Research Article

Teachers' Perception of Instructional Technology Application and Integration Competence to the Teaching-Learning Process

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ABSTRACT

Teachers' instructional technology competence is necessary for this information age. With this, teachers need to equip themselves with the knowledge, skills, and competence to apply instructional technologies to deliver the teaching-learning process. This study investigated the teachers' perception of instructional technology application and integration competence in the teaching-learning process of a selected high school in Candaba, Pampanga, Philippines. This study used descriptive survey research wherein 19 high school teachers participated voluntarily. The researchers also prepared and validated a questionnaire specifically for this study. Data analysis includes the following statistical treatments like frequency, percentage, mean, and Chi-Square. Results of the study showed that the ICT competence of the teachers is on the average level. All the selected teachers integrated technology into teaching. They were highly competent in using MS Word and MS PowerPoint and, on average competent in MS Excel and the Internet. In addition, teachers also encountered problems in using ICT in teaching. Furthermore, teachers perceived that technology in teaching significantly impacts students' learning. It made the students interested and focused, enhanced their teaching activities, and helped them deliver the lesson/s effectively. The study recommended that teachers have training on ICT to equip them with the knowledge and skills to use new programs/applications. The administration should also design a long-term plan for ICT and continue encouraging and training teachers to integrate ICT into teaching.

***Keywords*:** *Instructional Technology Application, Integration Competence, Teacher's Perception, Teaching-Learning Process*

Introduction

Today's generation is identified as the software and technology generation. Most young people have been exposed to computers, gadgets, and other related technology. Also, students in elementary and secondary schools typically have access to computers either in the classroom, computer laboratory, or computer shops in the community. It also includes playing video games and computer games at home.

The amount of time spent using computers varies from one school to another. Access to these technologies has brought about significant changes in students' lives. With the advent of technology, students could have instant access to readily available information on the Internet. The widespread use of technology has been instrumental in improving the learning styles, lives, and works of schooling individuals.

Teachers' instructional technology competence is necessary for the Information Age. To be influential mentors in the technology-based teaching environment, teachers should augment their subjects and instructional technology competencies (Fabian, 2006). Teachers' instructional technology proficiency is significant to keep the graduates competitive in the global market (Ticzon & Que, 2006). Consequently, it could help boost the country's competitiveness as it improves the efficiency of production processes across sectors. This idea also applies to industries, accelerates the growth of knowledge-based services, and empowers people to access unprecedented sources of information and markets (Angara, 2008). In Bayucca's (2020) study, teachers have proficient ICT skills. In another paper, school administrators, on the other hand, have varied digital competencies (Asio & Bayucca, 2021).

However, teachers need to equip themselves with the knowledge and skills to use these technology-based education environments. It is essential not just for their work efficiency but, more importantly, for this medium in the delivery of instruction (Fabian, 2006). In some related studies, information, media, and technology skills were satisfactorily achieved by teachers/ educators (Asio & Riego de Dios, 2019; Asio & Riego de Dios, 2018). This concept is part and parcel of their professional growth and development (Asio et al., 2019; Asio & Jimenez, 2020).

The use of technology in the K to 12 Basic Education Program as a comprehensive student-based learning tool has grown with the increased availability of computers and internet access. One research paper stated that more than 70 percent of its surveyed respondents have internet connectivity (Asio et al., 2021). Multimedia programs are being utilized by the students further to improve learning, word processors and presentation software to create papers and electronic presentations, and the Internet to search for information. Asio et al. (2021) also disclosed that the smartphone was the most utilized gadget for learning. Likewise, teachers also use these programs to create lesson plans, research topics, prepare and submit reports, and other required school information. However, these activities may affect the teachers' overall well-being like sleep, social, and emotional aspects, among others (Asio & Jimenez, 2021a)

High school campuses are encouraged to use and integrate computer use in daily classroom activities. On the other hand, teachers are motivated to use computers in preparing handouts, test items, and examination questions, computing grades and reporting grades preparing and delivering classroom presentations and lectures creating and maintaining course activities (Morley & Parker, 2008). Thus, teachers must further develop their competence in using technology such as MS Word, MS Excel, and MS PowerPoint in the teaching-learning process.

During the COVID-19 pandemic, the learning delivery modalities have significantly changed. Based on DepEd Order No. 12, s. 2020 or Learning Continuity Plan, the learning delivery modalities that schools can adopt may be one or a combination of the following, depending on the COVID-19 restrictions and the particular context of the learners in the school or locality: 1) face-to-face; 2) distance learning with three types: Modular Distance Learning (MDL), Online Distance Learning (ODL), and television (TV)/Radio-Based Instruction; 3) Blended learning which refers to a learning delivery that combines face-to-face with any or

mix of online distance learning; and 4) home-schooling. In the study by Asio and Jimenez (2021b), the Alternative Delivery Mode learning resources teachers developed exceeded the Department of Education's total number of MELCs. Jimenez (2020) also emphasized using contextualized e-learning resources as a tool for a more robust academic platform.

Secondary schools in Candaba, Pampanga, Philippines, advocated using technology in integrating lessons/activities in the teaching-learning process and the delivery of instruction. In support of this call, the schools purchased LCD projectors and computers to aid the teachers in delivering instruction. The schools subscribed to an internet connection. Moreover, the school administration also encourages the teachers to attend training to equip them with the necessary knowledge and skills in instructional technology. In a related study by Jimenez (2021), the researcher revealed the different experiences and challenges that teachers met and the different solutions they made to implement the alternative delivery model.

Based on this premise, the researchers initiated a study that will determine the level of instructional technology application and integration competence of teachers in select schools in Candaba, Pampanga, Philippines. From the result of this study, the researchers intend to help the selected schools improve the basic requirements to help improve the practice of instructional technology and the integration competence of the teachers.

Theoretical and Conceptual Framework

DepEd Computerization Program (DCP) provided the public schools with appropriate technologies that would aid the teaching-learning process and meet the challenges of the 21st century. (DO 78, s. 2010).

The Advance technology in education has resulted in new efforts to implement the potential use of the multimedia system as a means of upgrading students' learning in secondary schools. According to the DepEd ICT4E Strategic Plan, ICT plays a paramount role in creating a new and enhanced model of teaching and learning where education happens anytime, anywhere. To attain this vision, the Department of Education, through the DepEd Computerization Program (CDCP), provided the public schools with suitable technologies that would magnify the teaching-learning process and meet the challenges of the 21st century (DO 78, s. 2010). If teachers have competence in using different ICT programs, they can integrate technology in the different learning areas; thus, effective utilization of information and communication technology among teachers can be achieved. More so, instructional technology application can be attained when teachers are aware of and trained on the different software programs found helpful such as MS Word/Open Text Document; MS Excel/Open Office Spreadsheet; MS Access; MS PowerPoint/Open Office Presentation; Window and Network Navigation; MS Outlook/Google/Yahoo; Internet; and General Computer Use. Thus, this study.

Statement of the Problem

The study aimed to determine the level of instructional technology application, and integration competence and problems experienced of selected teachers and their perceived effect on the teaching-learning process.

Specifically, the researchers sought answers to the following questions:

1) In what area/s do the teacher integrate technology most?
2) How often the teachers use the instructional technology?
3) What computer gadgets and internet connectivity the teachers have access to?
4) What concerns/problems do the teachers encounter in using instructional technology?
5) How do the teachers rate their technical competence in the different software programs or commands/applications to operate in terms of:
   a) MS Word/Open Text Document
   b) MS Excel/Open Office Spreadsheet
   c) MS Access
   d) MS PowerPoint/Open Office Presentation
   e) Windows/Network Navigation
   f) e-Mails
   g) Other software or platforms
   h) Internet/Worldwide Web

    i)   General Computer Use?

6) What are the teachers' perceived effect of instructional technology application and integration on the teaching-learning process?

Methodology
Research Design
This study used a descriptive-correlation research design with survey as the primary instrument for gathering data. Asio (2021) states that a correlation research design analyzes the relationship between one or more variables. The researchers aim to find out the level of instructional technology application, and integration competence and problems experienced of selected teachers. The study also would want to know the effects of instructional technology application and the integration competence of teachers in the teaching-learning process. Thus, the said research design is appropriate for the study.

Sampling of the Study
The population for the study was the school teachers of one public high school located at Candaba, Pampanga, Philippines. Using a convenience sampling technique, the researchers determined that 19 high school teachers could participate voluntarily in the said survey. Inclusion criteria include that the respondents should be a bona fide high school teacher who were teaching for quite some time already in the said institution and must have the basic grasp of instructional technology application.

Instrument
The researchers prepared a structured questionnaire to answer the questions on the application and integration of technology. Part I of the questionnaire sought answers on the profile of the respondents. Part II-IV provided answers on the teachers' capabilities to use computer programs. The teacher-respondents rated themselves on their ability to use computer applications. The said questionnaire has undergone validity process from five experts in the field to confirm whether the items included in the instrument were appropriate and accurate. Prior to the actual data gathering, it was first subjected to pre-test among private school teachers to establish the credibility of the instrument.

Data Analysis
The gathered data were subjected to analysis and interpretation. The data were encoded in MS Excel to facilitate the computation and analysis. Descriptive statistics were used in analyzing the data as required in answering the posed questions and as indicated by the descriptive quantitative survey method. The mean formula was used in determining the weighted average on the levels of application, integration, and software competence of teachers. The Chi-square formula was used in determining the impact of using technology in teaching. Likewise, percentages and ranking were also used in interpreting the gathered data.

Results and Discussions
The succeeding discussions below present the result of the investigation. Data were presented using tables to facilitate an easy and clear discussion of the results.

Table 1. Frequency and Percentage Distribution by Subject Areas where Technology is Used

Subject Area	f	%
English	4	21.05
Mathematics	3	15.69
Science	2	10.53
Filipino	3	15.79
Araling Panlipunan	3	15.79
Edukasyon sa Pagpapahalaga	5	26.32
MAPEH	1	5.26
Music	1	5.26

Subject Area	f	%
Arts	1	5.26
Physical Education	1	5.26
Health	1	5.26
Technology & Livelihood Education	4	21.05

Table 1 presents the subject areas where select teachers integrate technology in teaching. The table revealed that all teachers make use of technology in their delivery of instruction. Most of the respondents gave multiple responses as they were handling different subject areas to complete the number of teaching hours per day.

Table 2. Frequency and Percentage Distribution of the Number of Times Technology is used in teaching

Times of Use	f	%
Every class hour	2	10.52
Once a day	4	21.05
Twice a day	5	26.32
Three times a day	3	15.79
Once a week	8	42.11
Twice a week	4	21.05
Three times a wee	6	31.58
Once a month	3	15.79
Twice a month	1	5.26
Other answer (it depends on the lessons/as the need arises)	9	47.37

Table 2 shows that select teachers used technology in their teaching depending on the lesson or as the need arises (47.37%). Some teachers used it once a week (42.11%); and three times a week (31.58%). It is important to note that none admitted they were not using the technology as seen in Table 2.

Table 3 presents the responses of the select teachers indicating the level of ownership of the type of computer. A laptop/notebook computer is the type of computer owned/used by the majority (13) of the teachers either at home or at school. Eight of them had a desktop while three teachers answered that they had a pocket PC/PDA and five had both a laptop and a desktop. This implied that most of the teachers have a background in using computers.

Table 3. Type of Computer Owned/Use, Place, and Ways of Accessing the Internet by the Teachers

Computer Types	f
Desktop	8
Laptop/Notebook	13
Desktop and Laptop	5
Pocket PC/PDA	3
Place where the faculty members have access of the Internet	
Home	6
School	3
Internet Café	10
Ways of Accessing the Internet	
Dial-up	4
Unlimited DSL	9
Internet Card	3

The internet café is the primary access of internet use by the teachers (10) even though they have desktops, laptops or notebooks, pocket PCs/PDAs at home. Perhaps, they do not want to be burdened with paying monthly internet bills or their areas have low visibility to access the Internet.

On the other hand, six respondents can access the Internet at home because of the availability of affordable internet services offered by various internet providers while three teachers can access the Internet at school using the WI-FI connection of the co-teachers since the school has no access to an internet connection.

Unlimited DSL is a way by which most of the teachers (9) subscribe to access the Internet anytime they want. Others used internet cards and dialups to regulate the amount spent on using the Internet. Other teachers gave multiple responses to questions.

Table 4 shows that the select teachers, in general, were highly competent in using the MS Word Applications; however, they were only average/competent in creating forms with fields.

Table 4. Competence of Respondents on Using MS Word Applications

Applications	WP	WA	Remarks
Create and print basic document	62	3.26	Highly Competent
Format a document (tabs, fonts, etc.)	63	3.32	Highly Competent
Insert and adjust graphics	63	3.32	Highly Competent
Create and format tables	64	3.37	Highly Competent
Create and merge documents	63	3.32	Highly Competent
Create a table of contents and index	68	3.58	Highly Competent
Create forms with fields	50	2.63	Competent
Total Weighted Average	**433**	**3.26**	**Highly Competent**

This implied that they were well-versed in using the MS Word program, which was considered to be the most commonly used computer application in doing school reports, encoding test questions, writing letters/memos, preparing paper works, preparing students for activities, and the like.

Table 5. Competence of Respondents in Microsoft Excel

Applications	WP	WA	Remarks
Create and print a simple spreadsheet	62	3.26	Highly Competent
Format a spreadsheet	63	3.32	Highly Competent
Use formulas, graphs, pictures, etc.	59	3.11	Competent
Insert and format a graph	55	2.89	Competent
Use worksheets in workbooks	53	2.79	Competent
Use in classroom activities (especially Science and Math)	53	2.79	Competent
Total Weighted Average	**345**	**3.03**	**Competent**

As shown in Table 5, generally, the select teachers could use MS Excel on an average level. They were highly competent in creating, printing, and formatting simple spreadsheets since it only involves simple typing or encoding information. Whereas they were only average/competent in using formulas, graphs, and pictures, inserting and formatting graphs, using worksheets in workbooks, and using them in classroom activities because they are usually used in Science and Mathematics subjects.

The results show that the teachers had backgrounds, knowledge, and skills in using MS Excel. However, they still need additional training in some applications of MS Excel where they showed average competence.

Table 6. Competence of Respondents in Microsoft Access

Applications	WP	WA	Remarks
Create a database	57	3.00	Competent
Sort data	61	3.21	Competent
Create and use queries	56	2.95	Competent
Create and use reports	55	2.89	Competent
Mail Merge data for labels and letters	56	2.95	Competent
Total Weighted Average	**265**	**3.00**	**Competent**

Table 6 reveals that the teachers were only on the average level in using MS Access. The reason for this is that such an application is commonly used for business-related courses. However, it can be noted that some teachers were somehow knowledgeable in using the said application, but they still need further training on creating databases, sorting data, creating, and using queries and reports, and using mail merge data for tables and letters so that they can utilize them in their instruction and for research functions.

Table 7 shows that generally, the teachers were highly competent in using the MS Power-Point Application, particularly in adding animations, sounds, video, and audio, inserting clip arts and objects in their presentations, and creating basic presentations. Whereas they were only average/competent in printing and mailing presentations and in creating tables and charts.

Table 7. Competence of Respondents on MS PowerPoint

Applications	WP	WA	Remarks
Create a basic presentation	63	3.32	Highly Competent
Insert clip arts and objects	64	3.37	Highly Competent
Add animations, sounds, video and audio	65	3.42	Highly Competent
Create tables and charts	59	3.11	Competent
Print and mail presentation	61	3.21	Competent
Total Weighted Average	**312**	**3.28**	**Highly Competent**

This implies that the teachers can use the basic applications of MS PowerPoint, but they need further training on some complex features which are also imported into Power-Point presentations.

Table 8. Competence of Respondents on MS Windows and Network Navigation Applications

Applications	WP	WA	Remarks
View folder and file locations	54	2.84	Competent
Create and organize folders and files	58	3.05	Competent
Search for file using "Find"/ "Search"	58	3.05	Competent
Copy files from one location to another	59	3.11	Competent
Total Weighted Average	**229**	**3.01**	**Competent**

Table 8 illustrates how the teachers rated themselves as competent in using MS Windows and Network Navigation. This implies that they were knowledgeable and had skills in the said applications because these applications were usually used in the MS Word and MS Power-Point Applications.

Table 9 shows that in general, the teachers were on the average level in using the Google application. Nevertheless, in using such programs, they were highly competent inputting addresses and sending Emails. This meant that the teachers had the skills in using the Google Search Engine.

Table 9. Competence of Respondents in Using Google

Applications	WP	WA	Remarks
Address and send E-mail	63	3.32	Highly Competent
Enter appointment in calendar	57	3.00	Competent
Create and edit a contact/groups	56	2.95	Competent
Create and edit a note	59	3.11	Competent
Customizing view	60	3.16	Competent
Total Weighted Average	**229**	**3.01**	**Competent**

However, they still need further training to enhance their skills in entering appointments in the calendar, creating, and editing contacts or groups, creating and editing notes, and customizing views. Such applications are important in searching for the needed information and in doing research work.

Table 10. Competence of Respondents in Using Other MS Office Applications

Applications	WP	WA	Remarks
Microsoft frontpage	32	1.68	Less Competent
Microsoft Publisher	33	1.74	Less Competent
Moviemaker	27	1.42	Less Competent
Dreamweaver	26	1.37	Less Competent
Adobe Flash	24	1.26	Less Competent
Total Weighted Average	**142**	**1.49**	**Less Competent**

Table 10 shows that the teachers had less competence in using applications such as From Page, MS Publisher, Moviemaker, Dreamweaver, and Adobe Flash. This implies that they seldom use these applications. However, they can be trained on these applications.

Table 11 illustrates that the competence of teachers in using the Internet was generally fair. As seen on the table, they were competent in locating search engines like Google and Yahoo, locating/browsing websites, and composing, sending, and receiving emails. On the other hand, they were only fairly competent in creating and organizing Favorites, creating internet-based assignments, participating in chat or webcam sessions, and creating a Webpage.

Table 11. Competence of Respondents in Using the Internet

Applications	WP	WA	Remarks
Locate/Browse Websites	48	2.53	Competent
Use Search Engines (Google, Yahoo)	49	2.58	Competent
Create and organize Favorites	36	1.89	Fairly Competent
Compose, send, and receive e-mails	48	2.53	Competent
Create a web page	36	1.89	Fairly Competent
Create internet-based assignments	32	1.68	Fairly Competent
Participate in discussion forums or bulletin boards	26	1.37	Less Competent
Participate in chat or webcam sessions	34	1.79	Fairly Competent
Total Weighted Average	**309**	**2.03**	**Fairly Competent**

This reflected that they were somehow knowledgeable on the basic application of the Internet but still needed further training on some complex internet applications.

Table 12. Competence of Respondents in Using Other Computer Application

Applications	WP	WA	Remarks
Create handouts for students	63	3.32	Highly Competent
Use a multimedia encyclopedia	56	2.95	Competent
Can self-learn using Online Help	51	2.68	Competent
Create pictures or drawings	54	2.84	Competent
Use a digital camera	54	2.84	Competent
Use a scanner	56	2.95	Competent
Total Weighted Average	**334**	**2.93**	**Competent**

As shown in Table 12, the teachers were generally on the average level in using other computer applications. They only showed highly competent handouts for students. This implies that although they were already skilled in using the basic applications, they still need to acquire further training in some complex applications to use other computer applications to further improve their instructions.

Table 13. Utilization of Other Computer Application of Respondents

Other Computer Applications	f	Percentage
MS Office Project	2	10.53
AutoCAD 2010	1	5.26
Install and Uninstall Windows 7	2	10.53
Visual Basic	5	26.32
Total	**10**	**52.63**

Table 13 shows that out of 19 respondents, only five (5) of them are familiar with using Visual Basic, two (2) can install and uninstall other Windows Applications, and MS Office projects, and only one (1) can use AutoCAD 2010. These Applications are not commonly used by the teachers in their instructional activities but can be an advantage if they know about them.

Table 14. Problems Encountered by the Respondents in Using Technology in Instructional Purposes

Problems Encountered by the Teachers in Using Technology	f	%
Limited knowledge, skills and familiarity in using the software, hardware and advanced technology	10	52.63
Slow access to WI-FI and Internet connections	9	47.37
Occurrence of technical problems due to power failures	4	21.05
Inadequate number of LCD/laptops for use in instruction	6	31.58
Total	**29**	**100**

As soon as Table 14, most of the teachers encountered difficulty in using ICT in instruction because of their limited knowledge, skills, and familiarity with using new software, hardware, and advanced technology. Nine teachers responded that they found difficulty in using ICT because of slow access/no access to WI-FI and internet connections. Six teachers encountered difficulty because of an inadequate number of LCD/Laptops for use in instruction while four teachers found it difficult because of the occurrence of technical problems brought about by power failures.

Table 15. Computer Applications Where Training is Needed

Computer Applications Where Training is Needed	f	%
MS Word		
1. Creating forms with fields	2	10.53
MS Excel		
1. Using formulas, graphs, and pictures	4	21.05
2. Using worksheets in workbooks	6	31.58
3. Inserting and formatting a graph	3	15.79
MS Access		
1. Creating database	5	26.32
2. Sorting data	3	15.79
3. Using queries	2	10.53
4. Mail merge data	3	15.79
MS PowerPoint		
1. Adding animations, sounds, video and audio	7	36.84
2. Creating tables and charts	4	21.05
3. Printing and mailing presentations	5	26.32
Using Google		
1. Creating and editing a contact/groups	3	15.79
2. Entering appointment in calendar	3	15.79
3. Customizing view	2	10.53
Using Other MS Office Programs		
1. MS FrontPage	8	42.11
2. MS Publisher	5	26.32
3. Moviemaker	6	31.58
4. Dream Weaver	5	26.32
5. Adobe Flash	7	36.84
Using Internet		
1. Creating and organizing Favorites	5	26.32
2. Creating a Webpage	4	21.05
3. Creating Internet-based assignments	4	21.05
Using Other Computer Applications		
1. Using multimedia encyclopedia	6	31.58
2. Creating pictures or drawings	3	15.79

Table 15 shows the areas of computer software/programs/applications where training is desired for the further improvement of the teachers' ICT capability and competence. Most of the teachers expressed their desire to have further training in other computer applications that are useful for instructional purposes and them to deliver better instructions to students.

Table 16. Impact of Using Internet in Teaching using Different Education Platforms

Impact of Using Internet	4	3	2	1	Total
The lesson because interactive	8	5	5	1	19
Discussion is enjoyable	6	8	3	2	19
Students became interested/motivated/focused	6	9	2	2	19
Students learned more	7	7	3	2	19
Lessons were understood clearly	8	6	5	0	19
Technology-enhanced the teaching-learning process	13	4	2	0	19
It developed Multiple Intelligences of students	7	7	5	0	19

Impact of Using Internet	4	3	2	1	Total
Technology helped deliver the lessons effectively	12	5	2	0	19
Total	67	51	27	7	152

Note: 4-Strongly Agree; 3-Agree; 2- Moderately Agree; 1-Disagree

Summary:

Computed X^2:   931 α = 0.05
Tabular value: 31.42 df = 21
Decision: **reject Ho**

Interpretation: the use of technology in teaching has a significant impact on students learning.

Table 16 reveals that the use of technology has a significant impact on students' learning with a computed X^2 value of 931 which is higher than the tabular value of 31.42 at alpha .05 level of significance with a degree of freedom of 21. Such impact includes making the students interested /motivated/ focused in listening to their teachers; technology-enhanced the teaching-learning process; ICT helping the teachers deliver the lesson effectively; making the students more interactive and enjoyable; learning the lessons more and clearly and helping develop the multiple intelligences of the students.

Using the Internet to access different educational platforms like google classroom and Zoom meeting room is an additional knowledge and skills for teachers during the pandemic. They also use the Facebook messenger and smart phones to give instructions to their students.

Conclusion

Based on the gathered data, the following were the findings and conclusions the researcher arrived at:

1. All the teachers integrate technology in their delivery of the different subject areas that they handle.
2. Most teachers integrate technology in their instruction depending on the lesson as the need arises.
3. The perceived levels of computer software competence of the teachers of Candaba, Pampanga, Philippines in using different computer applications were as follows: they were highly competent in using Microsoft Word, Microsoft Windows and Network Navigation, and Microsoft PowerPoint Applications. They have only average competence in the following computer applications: Microsoft Excel. Microsoft Access, Google, Internet, and General Computer Use. They have fair competence in using other computer applications including Microsoft FrontPage, Microsoft Publisher, Moviemaker, Dreamweaver, and Adobe Flash. Generally, the ICT competence of the teachers is on the average level.
4. The teachers perceived that they still need to undertake additional training in some features of computer applications/programs.
5. The teachers encountered problems in using Information and Communications Technology (ICT) in their instructional activities including their limited knowledge, skills, and familiarity with using the new software, hardware, and advanced technology; inability to access Wi-Fi and internet connections, the occurrence of technical problems due to power failures and computer malfunctioning; slow internet connectivity due to school location; limited units of LCD projectors and availability of laptops.
6. The use of technology in teaching has a significant impact on students' learning as it makes the students interested, motivated, and focused on listening to teachers. It also enhanced the teaching-learning process and helped the teachers deliver the lesson effectively.

Recommendations

In the light of the above findings and conclusions are drawn, the following

recommendations are given to further improve the teachers' competence in using computer hardware/ICT:

1. The teachers should be given additional training in ICT to further equip them with the knowledge and skills necessary in using ICT equipment and be abreast in using new computer programs and applications.
2. Administrators should design a long-term plan considering the training/seminars to be attended by teachers.
3. Further encouragement should be made so that teachers integrate the use of ICT in their daily instruction.
4. Study and investigate the possibility of providing internet access on the whole campus.
5. Provide additional LCDs/laptops for the use of teachers in the delivery of instruction.

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