts (IA) and Information and Communication Technology (ICT) are "Basic" levels. In the specialization courses of HE, AFA, and ICT, a "Basic" competency level was computed, while specialization courses of IA obtained a "Developing" level of competency. There is no significant relationship between the profile and instructional competencies in the four areas of TLE in exploratory and specialization courses, except for the field of specialization, which has a significant relationship with the level of competency of teachers in specialization courses of IA and ICT. These findings proved that the field of specialization of teachers influences their level of competency in teaching TLE specialization courses, specifically in the areas of IA and ICT. There is a need to enhance the competencies of secondary TLE teachers in teaching specialization courses of IA and ICT.

Keywords: *technology and livelihood education, instructional competencies, descriptive survey, Sta. Cruz District*

Introduction

Recent trends in education in the Philippines pose new challenges in the academe to improve the literacy rate among Filipinos. In 2006, the Philippine EFA 2015 National Action Plan was drawn up with an identified central goal: to provide basic competencies to all Filipinos to achieve functional literacy for all. Consequently, various programs evolved as problems and issues related to these reforms arose in many learning areas, specifically Technology and Livelihood Education.

In 2016, the whole cycle of the K to 12 curriculum was implemented. Home Economics, Information and Communication Technology, Agri-Fishery, and Industrial Arts are the four components of Technology and Livelihood Education (TLE). These categories are still divided into several areas or mini-courses. Although numerous sectors continue to express reservations and opposition to the new curriculum's adoption, educators throughout the country are left with little alternative but to do so successfully. TLE teachers should have a broad range of subject expertise to accomplish this effectively.

However, the situation is that the subject covers a wide range of topics. In Grades 7 and 8, the number of TLE areas to be taught should be four per grade level,

allowing TLE teachers to pick from various options. The availability of resources is the most significant aspect to consider when selecting learning areas, with teachers' skills and qualifications coming in second. Because schools have varying resources and teachers have varying skill levels, they offer a variety of learning opportunities, making it more challenging to manage. In addition to that, many teachers teaching TLE subjects are non-TLE majors in Sta. Cruz District. In San Fernando High School alone, 83.33% or 5 out of 6 teachers teaching TLE subjects from Grade 7 to Grade 10 are non-TLE majors.

Teachers who are not TLE majors face a significant challenge in figuring out how to help students reach their full potential when they have to create various lessons, execute different skills, and use various equipment and facilities. While the new curriculum focuses on educating and preparing students to be competent with their set of abilities when they graduate, it is also necessary to examine the skills and behaviors of teachers. Teachers serve as role models for kids; thus, they must conduct themselves professionally. In the present day, one of the main concerns of parents, communities, and students is the quality of education wherein a teacher is an essential determining factor in education. The instructional competencies of teachers define the parameters of teaching and learning. The attainment of the growth



and development of the learners lies in the learning process. Teachers' competency in teaching is a significant factor in realizing this goal.

This result suggests that in producing a highly skilled workforce and globally competitive graduates, teachers of Technology and Livelihood Education must also be equipped with practical and experiential knowledge aided by the right and adequate tools, equipment, and machines for instructions in teaching Technology and Livelihood Education. On this ground, the researcher conceptualized this study to find out the instructional competencies of secondary TLE teachers of Sta. Cruz District, Sta. Cruz, Zambales.

Research Questions

The main objective of this study is to determine the instructional competencies of Technology and Livelihood Education teachers of Sta. Cruz District, Schools Division of Zambales for the School Year 2021 – 2022. Specifically, it sought answers to the following questions:

1. What is the profile of the respondents in terms of:
 - 1.1. Age;
 - 1.2. Gender;
 - 1.3. Civil Status;
 - 1.4. Educational Attainment;
 - 1.5. Field of Specialization;
 - 1.6. Teaching Position;
 - 1.7. Length of Service;
 - 1.8. In-service training attended; and
 - 1.9. National Certification?
2. How is the level of instructional competencies of teachers described as perceived by the teachers themselves in:
 - 2.1. Home Economics (HE);
 - 2.2. Industrial Arts (IA);
 - 2.3. Agri-Fishery Arts (AFA); and
 - 2.4. Information and Communication Technology (ICT) component areas?
3. Are there significant relationships in the level of instructional competencies of TLE teachers when the teachers are classified as to age, gender, civil status, educational attainment, the field of specialization, teaching position, length of service, number of years teaching TLE In-service training attended, and National Certification?
4. What action plan may be proposed based on the findings?

Methodology

Type of Study

This research used a descriptive survey design incorporating both quantitative and qualitative approaches. The term "descriptive research" refers to a type of research in a study aimed at accurately portraying the respondents. Descriptive research aims to describe the people who participate in the study. As a result, this research is descriptive research for attempting to survey multiple levels of the profile of the respondents, a survey, and a description of their level of competence in different areas of technology and Livelihood Education. A descriptive study is one in which information is collected without changing the environment (i.e., nothing is manipulated). Sometimes these are referred to as "correlational" or "observational" studies. The Office of Human Research Protections (OHRP) defines a descriptive study as "Any study that is not truly experimental." A descriptive study can provide information about a particular group's naturally occurring health status, behavior, attitudes, or other characteristics in human research. Descriptive studies are also conducted to demonstrate associations or relationships between things. Furthermore, the study employed quantitative as the leading method through close-ended questions. The quantitative approach was emphasized because investigating the relationship between the profiles of the respondents and their level of instructional competencies could be better understood by collecting extensive quantitative data.

Participants

The respondents of this action research are all Secondary Technology and Livelihood Education Teachers of Sta. Cruz District, Sta. Cruz, Zambales. Sta. Cruz District is composed of ten (10) public secondary schools. The researcher employed a total population sampling method to identify the 49 teacher respondents in this study. The following table summarizes the number of Secondary Technology and Livelihood Education Teachers in Sta. Cruz District.

Table 1. *The participants of the study, according to their schools.*

<i>Name of School</i>	<i>Frequency</i>	<i>Percentage</i>
Acoje National High School	2	4.08
Babuyan Integrated School	3	6.12
Don Brigido Mirafior Integrated School	5	10.20
Don Marcelo C. Marty High School	6	12.24
Guisguis National High School	7	14.29
Lipay National High School	6	12.24
Mena Memorial National High School	5	10.20
San Fernando High School		
Sta. Cruz National High School		
Sta. Cruz South High School	4	8.16
Total	49	100

Data Collection

The following were the procedures undertaken in the collection of data. The researcher notified the Schools Division Office of Zambales of the intent to conduct the study and asked permission from the Schools Division Superintendent, Dr. Romeo M. Alip, CESO V, thru Dr. Lani A. Mirafior, Public Schools District Supervisor of Sta. Cruz to proceed with the study in public secondary schools within the district. Second, a letter to the School Principals was crafted aiming to seek permission to float the questionnaires with the approved consent of the Schools Division Superintendent attached as their reference.

The survey questionnaires were administered to the respondents through the Google form link. The researcher also provided contact details to explain to the respondents the nature of the study and to ask further questions. The researcher adjusted the manner of floating the questionnaires to the current situation of the world with the COVID – 19 pandemic. The researcher did not do personal visits to the respondents to adhere to the strict observation of all the necessary, proper health protocols of the Inter-Agency Task Force (IATF), Department of Health (DOH), Office of the president of the Philippines, and other authorized agencies.

The required data were collected, organized, and tabulated to employ the appropriate statistical treatment necessary to extract the results. As quantitative descriptive research, this attempted to turn raw numbers into meaningful data, which became the basis for either accepting or rejecting the formulated hypotheses.

Instruments

A closed-ended researcher-modified survey questionnaire was employed to collect quantitative

data from the respondents. This is because it is convenient to conduct surveys and acquire necessary information from many study subjects within a short period. Furthermore, it makes an economy of time and expense possible and provides a high proportion of usable responses (Best & Kahn, 2003).

The questionnaire was subdivided into two (2) parts: Part I gathered data on the profile of the respondents, which included the age, gender, civil status, highest educational attainment, the field of specialization, teaching position, length of service, in-service training attended and national certification. Part II collected the respondents' level of competence in the different areas of Technology and Livelihood education. The closed-ended items were prepared by using Likert Scales. The value of the scales was between one and five.

Results and Discussion

Profile of the Respondents

Table 2. *Age of the respondents*

<i>Age (years)</i>	<i>Frequency</i>	<i>Percentage</i>
61 - 65	1	2
51 - 60	3	6
41 - 50	10	20
31 - 40	27	56
21 - 30	8	6
Total	49	100
Mean Age = 37.69		

Table 2 presents the profile of Teacher-Respondents according to age and gender. Most of the respondents belong to the age bracket 31-40 (n=27), followed by 20 percent (n=10) from the 41-50 age bracket. The age bracket 21-30 (n=8) and 51-60 age bracket (n=3) followed, respectively, and only one respondent falls under the age bracket of 61-65. Thus, the overall average mean of the group of respondents is 37.69 years old. This finding means that the respondents are not so young, and most are in their middle age.

This finding is similar to the study of Elli & Ricafort (2020), wherein their findings reveal that the TLE teachers are primarily young and may have the enthusiasm to teach the subject. These teachers may also be better at computers and technology and more eager to learn more about teaching.

It also implies that the Department of Education needs



to encourage more young Education students to choose Technology and Livelihood education as their major field of specialization for the reason that younger teachers are most often updated with technological innovations and are more energetic to meet the demands of the subject, which is skill-oriented.

Table 3. Gender of the respondents

Gender	Frequency	Percentage
Male	14	29
Female	34	69
LGBT	1	2
Total	49	100

As to gender, female respondents predominated this area with n=34 or 69% compared to the number of male respondents, which is only 14 or 29 percent of the total percent of the teacher-respondents. One respondent answered LGBT, which is 2% of the total respondents. General observation shows the predominance of female Technology and Livelihood Education teachers over male teachers. This result was obtained because Technology and Livelihood Education was formerly a Home Economics subject. Home Economics is associated with activities in the home, where females usually take charge. Female teachers are expected to take charge of household work and care for their children.

This finding is also similar to Elli & Ricafort (2020) finding. They found out that most females considered TLE their major field of specialization more than that male teachers. The gender imbalances among TLE teachers may be attributed to gender stereotyping in which the teaching profession may be generally perceived to be more appropriate for females.

Table 4. Civil status of the respondents

Civil Status	Frequency	Percentage
Single	7	14
Married	42	86
Total	49	100

Table 4 revealed that 86% (n=42) of the respondents are married, and 14% (n=7) are single. Based on the unstructured interview, most single teacher-respondents have plans to get married. This finding is similar to the Instructional Assessment of Technology and Livelihood Education study by Retome et al. (2012). It revealed that almost all of the teachers teaching TLE are already married.

Table 5. Educational attainment of the respondents

Highest Educational Attainment	Frequency	Percentage
Bachelor's Degree	13	27
Units in Master's Degree	31	63
Master's Degree	5	10
Total	49	100

The profile of the teacher-respondents according to the highest educational degree attained is presented in Table 5. As shown in the table, 63% (n=31) have units in Master of Arts in Education; 27% (n=10) finished Bachelor of Secondary Education, and 10% (n=5) graduated with a degree of Master of Arts in Education.

These findings show that most of the Technology and Livelihood Education teachers in Sta. Cruz District has earned Master's Degree units. These teachers find time and resources to upgrade themselves in the teaching position. Based on informal interviews, the Technology and Livelihood Education teachers in Sta. Cruz District, who earned units in the Master's Degree, were encouraged by their school heads and fellow teachers to undergo graduate studies.

The 27% percent of the respondents need to pursue a higher degree of education to upgrade their current teaching position and salary. The study reveals that the strength of efficiency of teaching performance was evident among teachers who have earned their master's or doctorate degrees. Such teachers' qualification coupled with experience is positively related to student development, as far as subject matters are concerned.

Table 6. *Field of specialization of the respondents*

<i>Field of Specialization</i>	<i>Frequency</i>	<i>Percentage</i>
TLE	19	39
Non - TLE	30	61
Total	49	100

Table 6 shows the profile of Technology and Livelihood Education according to the field of specialization. Only 39% (n=19) are TLE majors and most teachers teaching TLE are non-major, comprising 61% (n=30) of the total number of secondary TLE teachers in the district.

These findings show that most of the teachers teaching TLE in Sta. Cruz District does not have the necessary expertise to teach TLE specialization courses. However, regardless of specialization, most teachers are teaching exploratory courses in TLE because the instructional competencies in Technology and Livelihood Education are also applied in other subject areas. Nevertheless, to effectively teach the subject, specifically the areas of specialization offered in Grade 9 and Grade 10 level, the teachers teaching Technology and Livelihood Education must have units and obtained special or short courses related to Technology and Livelihood Education. This also shows an evident shortage of Technology and Livelihood Education teachers in Sta. Cruz District, Sta. Cruz, Zambales.

Table 7. *Teaching position of the respondents*

<i>Position</i>	<i>Frequency</i>	<i>Percentage</i>
Teacher I	25	51
Teacher II	8	16
Teacher III	14	29
Master Teacher I	2	4
Total	49	100

The profile of the respondents according to the teaching position is revealed in Table 7. As shown in the table, most of the respondents, with 51% percent (n=25), are currently in Teacher I position. Twenty-nine percent (n=14) hold a Teacher III position, 16% (n=8) hold a Teacher II position, and only 4% (n=2) hold a Master Teacher I position.

Based on unstructured interviews of the teacher-respondents, most teachers belonging to 51% of the respondents do not participate in the ranking for higher positions conducted by the division office because of the amount of paperwork involved coupled with the

stress and pressure that go with the ranking procedure.

Many occupations and all professions offer their recruits the opportunity of pursuing a career in the sense that individuals can be promoted through a delineated promotions hierarchy. This aspect of a career is referred to as its vertical mobility dimension (Ladinsky, 1963; Maclean, 1992). Promotion can therefore be regarded as the passage to a higher rank. In management, promotion is one of the reinforcers of the rewards system to help motivate employees. Other rewards include pay, recognition, desirable work assignments, autonomy, and participation (Robbins & Coulter, 2002).

Table 8. *Length of service of the respondents*

<i>Length of Service (years)</i>	<i>Frequency</i>	<i>Percentage</i>
31 - 40	4	8
21 - 30	2	4
11 - 20	10	21
1 - 10	33	67
Total	49	100
Mean Length of Service = 10.64		

Table 8 revealed the profile of the respondents according to the number of years in teaching. As revealed in the table, 67% (n=33) of the respondents have been teaching for 1-10 years, followed by 11-20 years (n=10), then by 31-40 years (n=4). Only 4% (n=2) have been teaching the subject for 21-30 years. According to the length of service, the mean year of the respondents was 10.64 or 11 years.

This result implies that 67% of the teacher-respondents are still new to the teaching profession. Most of them are not Technology and Livelihood education majors, but due to a shortage of teachers in this subject, they were given Technology and Livelihood Education teaching loads. Given the appropriate training and motivation, these teachers will stay in the teaching profession longer and will enjoy teaching the subject even if it is not their field of specialization.

Many studies indicate that teacher experience influences teacher effectiveness mainly in the first few years of a teacher's career (e.g., Clotfelter et al., 2007a, 2007b). Boyd et al. (2010) claim that improvement occurs over the first 4 or 5 years but point out that this is average, and some less experienced teachers improve much more quickly than others. Many of the studies that found student achievement was influenced by teachers' years of experience identified these effects only in the first three years of a teacher's career: "The



average teacher is at his or her worst during the first year in the classroom, gets better in the second year, a little better in the third year, and then never gets any better after that" (Jacob, 2012, p. 3).

Long years of service indicate deep satisfaction for teachers. They tend to take their occupation seriously and remain in it steadily. Long years of service indicate deep satisfaction for work because they have added knowledge and skills to become more efficient in performing the teaching career.

Table 9. *Training of the respondents*

<i>Related Seminars & Training</i>	<i>Frequency</i>	<i>Percentage</i>
School-Based	13	27
District	5	10
Division	15	31
Regional	2	4
National (aside from TESDA		
NC)	5	10
International	1	2
None	8	16
Total	49	100

The level of in-service training attended by Technology and Livelihood Education teachers is shown in table 9. Most of the respondents attended division-level training, which comprises 31% (n=15), followed by school-based training, which is 27% (n=13), with district and national level training having the same number of attendees, which is 10% (n=5) of the total respondents. Two (2) respondents attended regional-level training, and only one (1) respondent attended national-level training. 16% of the respondents (n=8) have no training. Most Technology and Livelihood education teachers have undergone training in the division, but only a few on the district and national level. Some of these national training and seminars are on official time, and the teacher has to shoulder his seminar fee and other expenses incurred in the training/seminar. 27% of the respondents are newly-hired teachers and need to undergo related seminars and training.

According to Chapman and Mählck (1997), pre-service training is "the single most widely employed strategy (by itself or with other strategies) to improve instructional quality. This finding comes as no surprise. One of the most widely held beliefs underlying both national and international educational development activities are that the most direct and efficient way to improve instructional quality is to improve the content pedagogical expertise of teachers through increased levels of training." Shulman (1986)

reinforces this idea by stating that all three types of knowledge, content knowledge, pedagogical content knowledge, and curricular knowledge, should be included in pre-service teacher training programs.

This finding suggests that special training and seminars must be provided to all teachers to enhance their knowledge of the content of the subject matters they are teaching. To improve his instructional competencies and professional growth, a teacher has to keep on learning. No matter how superior a teacher's education may have been, his preparation for teaching is never complete". This preparation involves keeping abreast with new educational innovations, changes, and developments in his field, whether in theory or practice, and other areas of knowledge relevant to teaching. This endeavor can be achieved through in-service training like attendance at seminar workshops, conferences, faculty meetings, or taking up graduate studies.

Table 10. *Competency assessment certificates of the respondents*

<i>Competency Assessment Certificate</i>	<i>Frequency</i>	<i>Percentage</i>
With National Certificate	29	59
Without National Certificate	20	41
Total	49	100

Table 10 shows that most of the total respondents are National Certificate (NC) II holders, which comprise 59% of the total respondents, while 41% (n= 20) do not have National Qualification.

This finding means that most TLE teachers may have been given the opportunity and have the resources to pursue and attend National Certification training and assessments. In partnership with DepEd, the Technical Education and Skills Development Authority (TESDA) complied with the mandates of the K to 12 programs and Section 13.2 of the Implementing Rules and Regulations (IRR) of the Enhanced Basic Education Act 2013. The IRR specifically provided that teachers who teach specialized subjects in secondary education should possess the necessary certification issued by TESDA. Joint Circular No. 1, series of 2014, issued on September 9, 2014, provided that TESDA should closely coordinate with DepEd to ensure that all TLE teachers handling Grade 9 classes are appropriately certified. DepEd requires TLE teachers to enroll in TESDA training programs. The embedment of tech-voc courses in the K-12 should



follow TESDA's training regulations (or TR) standards. Conforming to TESDA standards will ensure higher absorptive capacity for students since these TRs were developed according to industry requirements.

In this regard, every Technology and Livelihood education teacher of Sta. Cruz District must upgrade themselves and comply with the implementing rules and regulations of Enhanced Basic Education Act of 2013 and obtain National Certification from The Technical Education and Skills Development Authority.

Instructional Competencies of TLE Teachers

Exploratory Courses

Table 11. *Level of instructional competencies of teachers in Exploratory Courses of Home Economics*

<i>Home Economics: Exploratory Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Caregiving	3.59	Intermediate
2. Dressmaking	2.37	Basic
3. Cookery	3.74	Intermediate
4. Nail Care	3.11	Intermediate
5. Handicraft Making	3.17	Intermediate
6. Front Office Services	3.27	Intermediate
Average	3.21	Intermediate

Table 11 presents the level of instructional competency of Sta. Cruz District teachers in Exploratory Home Economics Courses. The TLE teachers obtained the highest mean rating of 3.74 or "Intermediate" in the competency under Cookery while 2.37 or "Basic" level in dressmaking.

In general, teachers' level of instructional competency along Exploratory Courses of Home Economics is in the intermediate level with an average mean of 3.21. This result indicates that TLE teachers of Sta. Cruz District is somewhat prepared to teach Home Economics among 7th and 8th-grade levels since it is a prerequisite for higher grades.

Table 12. *Level of instructional competencies of teachers in Exploratory Courses of Agri-Fishery Arts*

<i>Agri-Fishery Arts: Exploratory Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Food Processing	3.31	Intermediate
2. Food Processing (Salting/Curing/Smoking)	3.35	Intermediate
3. Food Processing (Fermentation/Pickling)	3.47	Intermediate
4. Food Processing (Sugar Concentration)	3.34	Intermediate
Average	3.37	Intermediate

The level of instructional competency of Sta. Cruz District teachers in Exploratory Agri-Fishery Arts Courses are shown in Table 12. The TLE teachers obtained the highest mean rating of 3.47 or "Intermediate" in the competency under Food Processing (Fermentation/Pickling), while the lowest competency level in that area is 3.31 but still "Intermediate" level in Food Processing Course.

In sum, teachers' level of instructional competency in Exploratory Courses of Agri-Fishery Arts is in the intermediate level with an average mean of 3.37. This result indicates that TLE teachers of Sta. Cruz District can teach these mini-courses but still need to upgrade and enhance their competencies along these courses to ensure quality instruction of basic skills needed by the learners.

Table 13. *Level of instructional competencies of teachers in Exploratory Courses of Industrial Arts*

<i>Industrial Arts: Exploratory Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Masonry	2.13	Basic
2. Carpentry	2.74	Basic
3. Shielded Metal Arc Welding (SMAW)	2.24	Basic
4. Electrical Installation Maintenance (EIM)	2.12	Basic
5. Plumbing	1.98	Developing
Average	2.24	Basic

The above table 13 presents the instructional competencies of teachers in Industrial Arts Exploratory Courses. The highest mean score falls under the Carpentry course with a mean score of 2.74, which is a "Basic" level of competency, followed by Shielded Metal Arc Welding (SMAW), then Masonry, and then Electrical Installation and Maintenance (EIM) with mean scores of 2.24, 2.13 and 2.12 respectively. The lowest competency level of 1.98, a "Developing" level, falls under the Plumbing course.

This finding must be because males mostly dominate



courses under Industrial Arts, but only a few male graduates of industrial arts courses enter the teaching profession

Table 14. *Level of instructional competencies of teachers in Exploratory Courses of Information and Communication Technology*

<i>Information and Communication Technology: Exploratory Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Computer Systems Servicing (CSS)	3.11	Intermediate
2. Technical Drafting	2.21	Basic
3. Illustration	2.07	Basic
Average	2.46	Basic

Table 14 shows teachers' level of instructional competency in exploratory courses in Information and Communication Technology. Computer Systems Servicing garnered the highest weighted mean of 3.11, which is an "Intermediate" competency level, followed by Technical Drafting with a mean of 2.21, which falls under the "Basic" level of competency. The lowest weighted mean is 2.07, also a "Basic" competency level.

In general, the level of competency of teachers in ICT is only "Basic". This finding only implies that ICT teachers of Sta. Cruz District needs to be capacitated in Technical Drafting and Illustration courses to become more competent in teaching.

Specialization Courses

Table 15. *Level of instructional competencies of teachers in Specialization Courses of Home Economics*

<i>Home Economics: Specialization Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Dressmaking	2.65	Basic
2. Dressmaking 2	2.23	Basic
3. Hairdressing	2.20	Basic
4. Nail Care	2.66	Basic
5. Bartending	2.26	Basic
6. Bread and Pastry Production	3.18	Intermediate
7. Caregiving	2.51	Basic
8. Cookery	3.41	Intermediate
9. Food and Beverage Services	2.89	Basic
10. Housekeeping	2.96	Basic
11. Wellness Massage	2.36	Basic
Average	2.66	Basic

Table 15 reveals the level of competency of teachers in specialization courses in Home Economics. It can be seen from the table that teachers got a weighted mean of 3.41 or "Intermediate" in Cookery, while a weighted mean of 2.20 or "Basic" was obtained in Hairdressing. Overall, the teachers' Home Economics specialization courses weighted average rating is 2.66 or "Basic". This finding implies that teachers may lack relevant training in these mini-courses, and there is a need to hire more teachers who possess the necessary qualifications to deliver quality instructions to learners of Home Economics specialization courses.

Table 16. *Level of instructional competencies of teachers in specialization Courses of Agri-Fishery Arts*

<i>Agri-Fishery Arts: Specialization Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Food Processing	2.56	Basic
2. Horticulture	2.67	Basic
3. Aquaculture	2.21	Basic
Average	2.48	Basic

Table 16 presents a rating of 2.67 or "Basic" in Horticulture. It can also be seen that a "Basic" level of competency was obtained by teachers of Aquaculture. An overall average of 2.48, also a "Basic" competency, was revealed. This result shows that Agri-Fishery Arts specialization teachers, likewise presented in their profile, have relevant training and seminars in Agri-fishery arts and its mini-courses. Hence, there is an urgent need for the Agri-Fishery Arts specialization teachers of Sta. Cruz

District to undergo relevant training to enhance their skills and competencies to ensure quality instruction in the district.

Table 17. *Level of instructional competencies of teachers in Specialization Courses of Industrial Arts*

<i>Industrial Arts: Specialization Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Carpentry	1.70	Developing
2. Electrical Installation and Maintenance (EIM)	1.91	Developing
3. Shielded Metal Arc Welding (SMAW)	1.81	Developing
Average	1.81	Developing



Table 17 shows teachers' level of instructional competency in specialization courses in Industrial Arts. Electrical Installation and Maintenance (EIM) garnered the highest weighted mean of 1.91, a "Developing" competency level. At the same time, the Shielded Metal Arc Welding (SMAW) course got the lowest rating with a mean of 1.81, which also falls under the "Developing" level of competency. An average of 1.81 was obtained.

Table 18. *Level of instructional competencies of teachers in Specialization Courses of Information and Communication Technology (ICT)*

<i>ICT: Specialization Courses</i>	<i>Weighted Mean</i>	<i>Description</i>
1. Animation	2.43	Basic
2. Computer Systems Servicing	2.73	Basic
3. Illustration	2.07	Basic
4. Technical Drafting	2.21	Basic
Average	2.36	Basic

Table 18 shows the level of competency of teachers in Information and Communication Technology (ICT) Specialization Courses. Computer Systems Servicing garnered the highest rating of 2.73, described as "Basic," while the Illustration course got a 2.07 rating, also a "Basic" competency level.

The teachers obtained an average rating of 2.36 or a "Basic" level. This suggests that the teachers may have insufficient knowledge and skills in the different competencies of specialization courses in Industrial Arts. Thus, relevant training and seminars must be provided to bridge the gap in delivering quality instruction among the learners of Sta. Cruz District.

Conclusion

This action research aimed to determine the level of instructional competencies of teachers in TLE as perceived by the teachers themselves and the significant relationships in the level of instructional competencies of these teachers when they are classified as to age, gender, civil status, educational attainment, the field of specialization, teaching position, length of service, number of years teaching technology and livelihood EducationIn-service training attended, and National Certification. The study yielded noteworthy results.

Majority of TLE teachers in Sta. Cruz District are

females, and most are above 30 years old and married. In terms of years in service, most teachers are at career stages 1 and 2, with a mean length in service of 10.64. While more than half of the teachers in Sta. Cruz District already has units for master's degrees, but only a few have finished their doctorate. Aside from that, only a few attended regional, national, and international training. However, more than half have already obtained a National Certificate. Another important finding that needs immediate attention is that more than half of TLE teachers are non-TLE majors, which means a shortage of TLE major teachers in the district.

Furthermore, the level of competency of teachers in exploratory courses of Home Economics and Agri-Fishery Arts is "Intermediate," while exploratory courses of Industrial Arts and Information and Communication Technology fall under the "Basic" level. On the other hand, in the specialization courses of Home Economics, Agri-Fishery Arts, and Information and Communication Technology, a "Basic" competency level was computed. In contrast, specialization courses in Industrial Arts obtained a "Developing" level of competency.

The study also reveals no significant relationship between the profile and instructional competencies in the four areas of TLE in exploratory and specialization courses, except for the field of specialization, which has a significant relationship with the level of competency of teachers in specialization courses of Industrial Arts and ICT. This finding proves that the field of specialization of teachers influences their level of competency in teaching TLE specialization courses, specifically in the areas of Industrial Arts and Information and Communication Technology. There is a need to enhance the competencies of secondary TLE teachers in teaching specialization courses in Industrial Arts and Information and Communication Technology. Although the findings may be valuable inputs to improve the instructional competency level of teachers, future researchers may further improve the study by considering other factors affecting TLE teachers' instructional competence, not only in Sta. Cruz District but also in other schools in the Schools Division of Zambales.

The teaching of TLE requires developed competencies among teachers to deliver quality instruction effectively. To address the gaps in the level of instructional competencies in the different component areas of TLE, teachers must be encouraged to enroll in short courses offered by TESDA and undergo assessment and evaluation to qualify for National



Certification. Conduct in-service training in making video lessons, making instructional materials using MS PowerPoint, employing suitable teaching strategies, facilitating competency-based education, and developing digital learning strategies can also enhance teachers' instructional competencies. In addition, intensive supervision of Technology and Livelihood Education classes should be undertaken by school administrators and Technology and Livelihood Education Program Supervisors to guide these teachers and thereby help them enhance their teaching, guidance, management, and evaluation skills.

Moreover, the Department of Education should allocate funds to purchase appropriate instructional materials, tools, and equipment and build functional laboratory classrooms for the different specializations in technology and Livelihood education subjects. Aside from those, teachers should have a continuous education evaluation or analysis of their performance in teaching Technology and Livelihood Education to improve their weak points and enhance their strong points. Linkages and community involvement should be encouraged to promote more advanced training skills for teachers—also, the conduct of survey of constraints encountered by TLE teachers of Sta. Cruz District must also be accomplished. Lastly, it is necessary to conduct a Needs Assessment of Technology and Livelihood Education Teachers to implement K to 12 Curriculum. The researcher wishes further studies about teachers' competence in teaching the specialization courses in Technology and Livelihood Education.

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