

Information And Communications Technology Proficiency Among Teachers in Gasi Elementary School: Basis For A Sigasig Ict Enhancement Program

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Abstract — This study assessed the proficiency in ICT among the teachers of Gasi Elementary School. As an output it developed a proposed ICT Enhancement Program for Gasi Elementary School. The program was crafted after finding out that majority of the teachers had low proficiency levels in the use of information and communications technology. This current paper utilized the Research and Development design. This study was conducted at Gasi Elementary School, Gasi, Kiamba, Sarangani Province. The respondents of the study were 8 teachers of Gasi Elementary School. To evaluate their proficiency levels, a questionnaire was developed and utilized to create individual proficiency profiles for each respondent and became the basis for the enhancement program. The study presented a clear picture of how ICT is being used in Gasi Elementary School. The results revealed that several shortcomings were needed to augment their proficiency as indicated by their poor level skills in fundamentals of computers, Microsoft PowerPoint, Microsoft Excel, and Use of the Web and their fair skills in computer peripherals and Microsoft Word. On account of the findings, this study recommend that teachers should be sent in ICT and implement the school's ICT Enhancement Program.

Keywords — Proficiency Level, Information And Communications Technology, Gasi Elementary School



I. Introduction

In a very short period of time, the development of information and communications technologies has brought about an incredible number of technological improvements worldwide. This can be seen in how quickly technological advances arrive and disappear. In a few of months, computer processing speeds are increased significantly compared to their forerunners to handle newer and considerably more hardware-demanding software. Moreover, ultra-fast smart phones with operating systems that perform as good as, if not better than, personal computers from at least 15 years ago have rendered even the most stylish cell phones nearly outdated. The Irish Computer Society (2023) states that instructors must receive information-communications technology (ICT) training. ICT proficiency is thought to facilitate various pedagogical and educational approaches. Teachers ought to be aware of the advantages of digital literacy. Teachers require substantial, ongoing exposure to ICTs in order to be able to evaluate and pick the most appropriate resources. Information and communication technology (ICT) is becoming more important in the field of education, according to Wong & Daud (2018), since students are now the most frequent users of ICT. Teachers are essential in bridging the digital divide between students and serving as the catalyst for the development of an ICT-literate society. As educators in schools, it is necessary for teachers to prepare and update all the facts to be presented in subjects using ICT facilities available in schools.

The National Competency-Based Standard and the Teachers' Strengths and Needs Assessment provide clear definitions of effective teaching, and they both call for teachers to improve their professionalism in the classroom both as a profession and as a commitment to the next generation. The National Competency-Based Standard mandates that teachers employ the proper digital resources to fulfill the state's educational goals and criteria (Lara, 2015).

Every school must give well-designed ICT workshops and trainings for their staff, particularly for the classroom and laboratory instructors to embrace and utilize the current technologies. In the context of Gasi Elementary School, most of the teachers got low average score of ICT knowledge based on their classroom observation results.

This study was conducted among teachers in Gasi Elementary School in Kiamba 2 District, Sarangani Division. The researchers are of the opinion that in order to realize the MATATAG Curriculum's objective of providing a globally competitive education in the twenty-first century, an ICT enhancement program should be implemented.



II. Methodology

Research Design

This current paper utilized the Research and Development design. Survey questionnaires were utilized to gather the relevant data describing the respondents' academic qualifications. Based on the results, the siGASIg ICT Enhancement Program for Gasi Elementary School was designed.

The main objective of this research is to come up with a siGASIg ICT Enhancement Program for teachers in Gasi Elementary School. Figure 1 presents the research design.

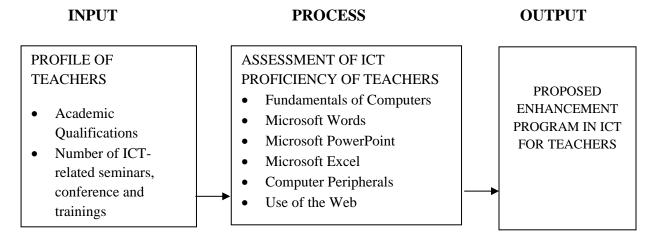


Figure 1. Research Design

Research Locale

This research will be carried out in Gasi Elementary School, Gasi, Kiamba, Sarangani Province in Region XII, Philippines. The said school is a public elementary school and has 8 teachers who rendered their valuable services in teaching profession. In addition, Gasi Elementary School is 3.5 kilometers away from national highway.

Research Participants

The participants of the study were the 8 teachers of Gasi Elementary School who are employed in Department of Education, Kiamba 2 District, Sarangani Division. The 8 teachers composed of 6 male and 2 female public elementary teachers.

Research Instrument

One survey questionnaire and an 80-item test of teachers' ICT skills were used in the study. The 80-item test was modified by the researcher from Lara (2015) but otherwise was taken from that work. Before the test is given, the instructions, words, and questions were reviewed to ensure that they were accurate and clearly presented, and that the format was suitable. The Part I of the



survey form asks about the respondents' socio-demographic profile, academic qualifications, and the number of ICT-related seminars, conferences, and trainings they have attended. The purpose of Part II was to assess the respondents' ICT proficiency. The test's subject matter covers computer basics as well as how to utilize Microsoft Office programs like Word, PowerPoint, and Excel as well as computer peripherals and the web.

In determining the proficiency level in teaching using ICT of the respondents, the following scoring range was adopted from Lara (2015).

Scoring Range	Verbal Description	Interpretation
13 – 15	Very Good	Very Good Proficiency in Fundamentals in MS Word, MS Excel and MS PowerPoint
10 – 12	Good	Good Proficiency in Fundamentals in MS Word, MS Excel and MS PowerPoint
7 – 9	Fair	Fair Proficiency in Fundamentals in MS Word, MS Excel and MS PowerPoint
4 – 6	Poor	Poor Proficiency in Fundamentals in MS Word, MS Excel and MS PowerPoint
0 – 3	Very Poor	Very Poor Proficiency in Fundamentals in MS Word, MS Excel and MS PowerPoint

Likewise, the following scheme was developed.

Scoring Range	Verbal Description	Interpretation
9 – 10	Very Good	Very Good Proficiency in Computer Peripherals and Use of the Web
7 – 8	Good	Good Proficiency in Computer Peripherals and Use of the Web
5 – 6	Fair	Fair Proficiency in Computer Peripherals and Use of the Web
3 – 4	Poor	Poor Proficiency in Computer Peripherals and Use of the Web
0 - 2	Very Poor	Very Poor Proficiency in Computer Peripherals and Use of the Web

Upon computing the mean score, the principle of rounding off was employed.

The respondents' profiles and the level of ICT competency among the teachers at Gasi Elementary School were described using frequency counts and percentage methods. ANOVA was used to determine whether there is a significant difference in the proficiency level of ICT use among the teachers. All statistical test were set at 0.05 level of significance.



Data Gathering Procedure

A methodical process will be followed in order to gather the required data: first, the researcher requested permission to conduct the study from the Superintendent of the Department of Education Schools Division of Division of Sarangani, Ruth L. Estacio PhD, CESO VI. Next, the researcher wrote another letter to the district supervisors that were covered in this study, granting permission to conduct the study with the teachers in Gasi Elementary School. After approval, survey questionnaires were distributed to the eight teachers in Gasi Elementary School, Kiamba 2 District, Division of Sarangani. All of the distributed questionnaires were retrieved, and the completed results were reviewed and totaled. Lastly, after the results were totaled, they were analyzed and interpreted in light of the study's purpose.

Ethical Considerations

There are particular implications for a crucial ethical factor in this quantitative study. These issues and concerns may be mostly related to the methodology employed in this investigation. The proper conduct of the study, confidentiality, and anonymity were the three main ethical concerns in this research project.

Participation. The participants could choose to take part without worrying about consequences, payback, or loss of benefits. Participants were informed about the purpose and benefits of the study, and their right to add to the body of knowledge was taken into consideration and anticipated. There was no coercion used to compel study participants to participate. People are free to stop participating in the survey at any time if they start to feel uncomfortable.

Informed consent. Given the limitations of the study, potential research volunteers were sufficiently informed about the objectives, methods, and benefits of the research; their affirmative response indicates that the request for their involvement was voluntary; the informed consent form required them to sign as a sign of their free will to participate in the study; the fact that the respondents were consenting adults negated the need for parental consent; the respondents' identities were kept confidential and their responses undisclosed; and they were fully aware that they could opt out of the study at any time.

Data Privacy. In this quantitative study, confidentiality and privacy were preserved by withholding the informants' personal information, such as their age, gender, occupation, and state of health conditions; as a result, their identity was kept private for security reasons. Their responses to the survey questionnaire were kept confidential and treated as such. Participants' privacy rights shall not be violated without their informed consent under the current Data Privacy Act of 2012, which safeguards this fundamental human right. One way to maintain privacy and confidentiality in this quantitative study is to allow respondents to omit their names from the survey questionnaire.



III. Results and Discussion

What is the profile of the teachers in Gasi Elementary School in terms of their academic qualifications and number of ICT-related seminars, conferences and trainings attended?

Table 1.1. The Profile of the Teachers in Gasi Elementary School in terms of Educational Attainment

Educational Attainment	Frequency	Percentage
Full-pledge doctorate	0	0.00%
Full-pledge Master's degree with doctorate units	0	0.00%
Full-pledge Master's degree without doctorate units	1	12.50%
Bachelor's degree with Master's degree unit	7	87.50%
Bachelor's degree without Master's degree unit	0	0.00%
TOTAL	8	100.00%

Table 1.1 provides a comprehensive overview of the educational attainment of teachers at Gasi Elementary School, presenting data in terms of frequency and percentage. It is evident that the majority of the teaching staff at the school have attained a Bachelor's degree with Master's degree units, accounting for 87.50% of the total. This indicates a significant commitment to furthering their education beyond the undergraduate level. On the other hand, no teachers in the school possess full-pledge doctorate degrees or full-pledge Master's degrees with doctorate units, as both categories register 0.00%. Only one teacher holds a full-pledge Master's degree without doctorate units, representing 12.50% of the sample. It is notable that there are no teachers with only a Bachelor's degree and no Master's degree units. In sum, the data suggests that the teaching staff at Gasi Elementary School, while predominantly holding Bachelor's degrees with Master's degree units, do not have a significant presence of higher degrees, indicating potential areas for professional development and growth within the school's faculty.

Table 1.2. The Profile of the Teachers in Gasi Elementary School in terms of Number of ICT-Related Seminars, Conferences and Trainings Attended

Attended	Frequency	Percentage
11 and above	0	0.00%
6 – 10	0	0.00%
1-5	8	100.00%
None	0	0.00%
Total	8	100.00%



Table 1.2 provides a snapshot of the professional development activities undertaken by teachers at Gasi Elementary School, focusing on their participation in ICT-related seminars, conferences, and trainings. The data is presented in terms of the number of such events attended by the teachers, and it is clear that there is a predominant pattern among the school's educators. Remarkably, 100% of the teachers in the sample have attended between one and five ICT-related seminars, conferences, or training sessions. This suggests a fairly uniform level of engagement with professional development opportunities related to information and communication technology. It is worth noting that there are no teachers who have attended 11 or more events, nor are there any who have attended six to ten, highlighting a concentration of participation in the lower range of the scale.

The absence of teachers who have not attended any ICT-related professional development is another noteworthy point. This indicates a strong commitment among the teaching staff to continuously upgrade their ICT skills and stay current with advancements in educational technology.

According to Irish Computer Society (2023), training in Information-Communications Technology (ICT) is essential for teachers. ICT skill is considered as an enabler of other teaching and learning practices. Teachers should understand the benefits of digital literacy. Teachers require extensive, on-going exposure to ICTs in order to be able to evaluate and select the most appropriate resources.

Table 2.1. The Proficiency Levels in Information and Communications Technology among the Teachers in terms of Fundamentals of Computers

Interval Scores	Frequency	Percentage	Description
13 – 15	0	0.00%	Very Good
10 - 12	0	0.00%	Good
7–9	4	50.00%	Fair
4–6	2	25.00%	Poor
0 - 3	2	25.00%	Very Poor
Overall Mean Score:		5.75	Poor
SD		2.31	

Table 2.1 presents the proficiency levels of teachers in Information and Communications Technology (ICT) concerning the fundamentals of computers. The table is divided into five interval scores, each representing a specific level of proficiency, along with corresponding frequencies and percentages. Notably, the data reveals that none of the teachers fall within the "Very Good" or "Good" categories, with all of them falling into the lower proficiency levels.

Specifically, 50% of the teachers are classified as "Fair," indicating a moderate level of proficiency in fundamentals of computers. Meanwhile, 25% are categorized as "Poor," implying a lower level of competence in this area. An equal percentage of 25% falls under the "Very Poor" category, reflecting the lowest level of proficiency.

The overall mean score, which is 5.75, leans towards the "Poor" category, suggesting that, on average, the teachers have a subpar understanding of fundamental computer concepts. The standard deviation (SD) of 2.31 indicates some variability in the data, signifying that there may be some differences in proficiency levels among the teachers. In summary, the table highlights that there is room for improvement in the ICT proficiency levels of these teachers, and targeted training or support may be needed to enhance their computer fundamentals.

In a study conducted by Caluza et al. (2017) which assessed the level of Information and Communications Technology (ICT) competencies of public school teachers at San Jose Central Elementary School, Division of Tacloban City, Philippines, findings showed that most of the teachers had a basic knowledge on ICT and are in need of improvement. More training is therefore needed for teachers in order for them to integrate ICT in teaching and other related task assigned to them so as to uplift and enhance the quality of education of the elementary public school.

Table 2.2. the proficiency levels in Information and Communications Technology among the teachers in terms of Microsoft Word

Interval Scores	Frequency	Percentage	Description
13 – 15	0	0.00%	Very Good
10 - 12	1	12.50%	Good
7–9	3	37.50%	Fair
4–6	4	50.00%	Poor
0 - 3	0	0.00%	Very Poor
Overall Mean Score:		7.25	Fair
SD		2.38	

Table 2.2 provides a snapshot of the proficiency levels in Information and Communications Technology (ICT) among teachers, specifically focusing on their skills with Microsoft Word. The table is divided into five intervals, each representing a different range of scores, and it presents the corresponding frequencies and percentages for each proficiency level. The highest proficiency level, labeled as "Very Good," encompasses scores ranging from 13 to 15, and interestingly, no teachers fell within this category. This suggests that there might be room for improvement in terms of achieving a very high level of proficiency in Microsoft Word among the surveyed teachers. The "Good" proficiency level includes scores between 10 and 12, with one teacher, or 12.50% of the surveyed group, falling into this category. This indicates that a minority of teachers have a commendable skill level in Microsoft Word.



The majority of teachers, 37.50% to be precise, are classified as having a "Fair" level of proficiency, which corresponds to scores between 7 and 9. This suggests that a significant portion of the surveyed teachers possess a moderate level of competence in using Microsoft Word. A further 50.00% of the teachers are classified as "Poor," with scores ranging from 4 to 6. This implies that half of the surveyed teachers have a relatively low proficiency level when it comes to Microsoft Word, indicating that additional training or support may be beneficial. Surprisingly, no teachers scored within the "Very Poor" category, which encompasses scores from 0 to 3, indicating that none of the surveyed teachers are at the lowest level of proficiency.

The overall mean score of 7.25 falls within the "Fair" category, reflecting the collective proficiency level of the surveyed teachers. The standard deviation (SD) of 2.38 suggests some variability in the scores, indicating that while the mean proficiency level is "Fair," there is a range of proficiencies among the teachers.

According to Irish Computer Society (2023), training in Information-Communications Technology (ICT) is essential teachers. ICT skill is considered as an enabler of other teaching and learning practices. Teachers should understand the benefits of digital literacy. Teachers require extensive, on-going exposure to ICTs in order to be able to evaluate and select the most appropriate resources.

Table 2.3. The Proficiency Levels in Information and Communications Technology among the Teachers in terms of Microsoft PowerPoint

Interval Scores	Frequency	Percentage	Description
13 – 15	0	0.00%	Very Good
10 - 12	0	0.00%	Good
7–9	3	37.50%	Fair
4–6	5	62.50%	Poor
0 - 3	0	0.00%	Very Poor
Overall Mean Score:		6.375	Poor
SD		1.51	

Table 2.3 provides an overview of the proficiency levels in Information and Communications Technology (ICT) specifically related to Microsoft PowerPoint among a group of teachers. The table presents interval scores, frequencies, percentages, and corresponding descriptions of their proficiency levels. Notably, no teachers in the sample achieved a "Very Good" or "Good" level of proficiency, with both categories showing 0.00% representation. The majority of the teachers fell under the "Fair" category, with 37.50% of them scoring between 7 and 9 on their ICT proficiency in Microsoft PowerPoint. However, a significant portion, 62.50%,



demonstrated a "Poor" level of proficiency, scoring between 4 and 6. There were no teachers classified as "Very Poor" with scores ranging from 0 to 3.

The overall mean score of 6.375 suggests a general trend towards the "Poor" proficiency category. The standard deviation (SD) of 1.51 indicates some variability in the proficiency scores among the teachers, though the majority remain in the "Fair" to "Poor" range. This data highlights the need for targeted training and development opportunities in Microsoft PowerPoint for these educators to enhance their ICT skills.

Wong & Daud (2018) explained that Information and communication technology (ICT) is gaining relevance in the field of education since students have emerged as the most active ICT users. Teachers play pivotal role as a medium between the students with technology and as the driving force in creating an ICT-literate society. As educators in schools, it is necessary for teachers to prepare and update all the facts to be presented in subjects using ICT facilities available in schools.

Table 2.4. The Proficiency Levels in Information and Communications Technology among the Teachers in terms of Microsoft Excel

Interval Scores	Frequency	Percentage	Description
13 – 15	0	0.00%	Very Good
10 – 12	1	12.50%	Good
7–9	2	25.00%	Fair
4–6	4	50.00%	Poor
0 - 3	1	12.50%	Good
Overall Mean Score:		6.375	Poor
SD		2.39	

Table 2.4 presents the proficiency levels of teachers in Information and Communications Technology (ICT) specifically in Microsoft Excel. The table is organized into intervals of scores, with corresponding frequencies and percentages, offering insights into the distribution of ICT skills among the teachers. The majority of teachers, comprising 50% of the sample, fell within the proficiency range of 4 to 6, which is classified as "Poor" in terms of their Microsoft Excel skills. This suggests that a significant portion of the teacher population may benefit from additional training or support in using Excel effectively for educational purposes. Following closely, 25% of teachers scored in the range of 7 to 9, categorized as "Fair," indicating a moderate level of proficiency. Additionally, 12.50% of teachers scored between 10 to 12 and 0 to 3 signifying a "Good" level of proficiency.

The overall mean score of 6.375 falls within the "Poor" category, further emphasizing the need for improvement in Excel skills among the teacher cohort. The standard deviation (SD) of 2.39 indicates some variability in scores, implying that while the majority falls into the "Poor"



category, there are still some variations in individual proficiencies. In conclusion, this table underscores the importance of targeted training and professional development opportunities to enhance teachers' ICT skills, particularly in Microsoft Excel, to better equip them in delivering quality education and managing data effectively in a technology-driven educational landscape.

According to the research led by Singhavi & Basargekar (2020) which aimed to identify the factors affecting the perceived proficiency of teachers in using ICT. The study revealed that positive perception about ICT as a teaching learning tool positively and significantly impacted teachers' perceived proficiency to use ICT. Moreover, many of the factors such as availability of computer equipment and resources and ICT related digital content contributes to positive proficiency.

Table 2.5. The Proficiency Levels in Information and Communications Technology among the Teachers in terms of Computer Peripherals

Interval Scores	Frequency	Percentage	Description
9 – 10	0	0.00%	Very Good
7 – 8	1	12.50%	Good
5–6	3	37.50%	Fair
3–4	3	37.50%	Poor
0 - 2	1	12.50%	Very Poor
Overall Mean Score:	·	4.375	Fair
SD		1.69	

Table 2.5 presents proficiency levels in Information and Communications Technology (ICT) among teachers, specifically focusing on their proficiency in handling computer peripherals. The table categorizes teachers into five proficiency intervals based on their scores, ranging from 0 to 10. The data indicates that none of the teachers scored in the highest proficiency level of 9-10, representing "Very Good" proficiency. Instead, the majority fall within the "Fair" proficiency level, with 37.50% of teachers scoring in the intervals of 5-6 and 3-4. This suggests that a significant portion of the teachers possess a moderate level of proficiency when it comes to computer peripherals. Additionally, 12.50% of teachers are categorized as "Good" and "Very Poor" each, with a smaller 12.50% classified as "Poor," indicating a range of proficiency levels within the "Fair" category.

The overall mean score of 4.375 further supports the assessment of "Fair" proficiency among teachers in terms of computer peripherals. The standard deviation (SD) of 1.69 indicates some variability in proficiency scores within the dataset, emphasizing the need for targeted training or support to help teachers improve their ICT skills with computer peripherals. Overall, this table provides valuable insights into the current state of ICT proficiency among teachers, highlighting areas where improvement and support may be necessary.



Pagatpatan (2021) aimed to determine the teachers' digital proficiency level in Information and Communications Technology to serve as basis for the development of techno-learning program. According to the results of the study, ICT teachers are proficient in their knowledge and skills in the four areas of ICT such as Personal Computer Operation, Computer Systems Servicing, Desktop Publishing and Photo Editing. Moreover, there was a significant relationship between the profile of the respondents and their levels of digital proficiency in ICT.

Table 2.6. The Proficiency Levels in Information and Communications Technology among the Teachers in terms of Use of the Web

Interval Scores	Frequency	Percentage	Description
9 – 10	0	0.00%	Very Good
7 – 8	0	0.00%	Good
5–6	4	50.00%	Fair
3–4	3	37.50%	Poor
0 - 2	1	12.50%	Very Poor
Overall Mean Score:		3.75	Poor
SD		1.28	

Table 2.6 presents the proficiency levels of teachers in Information and Communications Technology (ICT) with respect to their use of the web. The table is divided into five intervals based on the scores, with corresponding frequencies and percentages for each proficiency level. It's evident that none of the teachers fall into the highest proficiency levels, with no respondents scoring in the 9-10 range (Very Good) or the 7-8 range (Good). The majority of teachers, constituting 50% of the sample, fall into the Fair category, scoring between 5 and 6. This suggests that half of the teachers have a moderate level of proficiency in using the web for ICT purposes.

Moving down the proficiency scale, 37.5% of teachers fall into the Poor category, with scores between 3 and 4, indicating a notable proportion struggling with web-based ICT usage. Furthermore, 12.5% of teachers are classified as Very Poor, scoring between 0 and 2, indicating a significant need for improvement in their web-based ICT skills. The overall mean score of 3.75 falls within the Poor range, which is consistent with the distribution of scores, highlighting a general need for enhancing web-related ICT skills among the surveyed teachers.

The standard deviation (SD) of 1.28 suggests some variation in the proficiency levels among the teachers, with scores spread out to a moderate extent around the mean. In conclusion, this table underscores the importance of targeted training and professional development opportunities for teachers to improve their web-based ICT skills, ultimately enhancing their ability to integrate technology effectively into the educational process.

In an undertaking led by Syahid et al. (2018) which assessed the ICT competences of primary school teachers, findings revealed that only half of the primary school teachers possessed good pedagogic competence. They only do conventional classroom management and have not



optimally utilized ICT for learning activities in primary schools. This study emphasized and discussed the importance of ICT competence and how to develop it for primary school teachers.

3. Is there a significant difference in the proficiency levels in ICT among the teachers when grouped according to their academic qualifications and ICT-related seminars, conferences and trainings attended?

Table 3. Significant difference in the proficiency levels in ICT among the teachers when grouped according to academic qualifications and ICT-related seminars, conferences and trainings attended

Variable	t-value	p-value	Remarks
Academic qualifications	23.8	0.005	With Significant Difference
ICT-related seminars, conferences and trainings attended	1.45	0.358	Without Significant Difference

Table 3 presents the results of a study examining the proficiency levels in Information and Communication Technology (ICT) among teachers, categorized based on their academic qualifications and their participation in ICT-related seminars, conferences, and trainings. The table includes three key components: the variable being analyzed (academic qualifications and ICT-related seminars, conferences, and trainings attended), the t-value, and the p-value, along with remarks summarizing the significance of the findings. In the first category, which considers academic qualifications, the t-value is 23.8 with a corresponding p-value of 0.005. The p-value is below the conventional significance level of 0.05, indicating that there is a significant difference in the proficiency levels in ICT among teachers when grouped by their academic qualifications. This suggests that teachers with varying academic qualifications, such as different degrees or certifications, demonstrate differing levels of ICT proficiency. It is crucial to note that this difference is statistically significant, which implies that the variation in ICT proficiency is not likely due to random chance but is associated with their academic qualifications.

On the other hand, when analyzing the impact of participation in ICT-related seminars, conferences, and trainings, the table reveals a t-value of 1.45 and a p-value of 0.358. In this case, the p-value is greater than 0.05, indicating that there is no significant difference in ICT proficiency among teachers who have attended these events and those who have not. Therefore, the data suggests that participation in ICT-related professional development activities, such as seminars and conferences, does not appear to have a significant influence on teachers' ICT proficiency levels, highlights that the proficiency levels in ICT among teachers vary significantly based on their academic qualifications. However, there is no significant difference in ICT proficiency when considering their participation in ICT-related seminars, conferences, and trainings. These findings can inform educational institutions and policymakers in designing targeted professional



development programs to enhance ICT skills among teachers, particularly for those with differing academic qualifications.

In a study conducted by Caluza et al. (2017) which assessed the level of Information and Communications Technology (ICT) competencies of public school teachers at San Jose Central Elementary School, Division of Tacloban City, Philippines, findings showed that most of the teachers had a basic knowledge on ICT and are in need of improvement. More training is therefore needed for teachers in order for them to integrate ICT in teaching and other related task assigned to them so as to uplift and enhance the quality of education of the elementary public school.

4. Proposed ICT Enhancement Program

The ICT (Information and Communications Technology) ability of teachers plays a pivotal role in the modern education landscape. It directly influences how effectively teachers can utilize technology to enhance their teaching methodologies and engage students in a digital-driven world. In the context of Gasi Elementary School in Kiamba 2 District, Sarangani Division, a research project was developed to assess and enhance the ICT abilities of its teachers through an ICT enhancement program. This endeavour recognizes the significance of equipping educators with the necessary digital skills to provide quality education. The "ICT Proficiency Enhancement Workshop Series of the siGASIg Teachers" represents a significant step toward preparing teachers at Gasi Elementary School for the challenges and opportunities presented by ICT in education. This program underscores the school's commitment to providing a high-quality and technology-enhanced learning environment for its students.

IV. Conclusion

In conclusion, the assessment of teachers' proficiency in the fundamentals of computers shows that there is room for improvement. None of the teachers achieved a "Good" or "Very Good" rating, with the majority falling into the "Fair" category. This suggests a need for additional training and development in basic computer skills to enhance their ICT proficiency. In the context of Microsoft Word proficiency, the results indicate a fair level of competency among teachers, with the majority rated as "Poor" and "Fair." While there is room for improvement, it is encouraging that some teachers have achieved a "Good" rating. This suggests that further training and support in Microsoft Word may help enhance their skills. The proficiency levels in Microsoft PowerPoint are somewhat concerning, as the majority of teachers are categorized as "Poor." This indicates a significant gap in knowledge and skills in creating presentations using this software. Teachers would benefit from targeted training and resources to improve their proficiency in this essential tool. Similar to Microsoft PowerPoint, the proficiency levels in Microsoft Excel are less than desirable, with the majority of teachers falling into the "Poor" category. However, there is a small percentage of teachers rated as "Good." To bridge the gap, additional training and support in Excel are necessary to enhance their spreadsheet skills. Proficiency in computer peripherals is



relatively balanced, with teachers distributed across various categories, ranging from "Good" to "Very Poor." This suggests that while some teachers have a good understanding of computer peripherals, others may require more training and support. Focusing on areas of weakness can help improve overall proficiency in this domain. The table on the use of the web indicates a general lack of proficiency among teachers, with the majority rated as "Fair" or "Poor." Very few fall into the "Good" category, and some are even rated as "Very Poor." This underscores the importance of providing training and resources to help teachers effectively utilize web-based tools and resources in their teaching practices. The analysis in Table 3 reveals a significant difference in ICT proficiency among teachers based on their academic qualifications. This suggests that teachers with higher academic qualifications tend to have better ICT skills. On the other hand, the absence of a significant difference based on ICT-related training implies that additional training and seminars may not be the sole determinants of ICT proficiency. A holistic approach that combines academic qualifications and targeted training is necessary to improve overall ICT competency among teachers.

Contributions of Authors

The authors confirm the equal contribution in each part of this work. All authors reviewed and approved the final version of this work.

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Conflict of Interests

All authors declare that they have no conflicts of interest.

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