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Role of Information and Communication Technology: Its Impact on Students' Learning and the Extent of Effects to Social, Recreational and Sports Activities

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Abstract

This study determined the role and impact of Information and Communication Technology (ICT) to the learning of the students. It further looks into the extent of effects of ICT usage to the social, recreational and sports activities of the students. The descriptive survey design is utilized in this paper. A researcher – made instrument is the main tool in gathering the data aided by indicators listed on the paper of a certain researcher as a result of his literature review. The gathered data was treated and interpreted statistically using the verbal interpretation set by the researcher. The result of the study revealed that outside the school only few hours are used by almost majority of ICTs and none of them uses more than twelve hours. It was found that the use of Internet for academic works is the least used ICT by the respondents. They declared that ICTs has great roles to their academic or non-academic learning and as such their learning is at all times augmented. The impact of ICTs are demonstrated from great extent to very great extent. In addition, among the recreational, social and sports activities, the latter is the type of activities which are less affected by respondent's time used for ICTs. Therefore, it can be concluded that although the respondents of this study expressed in their assessment that the ICTs help them at great extent but they did not use much of their time to a more fruitful activity which is the academic works. The positive perception of the respondents to the role and impact of the use of ICTs show that modern technologies are useful; however, careful management and utilization of these devices should be well taken so that other activities like recreation will not be much affected.

Keywords

Information and Communication Technology, Impact, Effects

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1. Introduction

There are many studies that discussed about the different role of Information and Communication Technology (ICT) and its impact to the life of the people; however, there are less documents that will prove that ICT helps the people. In the present time, it is observed that people's social connectedness becomes much more easier than before (Wessel, n.d.). The extent and value of relationships with others including family, friends, colleagues, and the wider community, through a variety of modes of contact, and the resulting benefit signifies social connectedness. This suggests that the connection a person get does not only mean to how many important people is involve in his life, but this refers also to the factors of trust, disclosure, happiness and companionship as the outcome. The internet, social network sites like Skype, Facebook, Youtube and mobile phones are examples of ICT that connects people with the member of their family, and

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friends who are away from them. Through these ICTs people are able to make relationships with other people who are at far distance and even those whom they have not meet. This ICT made connections possible more specifically to the students.

There are factors that characterize the future career of the students. The birth of ICT, social networking sites, mobile phones is some of the factors that shapes their life inside and outside the school. However, uncertainty arises whether this convenience brought to the life of the students has really helped them.

The classrooms are complicated places and have to address a lot of demands. Socialization, classroom management, learning, evaluation and assessment, are just a few of these demands. Fortunately, many classrooms today have access to facilities and resources (Wessel,n.d.) which are never experience in the olden days. Examples to these facilities and resources are the computers with internet connections. This will make the work of the teachers and students a lot easier in many ways.

The internet, social network sites like skype, facebook, youtube, and mobile phones are ICT that bring convenience and expediency to people's activities today. Some of the jobs of the scientists can be done even if they are just sitting in front of their computers with internet connections. Office workers either in the managerial or rank and file positions made their paper works trouble-free and effortless through the use of computers. Owners and employees in the business firms make their dealing and transactions with their customers and clients lightly without travelling and spending thousands of pesos. Farmers are guided on what are the latest trend in growing and increasing their farm productions. Government officials make their communications and transactions a lot easier through the use of ICTs.

The above mentioned are topics which are commonly observed in the present time. This indicates that the specific job of a person is related to new learning which are brought by modern technology. Academic institutions are also using this technology to produce qualified and competitive graduates. La Salle University, as one of the prestigious academic institutions in the Philippines, is one of the good examples to this end. In this paper the researcher desires to investigate on what is the role and impact of ICT to the learning of the students as perceived by them.

1.1. Review of Related Literature

The words of Harasim, Hilts, Teles, and Turoff, (1995) said that, "digital technologies developed steadily from the 1950s, (cited in Milton Campos, 1998). This is also confirmed by Jonassen, Howland, Marra, and Crismond, (2012) when they said that, "in 1950's the first technology was developed specifically to meet educational needs. Harasim, et al., (1995) continued that, "human communication processes started to be supported by computers from the 1980s onward, with computers becoming more important in the 1990s" (cited in Milton Campos, 1998).

To express people's feelings and to support others ideas are now feasible (Jonassen, et al., 2012). These thoughts can be realistically perform with the assistance of ICT. The researcher would like to consider that nowadays, the ways or means of students in acquiring knowledge and learning can be broadly offered by the technologies; however, according to Jonassen, Howland, Marra, and Crismond, (2012), "computers and other technologies has shown that they are no more effective at teaching students than teachers, but if we begin to think about technologies as learning tools that students learn with, not from, then the nature of student learning will change". Trucano (2005) affirmed in saying that, "ICTs are very rarely seen as central to the overall learning process". Their theory suggested that teachers are more better than ICT when it comes to teaching and ICT could be a tool towards learning. Tomie, (2005) explicitly agreed when he said that "learners use technology to acquire and organize information evidence to obtain a higher level of comprehension".

Furthermore, Trucano (2005) declared that, "there is a widespread belief that ICTs can and will empower not only the teachers but also the learners. ICTs transform the teaching and learning processes which will result in increased learning gains for students". He further declared that, " the use of ICTs creates and allows learners to have the opportunity to develop their creativity, problem-solving abilities, informational reasoning skills, communication skills, and other higher-order thinking skills," (). However, Wessel, (n.d.) proclaimed that, students' learning will always be a slow, challenging process and teacher instruction will always be a challenging and rewarding process. Furthermore, he expressed that ICT does not and will not change the way people learn since knowledge building is an individual process and cannot be handed over to computers.

Meaningful learning can be supported by ICT in many ways. They can be utilized as a tool to support knowledge construction, a vehicle for information, medium for socialization, and a partner to gather intelligent ideas. To access needed information, contrast personal viewpoint, learn the way of life of people who are miles away can be done by the use of ICT. To discuss, converse, argue issues which involve a group of people across the globe becomes possible (Jonassen, et al., 2012). This thought was supported by Campos, (1998) when he stipulated that, " in order to build knowledge, people must reason, engage in common

discussion, and argue".

In the study of Wessel, (n.d.) he revealed that email communication is widely used in some American schools. Reports to parents are immediately delivered through this means of communication. Administrators, teachers, students and parents utilized the on-line communication systems within and outside classrooms; however face-to-face conversation cannot be dispensed with. This briefly means that these people are still favorable on discussions without the use of on-line communication systems.

Brown (1994) said that "the evaluation of learning outcomes requires methods that measure understanding. These can be supported by the use of ICT (cited in Newhouse, 2002). Baker, Gearhart, & Herman, (1994); Kulik, (1994) stipulated that students have more positive attitudes towards their classes and learning when ICT use is included. Sivin-Kachala (1998) also declared that, "the use of ICT has consistently improved students' attitudes towards learning and their own self-concept. Kulik, (1994) stated that, "students tend to complete more in less time when they use ICT (as cited in Newhouse, 2002). It can therefore be concluded that the teachers and students feel that the use of ICT greatly motivates them (Trucano, 2005).

However, there is another view laid down by Trucano, (2005) in his paper when he said that, in a report regarding students from Organization for Economic Cooperation and Development (OECD) countries who utilized huge amount of computer usage outside school obtain low average. Trucano, (2005) presumed that, "high computer use outside of school is disproportionately devoted to computer gaming". He added further, that "ICTs are seen to be less effective (or ineffective) when the goals for their use are not clear". On the other hand, Ahmedani, et al., (2009) study showed that their respondents rated the use of IT including cell phones, email, video games, instant messenger services, and MySpace, with "most helpful" for communication and entertainment.

The increasing utilization of IT can change the lives of children. This would transform children's behavior, manner they interact with others and the way they understand the world.

This is confirmed by Becker, (2000); Subrahmanyam, et al., (2001) when they stated that, "IT impacts the lives of youth around the world" (as cited in Ahmedani, et al 2009). IT has been shown to offer opportunities to develop new and varied skills (Ahmedani, et al 2009). Research suggests that children are expanding their worldviews (Moje, 2000) and learning styles (Lou, 2001) with access to immediate global information, while also extending social networks through their growing variety of communication skills, (Jackson, 2007, as cited in Ahmedani, et al 2009).

Nevertheless, it is widely held that ICT is not appropriate for all learners or all learning experiences and that not all students enjoy, or indeed benefit from working with a computer (Ewing et al., 2002). Learners and technologies should be intellectual partners (Jonassen, et al., 2012). This idea was impliedly concurred by Trucano when he said that, "evidence exists that use of ICTs can increase learner autonomy for certain learners", (2005).

Most of the schools in the region are now equipped with computer laboratories to ensure that their students are not left behind. Teachers are also trained in order that they will able to monitor the learning of their students. Application of the knowledge acquired about ICT should be done in the proper ways so that students could successfully integrate ICT into their learning process and waste of time can be avoided.

According to the results in the study of Krogt et al., (2009) they stated that "using ICT in the classroom over a sustained period will boost the academic performance of children." In addition, the result of their study revealed that not only teachers are empowered on the ICT-supported activities but they also observed that there is 7% overall positive impact to the learning performance of the pupils.

1.2. Conceptual Framework

This study has three parameters. One of these speaks about the role of technology. The indicators of the first parameter are researchers' made items. On the other hand, the second parameter of which is anchored from the paper of Newhouse, (2002). His literature review founded nine positive impact of the technology to learning and teaching. In addition, the effects of the use of ICTs to social, recreational and sports activities are also given importance in this study.

The figure below illustrates the significant components that provoke the development of this study.

1.3. Statement of the Problem

The fast moving moment of the people in this present age, more specifically in the students' life, activity might not be a prizewinning without the ICT. In the absence of technology life this time seems to be unexciting. The purpose of this study is to look into the role of technology, its impact to students' classroom performance and its effect to social, recreational and sports activities of the respondents. Specifically, the study was undertaken to answer the following:

1. As revealed by the respondents,

- how many hours they spent for the use of ICTs outside the school?
- what ICT is used by them for long period of time in their

day to day life?

2. What is the great role of ICTs to respondents' life?
3. Which impact of ICTs has great effect to respondents' learning?
4. As revealed by the respondents regarding their time spent with the use of ICTs at what level is its effects towards their

- social,
- recreational and
- sports activities?

5. Based on the result of this study, what program could be devised to enhance students' information and appreciation on the use of ICT?

1.4. Significance of the Study

This study is beneficial to the respondents since they will be able to assess what is the role of ICTs to their student life; moreover, they could identify the impact of this ICTs to them. To the teachers and administrators, the result of this study could lead them to the path of creating more useful programs for the students. To the parents they will be able to identify whether the use of ICTs augment or not their children's school performance. This is also helpful to others researchers for the reason that this may guide them to find out answers of some other questions in relation to this study.

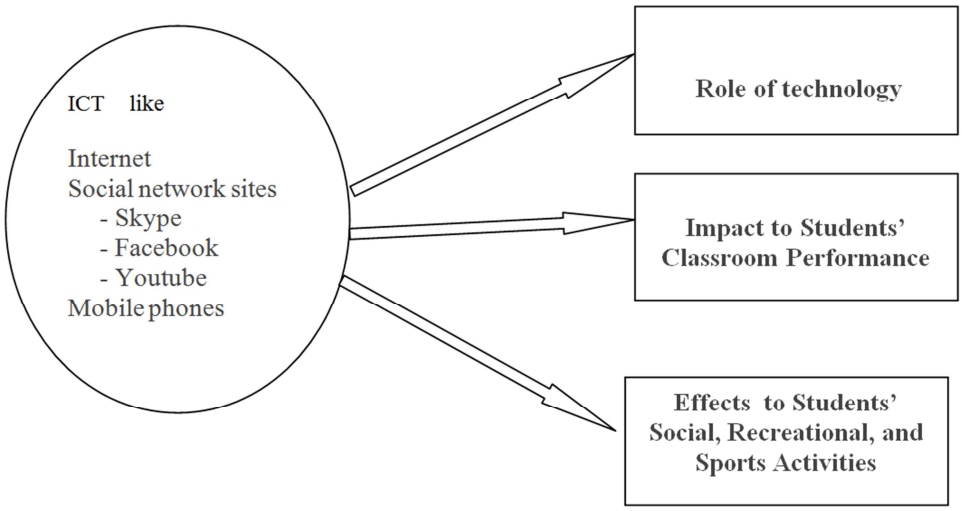

Figure 1. Schematic Diagram of the ICTs, its role and impact to students' classroom performance and effects to social, recreational and sports activities.

1.5. Scope and Limitations

This study limits only to the role of ICTs, impact to class performance and the effect to the social, recreational and sports activities of the respondents who are officially enrolled the 1st semester of SY 2013-2014 at one of the tertiary schools in Iligan City.

2. Methodology

This paper is a collaborative study of the authors. The descriptive survey method is utilized in this study. The research was conducted at one of the tertiary schools in Iligan City. This school is a public, non-residential, and mid-sized, and comprehensive school with a special emphasis on science and technology located in downtown in Iligan City, Philippines - a small, safe, and vibrant city that is a regional hub of culture and commerce (Mindanao State University-Iligan Institute of Technology, 1994). The survey questionnaire is administered to the students randomly selected from those who are officially enrolled in the 1st semester for the school year 2013 – 2014.

The tool utilized in this study is a mixed instrument. A researcher- made checklist is used in gathering the data to determine the role of ICT to students' class performance. This study articulated the nine role of technology as follows: (1) bountiful informative resources are through the ICT; (2) application on what is learned from the ICT resources is a lot easier; (3) crucial issues are learn and familiarity with web-based learning is through ICT ; (4) the use of technology in the classroom signifies a significant meaning in assessing students' performance;(5) ICT help the students to grow academically better than the traditional learning style; (6) the extent of class performance increases because of the ICT ; (7) these technological resources shape classrooms activities; (8) Academic or non-academic research can be done easily through ICT; (9) the use of ICT creates a friendly and economically viable environment that is conducive to learning in any corner in the world.

This checklist survey form is also aided by the nine types of

practices regarding the use of ICT taken from the paper of Newhouse, (2002). The items enumerated by Newhouse, (2002) are adapted in the present study; however, modifications are made on the corresponding research questions to suit the respondents. They are converted into declarative sentences and considered as indicators in this present study to measure the impact of ICT to students' learning. There are nine types of practices in the use of ICT. Indicators in a declarative statement follows after each type of practices namely: (1) Investigate reality and build knowledge: I am able to investigate the real world and build broader and deeper knowledge base using up-to-date information; (2) Promote active learning and authentic assessment: I am encourage by ICT to be active as participant in my own learning and I learn by doing; (3) Engage students by motivation and challenge: ICT provide more motivating and challenging learning experiences that encourage me to be more engaged with my learning; Provide tools to increase student productivity: ICT has been used to increase my productivity, particularly with repetitive, low-level tasks involving writing, drawing and computation that are not the main focus of study; (5) Provide scaffolding to support higher level: ICT has been used to support the development of my higher level thinking skills such as application, analysis and synthesis; (6) Increase learner independence: ICT has been used to provide learning experiences when and where they are needed, and I am encourage to demonstrate my independent learning and progress; (7) Increase collaboration and cooperation: ICT has been used to support learning experiences that involve cooperation among learners within and beyond school and a more interactive relationship between students and teachers; (8) Tailor/modify learning to the learner: ICT has been used to support more individualized learning programs and provided my learning experiences based upon my personal learning characteristics and needs; (9) Overcome physical disabilities: Students with physical handicaps used ICT input and/or output devices to be involved in similar learning activities as other students.

2.1. Data Gathering Procedure Scale of Measurement

The survey checklist instrument was administered to the students randomly selected and considered as respondents of this study. After they have finished answering the instrument it was then be collected, tallied, analyzed, interpreted and presented.

2.2. Treatment of Data

For discussion purposes of this study, frequency and percentile distribution are used to interpret the respondents' answers with respect to period of time they consumed with the use of ICTs. Moreover, the researcher the weighted mean computation in analyzing the gathered data to arrive at the findings, conclusion and recommendations on the results of this study.

Additionally, the researcher constructed hypothetical mean range, provided its qualitative description and verbal definition for each corresponding numeric value to further explain the gathered data as follows:

Table 1. Scale of Measurement.

Numeric Value	Hypothetical Mean Range	Qualitative Description (QD)	Verbal Interpretation (VI)
1	1.00 – 1.75	Disagree / Never	- means that ICT has insignificant role or impact to the students; thus, it did not helps the respondents' learning at all; - means that it has no effect at all to social, recreational and sports activities; thus no action for enhancement of students' information and appreciation on the use of ICTs is needed
2	1.76 – 2.50	Tend to Disagree / Less Great Extent	- means that ICT has slight role or impact to the respondents ; thus, it helps to respondents' learning at some time; - means that it has an effect sometimes to social, recreational and sports activities; thus few actions for enhancement of students' information and appreciation on the use of ICTs is needed
3	2.51 – 3.25	Tend to Agree / Great Extent	- means that ICT has moderate role or impact to the students; thus, it extends reasonable help to respondents' learning most of the time; - means that it has an effect at most of the time to social, recreational and sports activities; thus moderate actions for enhancement of students' information and appreciation on the use of ICTs is needed
4	3. 26 – 4.00	Agree / Very Great Extent	- means that ICT has great role or impact to the students; thus, it helps them augment respondents learning at all times; - means that it has an effect at all times to social, recreational and sports activities; thus extensive actions for enhancement of students' information and appreciation on the use of ICTs is needed

3. Results and Discussion

This section presents the output of the study. Discussion on the results and interpretation of the gathered data are illustrated in this part to fully understand the role, and impact of ICTs to the learning of the students. The effects on the use of ICTs to social, recreational and sports activities are also described below.

3.1. The Number of Hours Spent for the use of ICTs Outside the School

Table 2. Number of Hours Using ICTs Outside the School.

Number of hours	Frequency	%
none	9	8.10
1-3	46	41.44
4-6	32	28.83
7-9	6	5.41
10-12	18	16.22
More than 12	0	0

In table 2 it can be noticed that none of the respondents use ICTs for more than twelve hours. There are only very few (5.41%) of them use ICTs for seven to nine hours.

More than forty percent (41.44 %) of the respondents spent for one to three hours in a day using the ICTs outside the school. The result signified that the greater number of the respondents use only few hours (1-3 hours) of their time for ICTs outside the school.

3.2. Type of ICTs Used for Long Period of Time

There are three types of ICTs utilized in this study namely: internet, mobile phones, social network sites. The respondents are asked which among these three are used by them for long period of time in a day. The respondents of this study demonstrate that almost thirty percent (29.73%) of them use mobile phones for more than twelve hours in a day. The number of hours that they use for mobile phone is followed by social network sites (28.83 %). It is sad to note that among the three types of ICTs, the use of Internet for academic works is the least used among the three types of ICTs mentioned.

Table 3. The Type of ICTs Used for Long Period of Time Everyday.

	None		1-3 hours		4-6 hours		7-9 hours		10-12 hours		More than 12 hours	
ICTs	F	%	F	%	F	%	F	%	F	%	F	%
1.Internet for academic works	2	1.80	55	49.55	19	17.11	15	13.51	-	-	20	18.02
2.Mobile phones	8	7.21	30	27.03	20	18.02	15	13.51	5	4.50	33	29.73
3.Social network sites (facebook, skype, youtube and others)	2	1.80	50	45.05	18	16.22	9	8.11	32	28.83	-	-

The outcomes invited the researcher's impression that despite the Internet makes the academic works of the respondents a lot easier still it did not encourage them to use it for enhancement and preparation for classroom activities. This result confirms the idea expressed by Wessel, (n.d.) which says that ICT does not and will not change the way people learn since knowledge building is an individual process and cannot be handed over to computers.

Meanwhile, it is evident in the results that the respondents utilized much of their time (10 – 12 hours) in social network sites. This result have the chance to entertain Trucano's, (2005) presumption that, "high computer use outside of school is disproportionately devoted to computer gaming" in the sense that other social network sites may include computer games.

3.3. ICTs Role to Respondents' Life

In many ways in the present time, the internet, social network sites like skype, facebook, youtube, and mobile phones are types of ICT that bring convenience and expediency to people's activities. The jobs of the people become trouble-free and effortless through the use of ICTs. The table below presents the role of ICTs in the life of the students.

Table 4a. The Role of ICTs to Respondents' Life as a Student.

Indicators		μ	QD
1.	Bountiful informative resources are through the ICTs.	3.48	A
2.	Application on what is learned from the ICTs resources is a lot easier.	3.50	A
3.	Crucial issues are learn and familiarity with web-based learning is through ICTs	3.48	A

Indicators		μ	QD
4.	The use of technology in the classroom signifies a significant meaning in assessing students' performance.	3.53	A
5.	ICTs help the students to grow academically better than the traditional learning style.	3.37	A
6.	The extent of class performance increases because of the ICTs	3.54	A
7.	These technological resources shape classrooms activities.	3.52	A
8.	Academic or non-academic research can be done easily through ICTs	3.49	A
9.	The use of ICTs create a friendly and economically viable environment that is conducive to learning in any corner in the world.	3.59	A

Table 4b. Legend.

Hypothetical Mean Range	Qualitative Description (QD)
1.00 – 1.75 -	DA - Disagree
1.76 – 2.50 -	TTDA - Tend to Disagree
2.51 - 3.25 -	TTA - Tend to Agree
3.26 – 4.00 -	A - Agree

There are nine indicators utilized by the researcher to determine the role of ICTs in the life of the respondents. As assessed by them, they expressed their agreement that all the nine indicators have great roles to their academic or non-academic learning. Furthermore, this result signifies that ICTs augment or supplement their learning at all times. More importantly, the ICTs create a pleasant environment for the students to interact in the world.

The results of the study in many ways agree the theory of Jonassen, et al., (2012). Their words implied that meaningful learning can be supported by ICT in many ways. These are tool to support the construction of knowledge, a means of information, medium for socialization, and a partner to gather intelligent ideas. They further stressed that discussions of issues which involve a group of people across the globe becomes possible through the use of ICTs.

3.4. ICTs Impact to Respondents' Learning

The role of ICTs is not the only concentration of this study. The impact of their usage is also investigated. It is clear in the results of the study that the respondents demonstrated their answer within the range of great extent and very great extent.

Table 5a. The Impact of the Use of ICTs to Respondents' Learning.

Indicators	μ	QD
1.I am able to investigate the real world and build broader and deeper knowledge base using up-to-date information.	3.25	GE
2. I am encourage by ICT to be active as participant in my own learning and I learn by doing.	3.45	VGE
3. ICT provides more motivating and challenging learning experiences that encourage me to be more engaged with my learning.	3.32	VGE
4. ICT has been used to increase my productivity, particularly with repetitive, low-level tasks involving writing, drawing and computation that are not the main focus of study.	3.41	VGE
5. ICT has been used to support the development of my higher level thinking skills such as application, analysis and synthesis.	3.50	VGE
6.ICT has been used to provide learning experiences when and where they are needed, and I am encourage to demonstrate my independent learning and progress.	3.45	VGE
7. ICT has been used to support learning experiences that involve cooperation among learners within and beyond school and a more interactive relationship between students and teachers.	3.23	GE
8. ICT has been used to support more individualized learning programs and provided my learning experiences based upon my personal learning characteristics and needs.	3.36	VGE
9.Students with physical handicaps used ICT input and/or output devices to be involved in similar learning activities as other students.	3.40	VGE

Table 5b. Legend.

Hypothetical Mean Range	Qualitative Description (QD)
1.00 – 1.75 -	N - Never
1.76 – 2.50 -	LGE - Less Great Extent
2.51 - 3.25 -	GE - Great Extent
3.26 – 4.00 -	VGE - Very Great Extent

The table above presented that two of the indicators got the same degree of impact to the respondents' independent learning and progress and they learn by doing. The respondents rated them at very great extent. This means that ICT has great impact to the students; thus, it helps them augment their learning at all times. The assessment given by the respondents does not absolutely agree with the findings of Krogt et al., (2009). Since that in their study they observed that ICTs positive impact to students learning performance is only seven percent.

3.5. Effects of the Time Spent for ICT Usage to Social, Recreational and Sports Activities

Moving on to the other part of this study, the effects of the time spent in the use of ICTs to social, recreational and sports activities are also given importance in this study.

Table 6a. The Effects of Time Spent for ICT Usage to Social, Recreational, and Sports Activities.

Indicators	μ	QD
1. The period of time I spent with ICT affect my social activities.	2.90	GE
2. The period of time I spent with ICT affect my recreational activities.	3.06	GE
3. The period of time I spent with ICT affect my sports activities.	2.55	GE

Table 6b. Legend.

Hypothetical Mean Range	Qualitative Description (QD)
1.00 – 1.75 -	N - Never
1.76 – 2.50 -	LGE - Less Great Extent
2.51 - 3.25 -	GE - Great Extent
3.26 – 4.00 -	VGE - Very Great Extent

As shown in the table above the respondents of this study illustrated that the time they spent for the use of ICTs affects their recreational, social and sports activities at great extent. This signifies that it has an effect to the students at most of the time. Jonassen, et al., (2012), still believe that teachers are effective when it comes to teaching and students' learning than computers and other technologies. Trucano(2005) affirmed. Furthermore, Trucano declared that, "the use of ICTs creates and allows learners to have the opportunity to develop their creativity, problem-solving abilities, informational reasoning skills, communication skills, and other higher-order thinking skills," (2005). However, there are other aspects in students' life which needs the cautious assistance of the teachers. When the recreational, social and sports activities are affected due to the use of ICTs then moderate actions for enhancement of students' information and appreciation on the use of ICTs is needed.

4. Summary of Findings, Conclusion and Recommendations

This section presents the findings, conclusion and recommendations based on the gathered data.

4.1. Findings

After the gathering of data all facts in relation to this study are interpreted and the researchers draw the following findings:

1. Outside the school only few hours are used by almost majority of the for ICTs and none of them uses more than twelve hours
2. the use of Internet for academic works is the least used ICT by the respondents
3. respondents declared that ICTs has great roles to their academic or non-academic learning and as such their learning is at all times augmented
4. the impact of ICTs to the respondents are demonstrated from great extent to very great extent
5. Among the recreational, social and sports activities, the latter is the type of activities which are less affected by respondent's time used for ICTs

4.2. Conclusion

The student life does not end when one is already outside the school since learning comprises academic and non-academic. Although the respondents of this study expressed in their assessment that the ICTs help them at great extent but they did not use much of their time to a more fruitful activity which is the academic works. As students the activities which involve school works must be given priority since their learning will be at stake. The positive perception of the respondents to the role and impact of the use of ICTs show

that modern technologies are useful; however, careful management and utilization of these devices should be well taken so that other activities like recreation will not be much affected.

4.3. Recommendations

In the light of the findings and conclusion the following recommendations are drawn:

1. Students should be more cautious in the utilization of ICTs either within or outside the school so that time and money spent would yield good fruits and goals for success will be attained.
2. School administrators should organize ICT enrichment programs in the school which give the students more time to deeply understand the importance and relevance of the use of ICTs in their academic works in this present time.
3. Teachers being the second parents of the students must take actions for enhancement of students' information on the use of ICTs since the effects in students' recreational activities may also affect their appreciation on some other school activities like sports. They need to educate their students on the use of ICTs through integration of this matter in some of their classroom discussions. In addition, teachers must encouragement the students to use the Internet for enhancement and preparation of their classroom activities to ensure learning intensification.
4. Parents should conduct regular monitoring on how their children use ICTs at hand in order that their children will be reminded often that ICTs are good and useful when they are utilize in proper and appropriate manner.
5. Other researchers may investigate further on the reasons that intertwine why that there are only few hours used by students for ICTs outside the school.

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