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Profile and Level of Competence of Information and Communications Technology (ICT) Coordinators among Secondary Schools in the Division of Davao del Sur

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ABSTRACT

ICT Coordinators play a significant role in the effective delivery of education in every school. There have been many studies carried out in relation to ICT, but less has been done dealing specifically with ICT Coordinators. The study aimed to find out the Level of Competence of ICT Coordinators in the 57 Secondary Schools in the Division of Davao del Sur, Philippines. A descriptive-correlational method was used in the study. The research instrument patterned to the NICS developed by the CICT (2006) was used in the data-gathering procedure. Data were analyzed using mean, chi-square, pearson r correlation coefficient and t- test. Results showed that ICT coordinators were intermediate in Technology Operations and Concepts, Social and Ethical, and Pedagogical Domains, but basic in the Professional domain. Likewise, significant relationships were not established with regard to their gender, age, educational attainment, length of service and position. The findings suggest that ICT Coordinators need to upgrade their level of competence in the Professional Domain to become more

proficient and capable in performing their duties and responsibilities through seminar-workshops related to professional growth and development, research, innovation, and collaboration. To maintain their high level of competence, a continuing high-quality training program should be provided in the entire Secondary Schools in the Division of Davao del Sur.

Keywords **—** Information and Communication Technology, ICT Coordinators, descriptive-correlational method, Davao del Sur, Philippines

INTRODUCTION

Information and Communication Technology (ICT) had been established in the literature as an effective tool to facilitate students' learning, improve teaching, and enhance institutional administration (Kazu & Yavulzalp, 2008; Kirschner & Woperies, 2003). However, the researcher learned that the training of ICT Coordinators is inadequate and needs improvement. Reasonably, it varies from person to person, and from situation to situation as Cleere (2002) claimed that competency level of the school ICT coordinator varies far and wide between different schools in different towns, or cities, or indeed countries. In such a growth area as technology, the competency of ICT Coordinator is of key importance to the proper integration of ICT in the school.

While there have been many studies carried out in relation to ICT in schools, fewer studies have been done dealing specifically with ICT Coordinators. This research examined the level of competence of ICT Coordinators in carrying out their day-to-day duties, their suitability for the position and their general opinion of their level of competency.

The position of ICT Coordinator in the world of advanced technology recently is quite relevant with regards to his role. The Department of Education and Science (DES) in Ireland conducted a survey in 2008 in relation to the integration of ICT in primary and secondary schools. The survey was not based on the level of competence. However, it examined the integration of ICT into teaching which the researcher calls the level of expertise in this vast area.

More recent studies (British Educational Communications and Technology Agency, 2002) reveal that in the current practice, the most predominant roles assumed by the ICT coordinator include technical support and supporting children during the learning process. In this context, the tasks carried out by the ICT coordinator include teaching ICT skills, coordinating the development of an ICT curriculum, managing hardware, and technical support, and giving

training. Further, British Educational Communications and Technology Agency (2002) emphasizes the ICT leadership role to facilitate proper use of ICT.

Major ICT competencies required by teachers were highlighted by Kirschner and Woperies (2003) to include competency in making personal use of ICT; mastery of a range of educational paradigms that make use of ICT; competency in making use of ICT as mindtools; competency in using ICT as tool for teaching, competency in mastering a range of assessment paradigms which involves use of ICT; and competency in understanding the policy dimensions of the use of ICT for teaching and learning.

Successful integration of ICT in the school system depends largely on the competence of teachers towards the role of modern technologies in teaching and learning. Thus, experienced teachers and newly qualified need to be competent in using ICT effectively in their teaching (Kyriakidou, Chrisostomou, & Bank, 2000).

In a worldwide study conducted between 2016 and 2017 by the International Communications Union (ITU) based in Geneva, Switzerland on ICT Development Index (IDI) among the ASEAN countries, Singapore ranked number 18 followed by Brunei (53rd), Malaysia (63rd), Thailand (78th), Philippines (101st), Vietnam (108th), Indonesia (111th), Cambodia (128th), Myanmar (135th) and Laos (139th) (Measuring Information Society Report Volume 1, 2017 pp. 31).

ASEAN (2011) as cited by Pinprayong (2016) revealed that ASEAN countries planned to develop their ICT infrastructure and ICT manpower for economic transformation, innovation, people empowerment and engagement, human capital development, infrastructure development, and bridging the digital divide to deliver 4 key outcomes: 1) ICT as an engine of growth for ASEAN countries, 2) recognition for ASEAN as a global ICT hub, 3) enhanced quality of life for peoples of ASEAN, and 4) contribution towards ASEAN integration.

In the Philippines, a recent study reveals that most teachers have basic knowledge on ICT and needs improvement (Las Johansen *et al.*, 2017). According to Buabeng-Andoh (2012), the key factor of teacher's successful integration of ICT in the classroom teaching is professional development. The importance of ICT competence has been presented in the study to determine Thailand's ICT readiness for the ASEAN economic community. With competency in ICT and skills to support the growth of the ICT sector, human capital will be established. Thus, it will turn to support the progress of the other segments of the economy. ICT knowledge and skills are needed to help in promoting the country's

competitiveness (Wongwuttiwat, 2016). One study conducted by UNESCO about teacher ICT Education and training reveals that most ASEAN respondent countries were not systematic (UNESCO Institute for Statistics, 2014). There is a great need to consider ICT Competency for teachers as the figures below suggests.

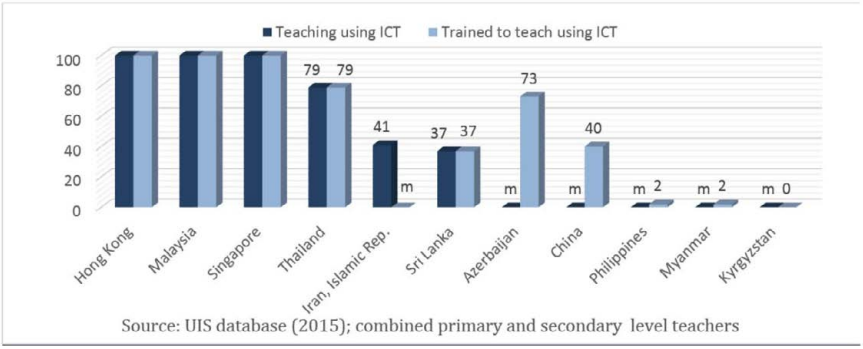


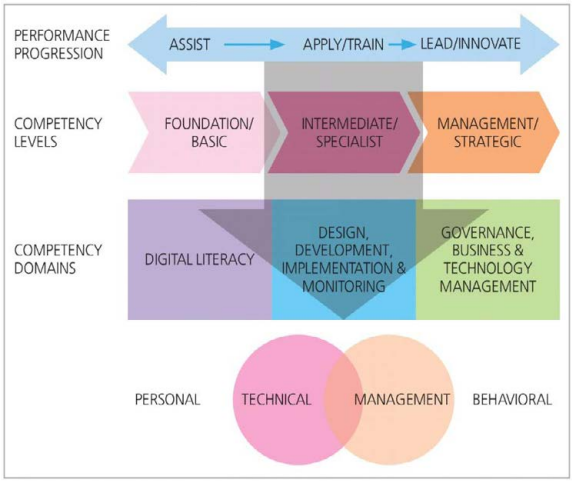
Figure 1. The proportion of combined primary- and secondary-level teachers teaching basic computer skills and subjects using ICT versus proportions trained

ICT coordinators accomplish different roles, that is, complex and demanding, yet, only a few roles will be fulfilled in practice (Kennewell, & Selwood, 1997). To achieve the educational innovation required through ICT (Watson, 2001), and to assess whether ICT coordinators realize their roles as agents of change, it is essential to have more than a theoretical overview of the possible roles ICT coordinators can fulfill. Thus, the study aimed to identify the level of competence of ICT coordinators of secondary schools in the Division of Davao del Sur.

FRAMEWORK

Information and Communications Technology (ICT) have emerged as one of the central building blocks of the society (Suliman, Raman, & Hamid, 2007). Countries are now crafting ICT Competency Standards to successfully harness human resources and enjoy the benefits of productivity gains, job creation, and economic growth. ICT competency standards is a very effective tool to facilitate a country's integration into the regional and international markets

(Hwa, 2016). The two international standards authority among the developers of standards for pedagogical ICT competency of teachers in all countries of the world "ICT Competency Framework for Teachers" (ICT-CFT) developed under the guidance of UNESCO and "Standards of ICT Competency for Teachers" developed by International Society for Technology in Education ISTE-NETS (Avdeeva, Zaichkina, Nikulicheva, and Khapaeva, 2016) is the basis for crafting the National ICT Competency Standards (NICS) by the Commission on Information and Communications Technology or CICT in the Philippines. This study adopted its theoretical underpinning to the National ICT Competency Standards (NICS) Framework for Teachers. NICS for Teachers is designed to define the competency outcomes, and the fundamental knowledge and skills required to employ in the performance of duty related to teaching in Philippine settings. It comprises performance indicators to evaluate the level of knowledge and competence of Teachers in ICT. This is very significant considering that ICT Coordinators are regarded as a change agent in today's teaching and learning process.



The NICS Competency Framework outlines the competency levels and domains, with the corresponding performance progression stages, that constitute an ICT competency standard developed by the ICT Office. Each level provides the technical, management, and personal attributes that an individual needs to perform effectively based on his/her job role. Hence, the framework allows for flexibility, adoptability and scalability that may be needed in the future.

Figure 2. NICS Competency Framework

Source: ICT Competency Standards, ICTD Case Study 4 2016. United Nations Asian and Pacific Training Centre for Information and Communication Technology for Development (UN APTCICTD)

The NICS for Teachers is a well-structured framework consist of four major domains:

- **Technology Operations and Concepts**
- **Social and Ethical**
- **Pedagogical and**
- **Professional**

Each domain is presented in a very compact form covering the following elements that serve as determinants on the level of competence of the Teacher:

- **Skill Set:** this is the key area of competency.
- **Sub-Area:** this is a more specific area of competency within the skill set.
- **Competency Descriptor:** is a brief description of the competencies covered by the Sub Area.
- **Competency Level:** this defines the level of proficiency a person must demonstrate to fulfill a specific job role.
- **Performance Indicators:** these identify the actions an individual would normally take to perform the area of competence detailed in the relevant statement. These are specific evidence of the achievement of a defined skill or knowledge level or the competent completion of a task.
- **Underpinning Knowledge:** these are the essential areas of learning and understanding that underpin the area of competence described in the standard. They also indicate broad areas of learning and development that an individual might consider to strengthen the specific area of competence.

To determine the level of competence of the ICT Coordinators of the Secondary Schools in the Division of Davao del Sur, the four competency domains (Dependent Variables) consisting different indicators of the NICS for Teachers will be tested against the demographic profile (Independent Variables) of the ICT Coordinators.

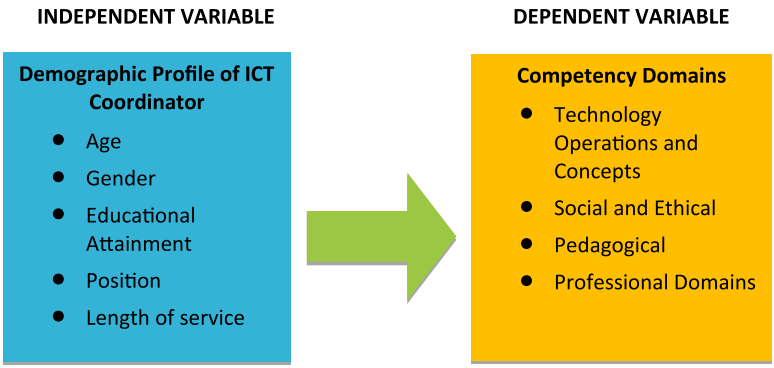


Figure.3. Schematic diagram showing the independent and dependent variables of the study

OBJECTIVES OF THE STUDY

The study aimed to: 1) Determine the socio-demographic profile of ICT Coordinators; 2) Determine the level of competence of ICT Coordinators on the four competency domains; 3) Identify the significant relationship between the socio-demographic profile and their competency level; 4) Evaluate the significant difference on the Level of Competence of ICT Coordinators against the assessment by their School Administrators.

METHODOLOGY

Research Design

The researcher used the descriptive-correlational method of investigation which involved a questionnaire to assess the Level of Competency of ICT Coordinators in the secondary school of the Division of Davao del Sur.

Research Site

This study was conducted in Davao Del Sur, Region XI, Philippines. Davao del Sur is a first class province in Davao Region. It has 14 municipalities and one chartered city. The province is subdivided into two divisions, to wit: Digos City division and Davao del Sur division. The 14 municipalities are under the Davao del Sur division which has 57 public secondary schools and fifty-seven ICT Coordinators. Fifty (50) of these schools were included in this study. The

schools are located in the following municipalities; (1) Sta. Cruz, (2) Matanao, (3) Bansalan, (4) Magsaysay, (5) Hagonoy, (6) Padada, (7) Kiblawan, (8) Sulop, (9) Malalag, (10) Sta. Maria, (11) Malita, (12) Don Marcelino, (13) Jose Abad Santos, and (14) Saranggani.

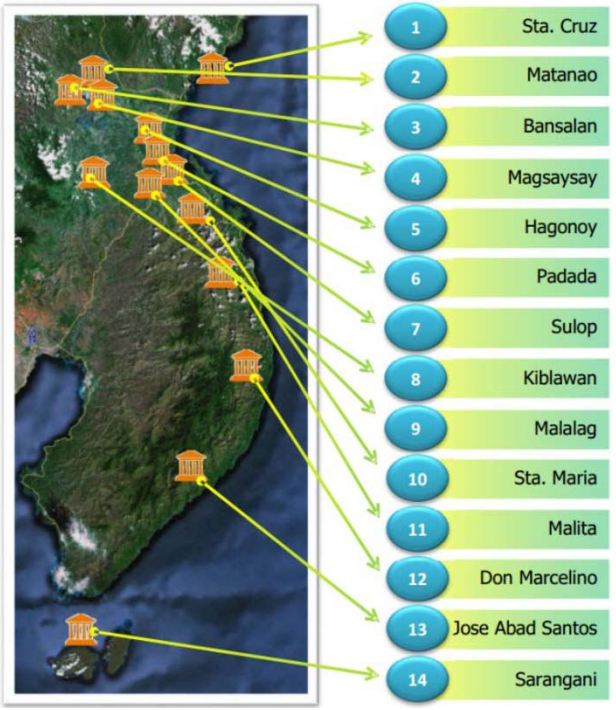


Figure 4. Map of Davao del Sur indicating the different municipalities where public secondary schools are located

Participants

The subjects of this study were the ICT Coordinators and School Administrators of the 50 public secondary schools in the division of Davao del Sur. There was a total sample of 100 respondents (50 School Administrator, 50 ICT Coordinators).

Instrumentation

The researcher used the descriptive-survey questionnaire as a main data gathering tool for the study. The instrument consists of two parts; the first part is compost of the demographic profile of the ICT Coordinators and the second part focused on the ICT Competency assessment. The National Information and Communications Technology (ICT) Standards (NICS) for Teachers developed by the Commission on Information and Communications Technology (CICT) in the Philippines was used.

The researcher sought permission from the Schools Division Superintendent. Upon approval, the researcher went to the identified schools and presented the approved letter to the school principals. Scheduled appointments were arranged for the actual survey and retrieval to give enough time for the respondent to reflect and to ensure a more accurate and quality information. This was done for the determination of respondents and for the distribution of the survey questionnaires. The descriptive design used to identify the profile of ICT Coordinators among the public secondary schools in Davao del Sur. The correlation method was used to determine the interrelationships between and among the profiles considered and level of competence of the ICT Coordinators. The comparison between the ICT coordinator and administrator's ratings along the variables considered was also included in the investigation. Furthermore, the study used frequency count, percentage, rank order, mean, Chi-square test, Pearson (r) correlation coefficient, and t-test. To determine the sample size and ease of instrument distribution the researcher used Slovin's Formula and purposive sampling techniques.

RESULTS AND DISCUSSION

As revealed in the study, most of the ICT Coordinators were male with a frequency of 30 or 60 percent while 20 or 40 percent were females. This finding means that females tend to be less interested in computers than males and use them less often in their spare time (Schaumburg, 2001). In addition, the three computer-related occupations (computer scientists, computer engineers and system analysts, and computer science and engineering) are the top career choices for males (Derbyshire, 2003). Bebetsos and Antoniou's (2008) and Kadel's (2005) studies also found that females have negative attitudes towards computers; as a result, they are often less computer literate than males. Sefyrin (2005) asserted that competence in ICT could be seen as a question of interest in ICT, where males are more interested in ICT than females.

Figure 5. Graphical presentation of ICT coordinators by gender

Age

Most of the respondents were on the bracket 26 -30 years old as evidenced by the frequency of 16 or 32 percent followed by 31 – 35 years old with twelve (12) or 23 percent. These findings reveal that some of the ICT coordinators are still young in the profession. Thus, this may imply that they have all the power and strength to face the many challenges in the job.

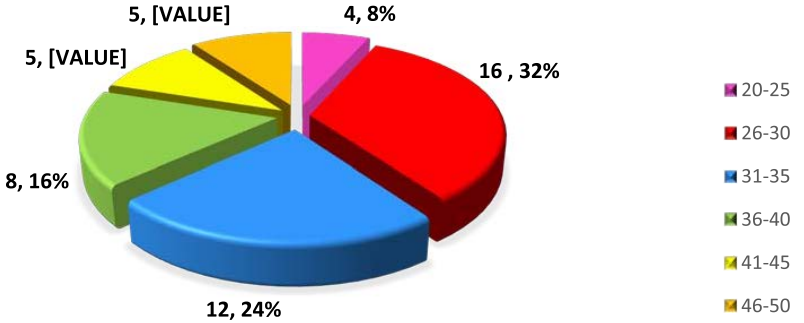


Figure 6. Graphical presentation of ICT coordinators by age

Length of Service

Majority of the respondents were still new in the service ranging from 0 – 5 years in the service with 25 or 50 percent. Nine (9) or 18 percent were in the service for 6 – 10 years, eight (8) or 16 percent were in the service for 11 – 15, five (5) or 10 percent for 16 – 20, and three (3) or 6 percent for 21 – 25 years. The findings imply that a greater number of ICT coordinators are still a neophyte in the position, but all are able and ready to face the challenges in the profession.

Cajindos' (2009) finding revealed that half of the teacher-respondents in Divine World College of Vigan were in the service for 5 – 10 years.

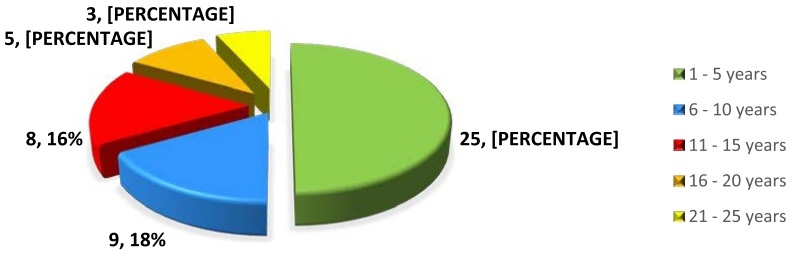


Figure 7. Graphical presentation of ICT coordinators by the length of service

Educational Attainment

As reflected in Figure 6, out of 50 ICT coordinators in the Division of Davao del Sur, 44% or 22 of the respondents were bachelor's degree holder, 32 percent or 16 respondents were master's undergraduate and 24 percent or 12 of them were master's degree holder. This means that majority of the ICT coordinators were non – master's degree holders. Besides, passing the Licensure Examination for teachers is one of the main requirements to be employed as a regular teacher. However, there is a need to grow professionally, and one of these is by enrolling or finishing a higher degree in education.

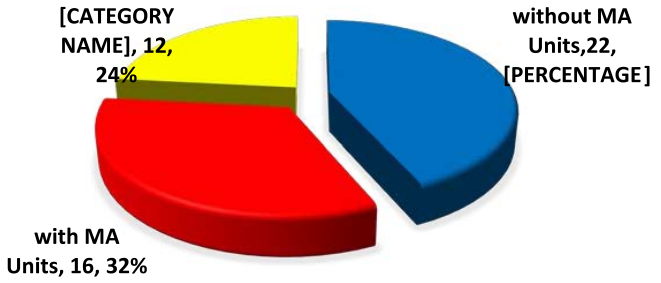


Figure 8. Graphical presentation of educational background of ICT coordinators

Plantilla Position

As regards the position of the respondents, 32 or 64 percent of the ICT coordinators were Teacher I, nine (9) or 18 percent were Teacher II, five (5) or 10 percent were Teacher III, one (1) or 2 percent is a Master Teacher I, and three (3) or 6 percent were LSB (Local School Board) paid Teacher. This implies that there is a need for ICT coordinators to grow while in service to get a higher position or rank. However, one factor for promotion is the length of service coupled with high performance at work. Villanueva (2009) found that most of the public high school teachers in the City Division of Candon were Teacher I.

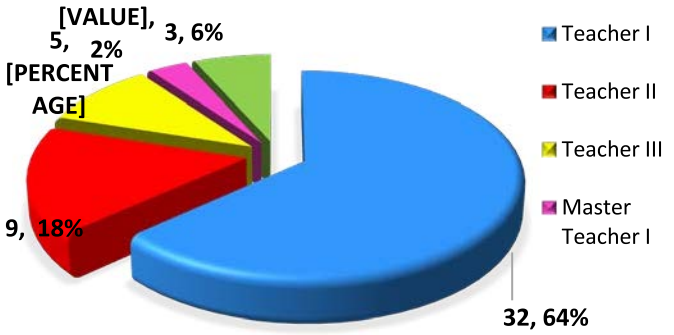


Figure 9. Graphical presentation of the Plantilla position of ICT coordinators

Level of Competence of Information and Communication Technology Coordinators in the four Competency Domains

To investigate the level of competence of ICT coordinators in the four competency domains descriptive statistics (mean score) were used.

As shown in Figure 8, the average mean of ICT coordinators in technology operations concepts showed to be intermediate with a mean score of 2.281, 2.022, and 1.754 for social and ethical, and pedagogical domains respectively. This means that the level of competence of ICT coordinator in terms of technology operations and concepts, social and ethical and pedagogical domain is satisfactory or at high levels. Personal attributes on the indicator are satisfactorily manifested. However, the main score for professional domain is 1.502 with a descriptive level "Basic". This signifies that the level of competence of ICT Coordinators in terms of professional domain is low. Personal attributes for the indicators are less manifested.

Technology operations and concepts domain include competencies related to technical operations and concept, and productivity of various ICT tools like computers and communication devices as well as the applications available online or offline. ICT coordinators in this domain satisfactorily demonstrate knowledge and skills in basic computer operation and other information devices including basic troubleshooting and maintenance. They are also intermediate in using appropriate office and teaching productivity tools. They clearly understand and effectively use the internet and network applications and resources and satisfactorily demonstrated knowledge and skills in information and data management.

Social and ethical domains include competencies related to social, ethical, legal, and human issues and community linkage. ICT coordinators intermediately understood and observed legal practices in the use of technology. They also recognized and practiced ethical use of technology in both personal and professional levels, appropriately planned, modeled and promoted safe and sound technology-supported learning environment and facilitated equitable access to technology that addresses learning, social and cultural diversity.

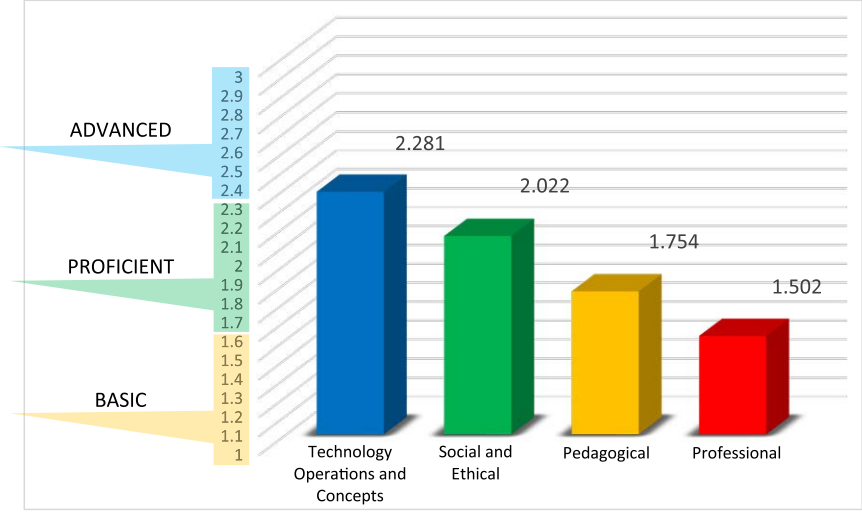


Figure 10. Graphical presentation of the level of competence of ICT coordinators in the four competency domains

Pedagogical domain includes competencies related to the use of technology in the following components of an instruction process: 1) planning and designing effective learning environments and experiences supported by technology; 2) implementing, facilitating, monitoring teaching and learning strategies that integrate a range of information and communication technologies to promote and enhance student learning; and 3) assessing and evaluating student learning and performances. ICT coordinators skillfully applied technology to develop students' higher-order thinking skills and creativity. They adequately provide performance tasks that require students to locate and analyze information and to use a variety of media to communicate results. They also competently conduct open and flexible learning environments where technology is used to support a variety of interactions among students, cooperative learning, and peer instruction. They amply evaluate usage of ICT integration in the teaching-learning process and the use results to refine and design to learning activities. They use computers and other technologies to collect and communicate information from students, colleagues, parents, and others. Lastly, they sufficiently apply technology to facilitate a variety of appropriate assessment and evaluation strategies recognizing the diversity of learner.

Professional domains include competencies related to professional growth and development, research, innovation, and collaboration. ICT coordinators in this domain basically engage in exploring and learning new and emerging technologies. They partially evaluate and reflect on the use of technology in the profession for development and innovation and partly share experiences and expertise, and halfway collaborate with peers and stakeholders in advancing the use of technology in education and beyond.

The Relationship between the Socio-Demographic Profile of Information and Communications Technology Coordinators and Their Level of Competence

As can be gleaned in Table 3, the mean score for male ICT coordinators on technology operations and concept is 2.38, 2.18 for social and ethical, 1.71 for pedagogical and 1.64 for professional. On the other hand, female ICT coordinators have a mean score of 2.14, 1.99, 1.62 and 1.33 respectively. There is a slight numerical difference on the mean score on how the male and female coordinators perceived their level of competence but when a chi-square test was performed to examine whether there is a relationship between the gender of ICT coordinators and their level of competence in the four competency domains the result revealed and failed to indicate a significant relationship between gender

and technology operations and concepts (Chi-square value = 1.181, p = 0.554), social and ethical (Chi-square value = 3.707, p = 0.157), pedagogical (Chi-square value = 3.081, p = -0.214) and professional (Chi-square value = 2.619, p = 0.270) respectively.

This is an implication that both male and female ICT coordinators had the same level of competence and gender is not an indicator of one's capability especially in the field of Information and Communications Technology.

This finding corroborates with what Danner (2013) had reported that there is no significant effect of gender on perceived ICT competencies scores. He added that the perceived ICT competencies mean of the males (M= 12.830) is higher than that of the females (M= 12.083); however, this difference is not significant enough to conclude that males perceive themselves to be more competent ICT users than the females.

Table 3. The relationship between gender and competence level of ICT coordinators

COMPETENCY DOMAIN	Male		Female		Chi-square Value	p
	Mean	Des.	Mean	Des.		
Technology Operations and Concepts	2.38	Intermediate	2.14	Intermediate	1.181	0.554
Social and Ethical	2.18	Intermediate	1.99	Intermediate	3.707	0.157
Pedagogical	1.72	Intermediate	1.62	Basic	3.081	0.214
Professional	1.64	Basic	1.33	Basic	2.619	0.270

Age and Its Relationship with Competence Level of ICT Coordinators

As shown in Table 4, the correlation for technology operations and concepts, social and ethical, pedagogical had no or negligible relationship with a coefficient of -0.043, 0.054, 0.021 respectively and a weak negative relationship was found for professional domains with a coefficient of -0.235. Further, results showed that age and competence level of ICT coordinators has no significant relationship with a p value of 0.820 for technology operations and concepts, 0.779 for social and ethical, 0.913 for pedagogical and 0.212 for professional domain. These findings suggest that ICT coordinators' age has no or negligible relationship with their level of competence in the four competency domains. This implies that regardless of age, ICT coordinators have the same or similar level of competence.

The finding relates to the study of Lam (2000) who found out that in determining whether there is a significant relationship between age and ICT competence, no significant relationship was found with (F (8,458) =.846, p=.563). In the same vein, the study supported the hypothesis indicating no significant relationship between age and the level of competence of ICT coordinators.

Table 4. The relationship between age and competence level of ICT coordinators

COMPETENCY DOMAIN	Pearson r	Description	P Value
Technology Operations and Concepts	-0.043	No relationship	0.820
Social and Ethical	0.054	No relationship	0.779
Pedagogical	0.021	No relationship	0.913
Professional	-0.235	Weak negative	0.212

Educational Attainment and Its Relationship with Competence Level of ICT Coordinators

It was found that educational attainment and technology operations concepts had a strong positive relationship with a coefficient of 0.402*, no or negligible relationship on social and ethical with a coefficient of 0.155, moderate positive relationship on pedagogical with a coefficient of 0.310 and weak positive relationship on professional domain with a coefficient of 0.262. This denotes a small relationship between the ICT coordinators' educational attainment and their competence level in the four competency domains.

In addition, results also showed that ICT coordinators' level of competence in terms of educational attainment has no significant relationship in the four competency domains with a p value of 0.028, 0.412, 0.095 and 0.161 respectively. This points out that educational attainment is negligibly related to their level of competence in the four competency domains. This suggests that educational attainment is not a sufficient factor in determining the level of competence of an individual in any field of concentration.

The result contradicts with Moffatt (1961) who pointed out that education is charged with the responsibility of helping to build competence for individuals who take their place in the society. Moreover, this fact relates to what Borghans, Green, and Mayhew, (2001) ascribed on competence as worker's level of formal education and that is most often used as a proxy for his/her level of professional competence because education is one of the mechanisms that promotes and develops workers' professional competence.

Table 5. Relationship between educational attainment and competence level of ICT coordinators

COMPETENCY DOMAIN	Pearson r	Description	P Value
Technology Operations and Concepts	0.402*	Strong positive relationship	0.028
Social and Ethical	0.155	No relationship	0.412
Pedagogical	0.310	Moderate positive relationship	0.095
Professional	0.262	Weak positive relationship	0.161

Length of Service and Its Relationship with Competence Level of ICT Coordinators

Table 6 shows the test of relationship between the length of service and the level of competence of ICT coordinators in the four competency domains. It was revealed that length of service and ICT coordinators' competence level in the four competency domains had no correlation on the technology operations and concepts domain, social and ethical, pedagogical and professional domain with a coefficient of -0.191, 0.129, 0.128 and 0.115 respectively. This tended to mean that Length of Service had "no or negligible" relationship to their level of competence in the four competency domains. Moreover, results project that length of service and level of competence of ICT coordinators had no significant relationship with a p value of 0.311, 0.496, 0.499 and 0.554 respectively. This is a clear manifestation that length of service is not a basis for assessing competence in any career or role. It may insinuate that ICT coordinators both new and old in the position can carry out the same task and obligation with the same level of competence.

The result is similar to what Wang (2006) find out that no significant relationships were derived to show academic orientation, professional development, and length of service in teaching Mathematics as predictors of teaching competence. Contradict to the findings of Teacher ICT Skills (Western Australia Dept. of Education and Training, 2006) that as teaching experience increases the average ICT competence index score decreases, from a score of 59 for teachers with less than 1-year teaching experience to 49 for teachers with 20 plus years' experience. The newer and younger teachers are bringing ICT skills and knowledge to the profession, whereas the more experienced, and older, teachers are less likely to have ICT skills.

Table 6. The relationship between length of service and competence level of ICT coordinators

COMPETENCY DOMAIN	Pearson r	Description	P Value
Technology Operations and Concepts	-0.191	No relationship	0.311
Social and Ethical	0.129	No relationship	0.496
Pedagogical	0.128	No relationship	0.499
Professional	0.115	No relationship	0.554

Plantilla Position and Its Relationship with Competence Level of ICT Coordinators

As can be gleaned in Table 7, plantilla position and ICT coordinators' level of competence were correlated to determine the relationship. It was revealed that weak positive relationship was inferred on the technology operations and concepts with a coefficient of 0.247, no or negligible relationship on social and ethical domain with only 0.009 coefficient, no or negligible relationship on pedagogical domain with a coefficient of only 0.140 and 0.217 coefficient for professional domain which denotes a weak positive relationship. Correspondingly, results also revealed that the level of competence of ICT coordinators in terms of Plantilla position had no significant relationship with a significance value of 0.188, 0.962, 0.462 and 0.250 respectively. As indicated in the study ICT coordinators regardless of position perform the same in school as ICT coordinator with fundamentally or absolutely the same level of competence.

The finding is similar to what Contessa (2012) emphasized that Rank position was weakly correlated with individual competencies and aggregated scores for all competencies as measured by faculty evaluations. Different from the result of the Teacher ICT Skills Journal (Western Australia Dept. of Education and Training, 2006) that full-time teachers are significantly more competent in ICT integration within learning than part-time / job share teachers (39% vs. 33%).

Table 7. The relationship between Plantilla position and competence level of ICT coordinators

COMPETENCY DOMAIN	Pearson r	Description	P Value
Technology Operations and Concepts	0.247	Weak positive	0.188
Social and Ethical	0.009	No relationship	0.962
Pedagogical	0.140	No relationship	0.462
Professional	0.217	Weak positive	0.250

Test of Difference on Competence Level of ICT Coordinators Against the Four Competency Domains as Rated by ICT Coordinators and their Administrators

The descriptive analysis showing the mean score of the level of competence of ICT coordinator as perceived by their school administrator and the ICT coordinators was presented in Table 8 and Figure 9.

ICT coordinators had a high level of competence as perceived by the ICT coordinators themselves and by their administrators in technology operations and concepts, social and ethical and pedagogical with a mean scores of 2.28 and 2.44, 2.02 and 2.15, and 1.75 and 1.85 respectively and had a low competence level in professional domain with a mean scores of 1.50 and 1.64.

Numerically, administrators had higher ratings than the ICT coordinators. However, the result yields a clear manifestation that generally ICT coordinators performed satisfactorily in their jobs. Their level of competence is at the "intermediate level" as revealed when rated by themselves and by their administrators in the four competency domains.

In the same table, it reveals that there is a significant difference between the ICT coordinators' competency level as rated by school administrator with regards to their perceptions on the level of competence of ICT coordinators in terms of technology operations and concepts. On the contrary, social and ethical, pedagogical and professional domain have no significant difference.

Possessing such competence, ICT coordinators are capable of imparting their knowledge and skills in the four competency domains not only to the students but also to their colleagues and to the school where they were stationed. It justifies what Tearle (2003) highlighted that ICT coordinators with strong technological and pedagogical proficiency would be the ideal and effective strategy in filling the role in staff development with reference to the staged approach. Furthermore, Wong (2008) had also stated that with highly proficient ICT coordinators, peer teachers could benefit from working under their direction and learning from their expertise both pedagogical and technological to bridge the needs of education and technology.

Table 8. Test of difference between the competence level of ICT coordinator as perceived by the ICT Coordinators themselves and as perceived by their school administrators

Competency	Ict Coordinator	Administrator	T	Sig 5%
Technology Operations Concepts	2.28	2.44	-2.016*	0.048
Social and Ethical	2.02	2.15	-1.239ns	0.220
Pedagogical	1.75	1.85	-.9310ns	0.356
Professional	1.50	1.64	-1.103ns	0.275

Legend: 1.0 – 1.6 (Basic),
1.7 – 2.3 (Intermediate)
2.4 – 3.0 (Advanced)
* – significant
ns – not significant

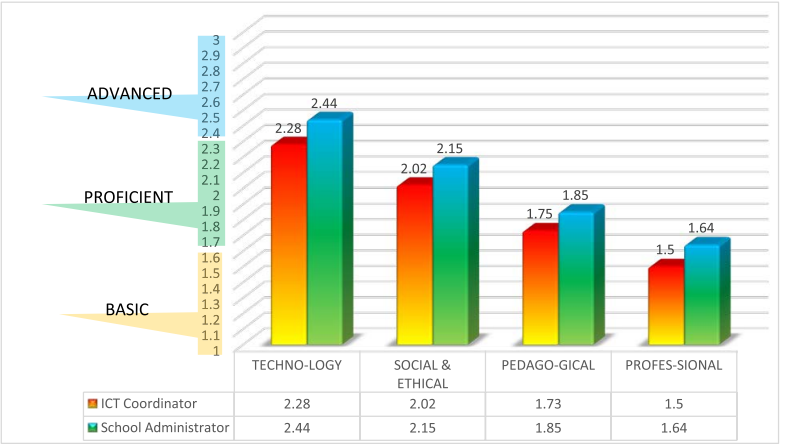


Figure 11. Graphical presentation of the level of competence of ICT coordinators as rated by ICT coordinators and administrator

CONCLUSION

ICT coordinators were intermediate on technology operations and concepts, social and ethical, and pedagogical domains, but less competent in

professional domain as the result suggests. Their demographic profiles are not a reliable basis for assessing their level of competence except for educational attainment which shows a very significant impact. Comparative results on the level of competence of ICT Coordinators against the assessment of their school administrators revealed that the ICT Coordinators in the Division of Davao del Sur possesses a high level of competence in Technology Operations and concepts. No similar studies have been conducted in the Philippines in relation to ICT Coordinator. ICT Coordinator in the Philippines is only a designation and not a position included in the Personal Services Itemization and Plantilla of Personnel, which only means, there is no fixed job description for the said position. To effectively assess the level of competence of ICT coordinators, their roles, duties, and functions must be properly defined based on their job description in the Position Description Form that every permanent government official obtained upon appointment for a permanent position. Therefore, the position ICT Coordinator should not remain as designation, but, should be included in the Plantilla of Personnel as a new regular item position.

TRANSLATIONAL RESEARCH

The findings of this study may be best translated through the conduct of trainings and seminars to update the ICT Coordinators with new trends and techniques in teaching. Likewise, the Department of Education may craft a policy to clearly define the roles and functions of ICT Coordinators in schools.

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