



Competencies of Grade VI Teachers in Technology and Livelihood Education (TLE)

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Abstract:

This study aims to determine the competencies of Grade VI teachers teaching Technology and Livelihood Education (TLE). The survey questionnaire design utilizing frequency count, ranking and chi-square were used to carry out this study. Result shows that majority of the TLE teachers belong to the categories of young and middle ages. Most of them are females, married and with teacher I position. It also showed that higher percentage of TLE teachers have earned masteral units. In terms of teaching experience many are new in the service, without national certificate and seminars and trainings on school-based level. The study concludes that the profile of teachers teaching TLE vary along age, gender, marital status, position title, educational attainment, length of service, competency assessment certificate and trainings and seminars attended. The TLE teachers are generally “experienced” in most of the competencies along the four areas of TLE. There is no significant relationship between the profile of TLE teachers and the competencies along ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts except for the position title in Agriculture.

Keywords: Competencies, Competencies that Need to be Enhanced, Enhancement Program, Level of Competency, Profile of Teachers, Technology and Livelihood Education (TLE),.

I. INTRODUCTION

The development of the nation largely depends on education. The quality of education will also be determined on the performances of teachers in the school. Improving teacher quality is considered as an essential reform to improve student attainment and ensure it has a world class system of education (Australian Institute for Teaching and School Leadership), 2011 Becoming a teacher entails finishing a degree and passing the licensure exam for teachers. Nonetheless, the degree and certificates are not guarantee for teaching effectiveness. Lederman & Niess (2001), point out certain factors that affect teaching effectiveness such as personality traits, pedagogical knowledge, behavior towards student learning, mastery of competencies, professional decision-making and the pedagogical content knowledge. This is what defines a competent teacher who can develop the 21st century skills and improve students’ learning. Teaching in the elementary can be a challenging task for teachers as it greatly demands the strong competencies to be able to develop the knowledge and skills of the pupils indicated in the curriculum. The improvement is mandated under Republic Act 10533 otherwise known as the Enhanced Basic Education Act which stipulates that the program should meet the demand for quality teachers and school leaders. In response to this mandate, the curriculum for Technology and Livelihood Education (TLE) in the elementary was enhanced in terms of specific skills and knowledge that the elementary pupils must develop in order to meet the requirements for further learning. The subject being taught in grade 6 encompasses the field of ICT & Entrepreneurship, Agriculture, Home Economics, and Industrial Arts. It is geared toward the development of technological proficiency and is anchored on knowledge and information, entrepreneurial concepts, process and delivery, work and values. Based on the researchers observation, TLE is taught in the Division of Sorsogon City, Bacon District by elementary teachers who are generalists. These teachers may have the limited opportunity to undergo skills training by their

respective schools due to insufficient MOOE. Gempes et al. (2018), revealed in the study that DepEd teachers experienced inequity in attending seminars and trainings. It was observed that only the chosen few could avail of it. Although, the Technical Education Skills Development Authority in the province provides free training, elementary teachers cannot actively participate due to their busy class schedule and other school-related functions. Corollary to this, teaching of TLE may not be effective as the curriculum requires developed competencies of teachers to be able to deliver quality instruction. Furthermore, being generalists, teachers may not possess the specific skills and knowledge necessary to facilitate learning of the pupils. Anchored on this premise, the researcher is motivated to conduct a study on teaching competencies among TLE teachers in elementary in order to determine their strengths and weaknesses. The researcher also believes that teachers are responsible for operating educational system and they need strong and efficient professional competencies because the quality of teachers affects the achievement of the students.

II. FRAMEWORK

The conceptual paradigm, which guided the researcher in the conduct of this study, had been illustrated in Figure 1. The inputs of this study were the profile of TLE teachers along age, gender, marital status, position title, educational attainment, length of service, competency assessment certificate and trainings and seminars attended. It also included the level of competency of teachers along the content knowledge and the relationship between the profile and the level of competency of the teachers. These inputs revealed the teachers’ strengths and weaknesses along TLE instruction which can be used as basis for the teachers’ professional development. The process involved the administration of the survey questionnaire of TLE teachers’ competencies and the conduct of unstructured interview to validate responses of the teachers. The output of this study is the enhancement program

to address the competency need of the TLE teachers. The feedback component showed the interrelationship among the variables under consideration.

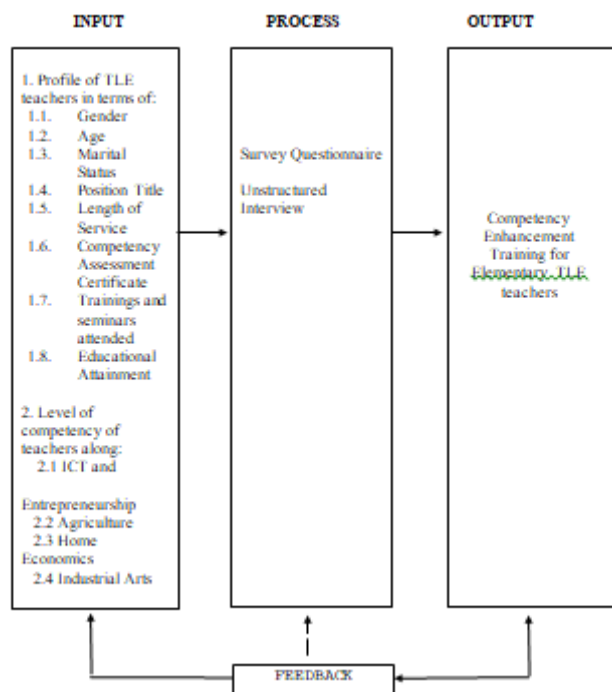


Figure.1. Conceptual Framework

Objectives of the study

This study aimed to determine the competencies of Grade VI Teachers in TLE in the Department of Education, Bacon District, Division of Sorsogon City for school year 2019-2020. Specifically, it investigated the profile of teachers in terms of age, gender, marital status, position title, educational attainment, length of service, competency assessment certificate and trainings and seminars attended. Likewise, it evaluated the level of competency of teachers along ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts and the significant relationship between the profile and the level of competency of the teachers in order to come up with a basis for the enhancement program to address their competency needs.

III. MATERIALS AND METHODS

Research Design

This study determined the competencies of Grade VI Teachers in Technology and Livelihood Education (TLE) in the Department of Education, Bacon District, Division of Sorsogon City for academic year 2019-2020. It made use of descriptive correlational method. The descriptive aspect allowed the researcher to describe the profile of TLE teachers and their competency along ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts. On the other hand, the correlational method determined the relationship between the profile and the level of competency. Survey questionnaire was distributed to the respondents to determine the level of competency. The responses were validated through unstructured interview. The study made use of frequency, Chi-square, weighted mean, and percentage as statistical tool to analyze the data.

Research Site

The study was conducted in thirty-two (32) elementary public schools in the Bacon East and West districts, division of

Sorsogon City, Philippines. These state-run schools are under the supervision of the Department of Education.

Participants

The researcher conducted the study among Grade 6 TLE teachers. It made use of universal sampling as there were only 34 teachers in the entire districts. Twenty (20) of these participants came from the West district while fourteen (14) were from the East district schools.

Instrumentation

The main instrument used in this study was a survey questionnaire checklist which was developed by the researcher based from the K to 12 Edukasyong Pantahanan at Pangkabuhayan and Technology and Livelihood Education Curriculum Guide. The test was composed of two parts. Part I is a teacher questionnaire which seeks information about the teacher's profile and part II includes questionnaire on competencies of Grade 6 teachers along Technology and Livelihood Education.

Validation of Instruments

In order to assess the questionnaires validity, it was presented to the adviser and panel members. The comments and suggestions were carefully considered to improve the instrument and ensure validity.

A dry-run of the questionnaire was done with the 13 TLE teachers in Sorsogon East and West district schools as respondents. The result of the dry-run was then subjected to reliability test using Cronbach Alpha. The internal consistency values obtained were 0.901066, 0.818391, 0.77243 and 0.713306 for ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts, respectively. This means that the instrument developed is reliable.

Data Collection

Prior to the conduct of the study the researcher sought permission from the office of the Schools Division Superintendent to conduct dry-run in various schools in DepEd-Sorsogon City Divisions. Upon approval, the researcher immediately conducted the dry-run in the schools in Sorsogon City.

After having the dry-run and reliability test, it was then administered to the TLE teachers of each respective schools. This was done on different schedules to consider the convenience of the respondents to answer the questionnaires.

Interview with the respondents were done to validate their responses in the questionnaire. One hundred (100%) retrieval rate was attained in the process. The data gathered were organized and prepared for analysis and interpretation using the appropriate statistical tools.

Data Analysis

Appropriate statistical measures were employed to quantify the data and answer the problems set in the study. Frequency count and percentage were used to describe the profile of the TLE teachers. Weighted mean was employed to quantify the level of competency of teachers along the identified variables. In addition, Chi square was used to determine the relationship between the profile and the level of competency of teachers. The scale and description adopted from the National Competency-Based Teacher Standards-Teachers' Strengths and Needs Assessment of the Department of Education were also utilized by the researcher to describe the competency level.

IV. RESULTS AND DISCUSSION

Profile of the TLE teachers

Table 1.A. Age of the respondents

| <i>Age</i> | <i>Frequency</i> | <i>Percentage</i> |
|--------------------|------------------|-------------------|
| 21-34 years | 15 | 44 |
| 35-48 years | 15 | 44 |
| 49 years and above | 4 | 12 |
| Total | 34 | 100 |

Table 1-A shows the age of the TLE teachers. The data reveal that the TLE teachers are mostly 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. As shown in the study of Rogayan (2018) on the perspectives of young teachers in the Philippines, among the reasons why they teach is to bring positive change, prepare students for life, serve as an inspiration, promote values, transform lives, teach for passion, set a higher bar of excellence in education, cure social problems, share knowledge and skills, and enable others' dreams. In addition, it was stated that these teachers are generally enthusiastic and dynamic making them more satisfied in the things that they do

Table 1.B. Gender of the respondents

| <i>Gender</i> | <i>Frequency</i> | <i>Percentage</i> |
|---------------|------------------|-------------------|
| Male | 5 | 15 |
| Female | 29 | 85 |
| Total | 34 | 100 |

The table 1-B shows the gender of the TLE teachers. This implies that most female considered TLE as their major field of specialization than that of male teachers. The gender imbalances among TLE teachers may be attributed to gender stereotyping in which teaching profession may be generally perceived to be more appropriate for females. Based on the study of Moses, et al. (2014), it revealed that the teaching profession is mostly dominated by females as there were 70% women and 52% men composed the teaching workforce in 2013 at pre-primary and primary levels. Among the reasons for the feminization of the teaching profession according to Keller (2011) are the socio-economic developments in which more men seek for new jobs or transfer from teaching profession and the old notion that men as economic provider must look for a job with higher salary to support their family.

Table 1.C. Marital status of the respondents

| <i>Status</i> | <i>Frequency</i> | <i>Percentage</i> |
|---------------|------------------|-------------------|
| Single | 12 | 35 |
| Married | 20 | 59 |
| Widowed | 2 | 6 |
| Total | 34 | 100 |

Table 1-C presents the marital status of the TLE teachers. This indicates that most of the teachers may have been financially stable as one of the indicators for marriage is financial stability. Some teachers may have gotten married prior to their employment to DepEd while others settled when they are already in service. This may also imply that most of the teachers are on the right age of marriage. As presented earlier in table 1-A, the frequency of teachers' age ranging from 21 to 34 and 35 to 48 are equal.

This finding is similar to the result of the study of Retome, (2013) on Instructional Assessment of Technology and Livelihood Education (TLE) Program. It revealed that almost all of the teachers teaching TLE are already married. Likewise, Salatan (2018) obtained in his study on Status of selected secondary schools in the Implementation of Technology and Livelihood Education program that majority of the TLE teachers are married with Home Economics as area of specialization and have been teaching more than 10 years.

Table 1.D. Position title of the respondent

| <i>Position</i> | <i>Frequency</i> | <i>Percentage</i> |
|------------------|------------------|-------------------|
| Teacher 1 | 22 | 65 |
| Teacher 2 | 3 | 9 |
| Teacher 3 | 6 | 17 |
| Master Teacher 1 | 0 | 0 |
| Master Teacher 2 | 3 | 9 |
| Total | 34 | 100 |

Table 1-D presents the position title of the TLE teachers. This implies that majority of the teachers are on the entry level position. This can be verified in table 1-F where most of these teachers are still young in the service with 5 years and below length of service. Moreover, the data denotes that the teachers may have missed out the promotion because of some qualifications that need to be met. Thus, it is necessary that they should be equipped with the competencies in teaching TLE through attending related seminars, trainings, advanced studies and other means of professional development to consequently upgrade their position either by reclassification or other means of promotion. The higher number of teacher 1 position teaching TLE may be an effect of the policy of the Department of Education to hire more teachers for K-12 program. Briones as cited by Musico (2018) stated that the department hired more teachers with different skills to bring down the teacher-student ratio to 1:25 at the kindergarten/elementary level. However, the newly hired teachers may face a challenge along promotion as limited opportunity is given due to insufficient teaching positions. Malipot (2019), underscored that teacher 1 remains on the same position for years and gets promoted only when another teacher retired from service.

Table 1.E. Educational attainment of the respondents

| <i>Educational Attainment</i> | <i>Frequency</i> | <i>Percentage</i> |
|-------------------------------|------------------|-------------------|
| Baccalaureate Degree | 8 | 23 |
| With masters unit | 25 | 74 |
| With master degree | 1 | 3 |
| With doctoral units | 0 | 0 |
| With doctoral degree | 0 | 0 |
| Total | 34 | 100 |

Table 1-E presents the educational attainment of TLE teachers. This implies that most of the TLE teachers nowadays took up master's degree for the reasons that they may want to enrich more their knowledge parallel to their field of specialization as well as to be promoted to a higher position. Nevertheless, from these number of teachers, only one was able to finish master's degree. This means that other TLE teachers who enrolled in the graduate school may have the difficulty to finish their master's degree program. One possible reason is that they may not have enough time for writing the thesis because of their teaching workload and other school designations. It is worth emphasizing that master's degree is very important to enhance teacher's competencies.

Zhang (2008), cited that teachers with advanced degree have significant effect on student achievement. This finding is consistent with result the study of Janer et al, (2015) on the Factors on Enhancing Competitive Edge and Attributes of Graduates as Inputs to the Development of Teacher Education Enhancement Program (TEEP). As shown, only a few of the graduates of education finished their master's degree; some earned only masteral units. However, majority of the education graduates did not pursue master's degree.

Table.1.F. Length of service of the respondents

| <i>Length of Service</i> | <i>Frequency</i> | <i>Percentage</i> |
|--------------------------|------------------|-------------------|
| 5 years and below | 27 | 79 |
| 6 to 10 years | 4 | 12 |
| 11 to 15 years | 0 | 0 |
| 16 to 20 years | 3 | 9 |
| 21 years and above | 0 | 0 |
| Total | 34 | 100 |

Table 2-F reveals the length of service of TLE teachers. A detailed inspection of the data gathered indicates that majority of the TLE teachers have 5 years or less teaching experience. This implies that these teachers may not have gained sufficient experience in teaching TLE subject. The teaching experience is significant to develop their set of knowledge and skills in order to become effective teachers. This finding is parallel to results of the study of Bancual(2019), which showed that a great number of junior high teachers have 5 years and below in service. The advent of the K-12 program requires teachers to be competent in teaching as different skills are needed to be developed among the learners. The work experience provides important knowledge, skills and personal attributes and complement academic studies (https://www. Emerald group publishing.com/learning/study_skills/life/placements.htm).

Table. 1.G. Competency assessment certificate of the respondents

| <i>National Certificate</i> | <i>Frequency</i> | <i>Percentage</i> |
|------------------------------|------------------|-------------------|
| With National Certificate | 11 | 32 |
| Without National Certificate | 23 | 68 |
| Total | 34 | 100 |

Table 1-G shows the competency assessment certificate of the TLE teachers. This suggests that there are teachers who have been teaching TLE for many years, yet they have no national certificate of competency from Technical Education and Skills Development Authority.

The national certificate is important as best proof that a person is qualified for a job according to the secretary of the TESDA (www. tesda. gov.ph/ News/ Details/9512). Thus, the agency mandates to regularly conduct free training for teachers and workers. Furthermore, such trainings should be done in collaboration among agencies viz. DepEd, CHED, TESDA and other relevant organizations.

The professional development for teachers must be annually done and evaluated to ensure that they are updated (<http://www. tesda.gov. ph/ uploads /File/ policy brief 2013/ PB% 20Kto12% 20as% 20of% 20Sept.20,% 202013.pdf>).

The importance of this competency certificate and other skills training is being recognized by the Department of Education. In fact, the department issued DepEd Order no. 50, series of 2016 or the Hiring Guidelines for Teacher 1 Positions in Schools Implementing Indigenous Peoples Education Effective School Year 2016-2017 which gives certain points for specialized trainings and skills upon presentation of certificates or demonstration of the skill.

Table.1.H. Related seminars and trainings of the respondents

| <i>Level</i> | <i>Frequency</i> | <i>Percentage</i> |
|---------------|------------------|-------------------|
| School-based | 19 | 56 |
| Division | 11 | 32 |
| Regional | 1 | 3 |
| National | 2 | 6 |
| International | 1 | 3 |
| Total | 34 | 100 |

Table 1-H shows the related seminars and training of the respondents. This means that the majority of the TLE teachers may have preferred school-based more than the other levels of seminars and trainings. In addition, this may be attributed to the school heads' action which required the teachers to participate in the activities as being cost-effective and accessible. Based on the interview with the TLE teachers, the attendance to the school and division level was part of their individual performance commitment review.

Nevertheless, little chances were given to them for participation to regional, national and international seminars and trainings due to limited school fund. The teachers often used their own personal fund just to attend those seminars and trainings and be able to earn higher points for promotion. Some teachers admitted that one should incurred a greater expense for international seminar.

This result verifies the findings of the study of Guiner (2013) on the competencies of technology and livelihood education (TLE) instructors as input to a training module in Industrial Arts. It was found out that majority of the Industrial arts instructors have attended seminars, workshops, or training at school and district levels. The researcher considered the availability of techno resources, preparedness of the faculty and extent of support extended to its faculty member as among the possible reasons for the teachers' participation.

Level of competency of teachers along ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts

Table 2-A shows the level of competency of teachers along ICT and Entrepreneurship. The TLE teachers obtained a highest mean of rating of 2.70 or "Experienced" in the competency that identifies seller and buyer and produces simple products while 2.05 or "Developing" level in creating, disseminating and processing an online survey form and data.

In general, the level of competency of teachers in ICT and Entrepreneurship is also "developing" with a weighted mean of 2.40. This implies that the teachers have only an average of all the competencies in the said area. Likewise, it suggests the need to capacitate the teachers in order to become competent in teaching.

Table.2.A. Level of competency of teachers along ICT and Entrepreneurship

| <i>ICT and Entrepreneurship</i> | <i>Weighted Mean</i> | <i>Description</i> |
|--|----------------------|--------------------|
| 1. Identifies the seller and buyer and produces simple products. | 2.70 | Experienced |
| 2. Buys and sells products based on need and demands in school and community. | 2.41 | Developing |
| 3. Posts and shares materials on wikis and on blogs in safe and responsible manners. | 2.17 | Developing |
| 4. Participates in video and audio conferences in a safe and responsible manner. | 2.35 | Developing |
| 5. Explains the advantages and the disadvantages of using online tools to gather data. | 2.67 | Experienced |
| 6. Creates, disseminates and processes an online survey form and data. | 2.05 | Developing |
| 7. Uses functions and formulas in an electronic spreadsheets tool to perform advanced calculations on numerical data. | 2.32 | Developing |
| 8. Uses video, audio conferencing tools and e-group to share ideas and work with others online. | 2.35 | Developing |
| 9. Uses the advanced features of a slide presentation tool to create a multimedia presentation with text, graphics, and photos; hyper linked elements; animations; and embedded audio an/or video. | 2.67 | Experienced |
| 10. Identifies the seller and buyer and produces simple products. | 2.35 | Developing |
| Average | 2.40 | Developing |

Furthermore, the results may be attributed to the teachers' lack of seminars and trainings in ICT and Entrepreneurship. As revealed in their profile, only a few of these teachers have relevant trainings and seminars. As generalists, it may be

expected that teachers need to develop the expertise along that field. Hence, the professional development of teachers is of great importance to effectively teach that subject area.

Table.2.B. Level of competency of teachers along Agriculture

| <i>Agriculture</i> | <i>Weighted Mean</i> | <i>Description</i> |
|--|----------------------|--------------------|
| 1. Discusses the importance of planting and propagating trees and fruit-bearing trees and marketing seedlings. | 3.12 | Experienced |
| 2. Uses technology in the conduct of survey to find out the elements to be observed in planting trees and fruit-bearing trees, market demands for fruit, sources of fruit bearing trees and famous orchard farms in the country. | 2.44 | Developing |
| 3. Conducts survey to identify the types of orchard farms, the trees appropriate for orchard gardening, proper way of planting/ propagating trees, the sources of fruit bearing trees and how to care for seedlings. | 2.53 | Experienced |
| 4. Prepares layout design of an orchard garden using the information gathered. | 2.47 | Developing |
| 5. Propagates trees and fruit-bearing trees using scientific processes. | 2.44 | Developing |
| 6. Performs systematic and scientific ways of caring orchard trees/ seedling such as watering, cultivating, preparing, and applying organic fertilizer. | 2.62 | Experienced |
| 7. Markets fruits and seedlings. | 2.53 | Experienced |
| 8. Develops plan for expansion of planting trees and seedling production. | 2.32 | Developing |
| 9. Conducts survey to find out the occupation of the people in the community, the possible hazards to the people and how to prevent it and the benefits they can get in animal/fish raising. | 2.47 | Developing |
| 10. Plans for the family's animal raising project, implement plan and manages marketing of animals/fish raised. | 2.24 | Developing |
| AVERAGE | 2.51 | Experienced |

The above results show consistency with the findings of study conducted by Torres (2014) on the level of competency and competency needs of Technology and Livelihood Education teachers in the Division of Imus City, Cavite, during the school year 2013-2014. As revealed, the TLE teachers have intermediate level of competency along computer and entrepreneurship. The intermediate competency level is defined in the study as being able to complete the task with minimal guidance but may need help from expert from time to time. Along agriculture shown in table 2-B, a rating of 3.12 or "Experienced" was obtained on discussing the importance of planting and propagating trees and fruit-bearing trees and marketing seedlings. On the other hand, 2.24 or on

"Developing" level in planning, implementing and managing for the family's animal raising project. Overall, the competency level of teachers in Agriculture is 2.51 and interpreted as "Experienced". This implies that the teachers may be equipped with the knowledge on scientific practices in planting trees and fruit trees. In addition, they may demonstrate understanding of scientific processes in animal/ fish raising. The knowledge acquired by the teachers may have come from the available learning resources provided by the department of education. Results of this study is parallel to the findings obtained in the study of Valera (2015) in which the secondary education students major in Technology and Livelihood Education had adequate level of attainment of the

Desired Learning Competencies specifically on Agricultural Arts. Thus, it recommended that the faculty should pursue post

graduate education in line with the subject being taught.

Table.2.C. Level of competency of teachers along Home Economics

| <i>Home Economics</i> | <i>Weighted Mean</i> | <i>Description</i> |
|--|----------------------|--------------------|
| 1. Identifies family resources and needs and enumerates sources of family income. | 3.06 | Experienced |
| 2. Prepares feasible and practical budget for basic and social need. | 2.88 | Experienced |
| 3. Classifies tools and materials according to their use (measuring, cutting, sewing) | 3.12 | Experienced |
| 4. Prepares project plan, identifies the materials and tools and drafts pattern for household linens. | 2.91 | Experienced |
| 5. Sews creative and marketable household linens as means to augment family income. | 2.50 | Experienced |
| 6. Markets finished household linens in varied/ creative ways. | 2.35 | Developing |
| 7. Explains different ways of food preservation, apply the principles and skills and uses of tool and equipment in food preservation processing. | 2.97 | Experienced |
| 8. Conducts simple research to determine market trends and demands in preserved/ processed foods. | 2.32 | Developing |
| 9. Assesses preserved /processed food as to the quality using the rubrics. | 2.68 | Experienced |
| 10. Markets preserved /processed food in varied/ creative ways with pride. | 2.38 | Developing |
| AVERAGE | 2.72 | Experienced |

Table 2-C presents the level of competency of teachers along Home Economics. It can be gleaned from the table that teachers got 3.12 or “Experienced” in classifying tools and materials according to their use (measuring, cutting, sewing), while, teachers got 2.32 or “Developing” level in conducting

simple research to determine market trends and demands in preserved/ processed foods. This suggests that teachers may have insufficient knowledge on marketing of products and in doing simple feasibility studies. However, as a whole, the

Table.2.D. Level of competency of teachers along Industrial Arts

| <i>Industrial Arts</i> | <i>Weighted Mean</i> | <i>Description</i> |
|---|----------------------|--------------------|
| 1. Discusses the importance, the methods and demonstrate creativity in enhancing / decorating bamboo, wood and metal product. | 2.97 | Experienced |
| 2. Conducts simple survey using technology and other data-gathering method to determine market trends on products, customer’s preference, innovative finishing materials, accessories and designs, and processes in enhancing/decorating finished products. | 2.32 | Developing |
| 3. Discusses the effects of innovative finishing materials and creative accessories on the marketability of products. | 2.76 | Experienced |
| 4. Enhances bamboo, wood, metal and other finished products through sketching, shading and outlining. | 2.59 | Experienced |
| 5. Construct project plan and market products. | 2.68 | Experienced |
| 6. Construct simple electrical gadgets and explains the protocols (processes) in making gadgets. | 2.44 | Developing |
| 7. Repairs simple gadgets/ furniture/ furnishings at home and school. | 2.38 | Developing |
| 8. Discusses the principles of “five s”. | 2.55 | Experienced |
| 9. Identifies recyclable products/ waste materials and explains the process and the importance of recycling. | 3.15 | Experienced |
| 10. Recycles the identified products/ waste materials into functional items (binding of used paper into notebook or memo pad; bottled plastic into lampshades, flower, plants, etc.). | 3.03 | Experienced |
| AVERAGE | 2.69 | Experienced |

Teachers are “Experienced” in the learning competencies for Home Economics with weighted mean of 2.72. This indicates that teachers can demonstrate some understanding of and skills in managing family resources. In addition, it may be indicative of having the knowledge on the basics of food preservation and sewing household linens which are essential parts of the Home Economics subject. The acquisition of this knowledge may not better suffice for them to teach effectively the subject as the principle of teaching posits that teachers must be experts in the subject they teach both in content and pedagogy. Hence, it spells the need to further enhance the

competencies of teachers along this subject to develop the needed expertise. Kostanjevec, et al. (2018) revealed in their study that the teachers feel more competent to teach Home Economics contents with completed home economics studies than teachers without completed relevant studies. The study concluded that the relevant teacher education is important for teaching Home Economics. Also, the relevant qualifications of teachers should be ensured while those with irrelevant education should be provided with additional professional training. Table 2-D shows the level of competency of teachers in Industrial Arts. Teachers perceived themselves to be

“Experienced” in identifying recyclable products/ waste materials and explaining the process and the importance of recycling with a mean rating of 3.15. In contrast, a rating of 2.32 or “Developing” was attained for conducting simple survey using technology and other data-gathering method. This gives implication that teachers may lack the necessary knowledge to undertake a simple survey to gather baseline data on marketing of products as regards to production, repair and furnishing. Thus, the technical skills of the teachers may be further developed along this area to be able to impart quality instruction to the pupils. As articulated in the study of Guiner (2013), the competency level of Industrial Arts instructors of State Universities and Colleges was generally in the level of high competency. However, along the areas of electronics and electricity, the instructors were moderately competent. Thus, it was recommended that the competencies

could be further improved with the provision of more facilities and the improvement of the qualifications of Industrial Arts instructors in order to meet the needs of the students and attain quality and excellence in teaching.

Relationship between the profile and level of competency of teachers.

The table below shows the significant relationship between age and level of competency of the teachers along ICT and Entrepreneurship, Agriculture, Home Economics & Industrial Arts. As reflected, There no significant relationship between the age and the level of competency along the four areas of the TLE since the computed value are 4.21, 0.76, 0.23 and 1.38 are lower than the critical value of 7.82 at 0.05 level of significance with the degree of freedom of 3.

Table.3. Relationship between the profile and the level of competency of the teachers.

| D | C | ICT and Entrepreneurship | | | | Agriculture | | | | HomeEconomics | | | | Industrial Arts | | | | | | | | | |
|-----------------------------------|----|--------------------------|----|------|------|-------------|----|------|----|---------------|-------|-----|----|-----------------|----|------|------|-----|----|------|---|------|------|
| | | Ls | Df | tb | cv | D | C | Ls | Df | tb | cv | D | C | Ls | Df | tb | cv | | | | | | |
| Age | | 0.05 | 3 | 7.82 | 4.21 | Dnr | Ns | 0.05 | 3 | 7.82 | 0.76 | Dnr | Ns | 0.05 | 3 | 7.82 | 0.23 | Dnr | Ns | 0.05 | 3 | 7.82 | 1.38 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |
| Gender | | 0.05 | 1 | 3.84 | 0.04 | Dnr | Ns | 0.05 | 1 | 3.84 | 0.00 | Dnr | Ns | 0.05 | 1 | 3.84 | 0.04 | Dnr | Ns | 0.05 | 1 | 3.84 | 1.57 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |
| Marital Status | | 0.05 | 2 | 5.99 | 2.42 | Dnr | Ns | 0.05 | 2 | 5.99 | 0.06 | Dnr | Ns | 0.05 | 2 | 5.99 | 1.31 | Dnr | Ns | 0.05 | 2 | 5.99 | 1.31 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |
| Position Title | | 0.05 | 3 | 7.82 | 3.58 | Dnr | Ns | 0.05 | 3 | 7.82 | 12.43 | R | S | 0.05 | 3 | 7.82 | 2.95 | Dnr | Ns | 0.05 | 3 | 7.82 | 2.22 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |
| Educational Attainment | | 0.05 | 2 | 5.99 | 1.41 | Dnr | Ns | 0.05 | 2 | 5.99 | 0.90 | Dnr | Ns | 0.05 | 2 | 5.99 | 3.17 | Dnr | Ns | 0.05 | 2 | 5.99 | 1.97 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |
| Length of Service | | 0.05 | 2 | 5.99 | 0.20 | Dnr | Ns | 0.05 | 2 | 5.99 | 1.12 | Dnr | Ns | 0.05 | 2 | 5.99 | 2.02 | Dnr | Ns | 0.05 | 2 | 5.99 | 0.23 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |
| Competency Assessment Certificate | | 0.05 | 1 | 3.84 | 2.51 | Dnr | Ns | 0.05 | 1 | 3.84 | 0.72 | Dnr | Ns | 0.05 | 1 | 3.84 | 0.46 | Dnr | Ns | 0.05 | 1 | 3.84 | 0.46 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |
| Seminars and Trainings Attended | | 0.05 | 4 | 9.49 | 6.36 | Dnr | Ns | 0.05 | 4 | 9.49 | 3.91 | Dnr | Ns | 0.05 | 4 | 9.49 | 4.08 | Dnr | Ns | 0.05 | 4 | 9.49 | 4.08 |
| Dnr | Ns | | | | | | | | | | | | | | | | | | | | | | |

Legend: Level of significance-Ls, Degree of freedom-Df, Tabular value-tb, Computed value-cv, Decision-D, Conclusion- C, Do Not

The result suggests that age of the TLE teachers may not be a factor of their level of competency in teaching the subject. This further implies that teachers may be equally competent in teaching TLE irrespective of their age. This result supports the findings of the study obtained by Araiz (2018). The data suggest that ICT coordinators’ age has no or negligible relationship with their level of competency in the four competency domains viz. technology operations and concepts, social and ethical, pedagogical and professional domain. It further implies that regardless of age, ICT coordinators have the same or similar level of competency. Likewise, there is no significant relationship between the level of competency along the four areas of TLE. This indicates that regardless of gender of TLE teachers may have similar level of competency in teaching the four areas. This also suggests that they may have acquired the knowledge and skills needed in teaching the subject through the equal opportunity given by the school for their professional development. As mentioned earlier, teachers are required to attend the in-service trainings during the Learning Action Cell which is regularly done to upgrade their competencies in teaching TLE. This corroborates with the findings of the study conducted by Islahi et al. (2013) on the influence of gender on teaching effectiveness. It was found out that the gender has no significant influence on the overall

effectiveness of secondary school teachers. Thus, it offers a new concept that female teachers who were thought to be weak in developing countries are equally good as male teachers in a dynamic society of the 21st century. In addition, there is no significant relationship between marital status and level of competency of teachers along the four areas in TLE. This indicates that the marital status may not influence their ability to teach the TLE subject. This may also be attributed to the fact that elementary teachers as generalists are expected to deliver only basic knowledge and skills to the pupils. The result of this study is in agreement with the study conducted by Oselumese, et al. (2016) which showed that marital status did not significantly influence the effectiveness of teachers. In terms of position title and level of competency of teachers along the four areas of TLE it was found out that there is no significant relationship in the area of ICT and Entrepreneurship, home economics and industrial arts. The finding denotes that the rank of teachers may not affect their teaching of ICT and Entrepreneurship, Home Economics and Industrial Arts. It also indicates that they may have similar level of competency in teaching these specific areas of TLE despite the differences in the position title. Moreover, the data may be attributed to the result of the frequency distribution of position title presented earlier in table 1. Majority of the

teachers occupy teacher 1 position and only a few are holding teacher 3 and master teacher positions. However, in the area of agriculture the computed value is higher than the critical value of 7.82 at 0.05 level of significance. Therefore, there is a significant relationship between the position title and level of competency along agriculture. This implies that the position title of the teachers may influence their level of competency in teaching agriculture. Agriculture is one the fields considered important to the country as it serves as backbone of the economy. Geronimo (2017) stated that the secretary of Agriculture emphasized the need to develop Filipino children's interest in agriculture by including the subject in elementary and high school levels of the Philippine education system. Hence, as teachers move in the academic career ladder the more they should equip themselves with the knowledge of agriculture. On the other hand, there is no significant relationship between the educational attainment and level of competency of teachers along the four areas of TLE. This suggests that whatever level of educational attainment each of the TLE teachers has attained it may not affect their level of competency in teaching. The absence of significant relationship between the educational attainment and level of competency of teachers may be expected with reference to the different graduate programs being taken by the teachers. It can be noted that only 6% of these teachers with earned units in master's degree is in line with the TLE. Majority of those who earned units or even earned master's degree are not vertically articulated. The above result is parallel to the findings of the study of Ahmad et al. (2016). As shown, the teachers' qualification does not affect the teaching competency. The researcher reasoned out that during the observation conducted some qualified teacher is not so competent than other teachers as they may have the content knowledge but do not possess good communication skills and classroom management. Meanwhile, those who are only completing their graduation and become teachers are much competent in teaching as they have content knowledge, pedagogical capabilities and professionalism. With respect to the length of service of the respondents, it shows that there is no significant relationship between the length of service and level of competency of teachers along the four areas of TLE. The result implies that the level of competency of the new generation of teachers may not be far from those teachers who have been teaching for a long time. This may be attributed to the fact that young teachers may be more knowledgeable in terms of the use of technology where information to enhance their teaching can easily be accessed. According to Pa-alisbo, M. A. C. (2017), the 21st century skills and job performance of teachers did not vary in terms of educational attainments, length of service and salary grade. The young teachers have been developed in their pre-service years while the seasoned teachers have been honed through the passing of the years but differ slightly in computer literacy since the young ones are into technology. With regards to the assessment certificate of the TLE teachers, it can be seen that there is no significant relationship between the competency assessment certificate and the level of competency of teachers along the four areas of TLE. This means that the teachers' level of competency may not be dependent on the National Certificate they possess. The NC issued when a candidate has demonstrated competence in all units of competency that comprised a qualification (tesda.gov.ph/About/tesda/127). It can be recalled in table 1 that majority of the teachers do not have this certificate. However, as revealed in the interview, those who are NC holders may have the difficulty to impart their knowledge and skills acquired in the training to the pupils due to lack of

laboratory facilities in the schools. Hence, they resorted to using lecture method in teaching the concepts of TLE. In similar manner, Gregorio (2016) found out in the study that majority of technical vocational teachers have NC II. However, the available equipment, materials and facilities in the school do not conform to the recommended numbers which are required to support the needs of the students who enrolled in the TLE subject and several problems being experienced by the teachers in the absence of the required facilities in school prompted them to do remediation. Along seminars and trainings of the respondents, it shows that there is no significant relationship between the level of seminars and trainings attended and the level of competency of TLE teachers since the computed chi-square values are lower than the critical value of 9.49 with a degree of freedom of 4. This suggests that whatever the level of trainings and seminars attended by the teachers, it may not affect their level of competency in teaching the four areas of TLE. This may be attributed to the fact that the school heads require the teachers who attended the seminars and trainings outside the division to conduct re-echo in order to impart what their knowledge and skills. Also as explained by the teachers during the interview, regardless of the level of seminars and trainings attended, the contents being discussed are the same. Hence, this may not necessarily have the influence in the level of competency of teachers in teaching TLE. This finding is parallel to the study of Bancual (2019) which showed that the level of seminars and trainings has no effect on the laboratory practices of science teachers along laboratory proper.

V. CONCLUSIONS

The profile of teachers teaching TLE vary along age, gender, marital status, position title, educational attainment, length of service, competency assessment certificate and trainings and seminars attended. The TLE teachers are generally "experienced" in most of the competencies along ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts. There is no significant relationship between the profile of TLE teachers and the competencies along ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts except for the position title in Agriculture. There is a need to enhance the competencies of elementary TLE teachers in teaching ICT and Entrepreneurship, Agriculture, Home Economics and Industrial Arts.

VI. TRANSITIONAL RESEARCH

The findings of this research can be translated into a proposed enhancement program for TLE teachers to address their competency needs. The proposed program could be evaluated and critiqued for its relevance, needs and appropriateness by the school administrators. It could also be integrated in the regular learning action cell of teachers in order to capacitate them in the light of achieving the goals to improve the TLE education.

VII. REFERENCES

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