

INTRODUCTION

Humanity has now moved from analogue to digital. All professions have moved from analogue to digital technology. Technology is now ruling the world, it is now the modern way of communication. It has made the world to be global village.

The scope of this write up will cover the definition of ICT, data and information, how counsellors can use the computer to impart their clients, the negative and positive impact of ICT in the field of counselling, amongst others.

WHAT IS ICT

Information Communication Technology, (ICT) it is used to handle communication process such as telecommunications, broadcast media, intelligent building management system, audio-visual processing and transmission systems, and network base control.

ICT is often used to describe the convergence of several technologies. ICT which is one of the new trends in educational sciences has become very popular in educational setting.

According to Okebukola (1997) ICT among other things must be made available to teachers, counsellors and students. ICT also helps us to disseminate information by a micro-electronic based combination of computing and tele-communication.

The modern advances in ICT has enhanced globalization of world into a small village through its use of electronic devices such as computers, international network (internet) which provides access to E-mail, Global Mobile Communication (GSM), Power Point delivery and the World Wide Web. 2

ICT actually made communication easy, relevant and efficient in counselling practice. Internet which is part of ICT is an international computer network connecting other network and computers from companies and universities. 3 According to him, an internet service provider is a company that provides people with internet connection and services such as E-mail etc. More than 190 countries are linked in

to exchanges of data, news and opinions. According to Vangie Bael: Webopedia (2014) No one actually owns the internet and no single person or organizations control the internet in its entirety. Internet is a powerful tool in teaching and learning, hence it is said that internet has reduced the world to a global village.

What is Data?

Data is one of the component of ICT.

Data are individual facts, statistics or items of information, often numeric. In a more technical sense, data are a set of values of qualities or quantitative variables about one or more persons or objects. While a datum is a single variable. Wikipedia.

What is Information?

Information is known as “news or knowledge received or given”. It is what results when you have processed, interpreted and organized facts.

The main differences between Data and Information

The terms data and information can mean different things in different contexts and the main differences between them are:

1. Data is a collection of facts while information is how you understand those facts in context.
2. Data is unorganized while information is structured or organized.
3. Information is an uncountable noun while data is a mass noun.
4. Data is not typically useful on its own but information is.
5. Data generally includes the raw forms of numbers, statements and characters. Information doesn't have to.
6. Information depends on data.

Examples of Data and Information

DATA	INFORMATION
1. Each individual homework and test grade of a student in one class	The student's average grade for each class
2. Typing its word cat videos in your computer search engine (input)	The list of search results that includes variety of cat videos on the internet (output)
3. 1017137769	A person's phone number 1017137769

How ICT can be used by a Counsellor to impart his/her Client

E-Counselling: E-Counselling services are typically offered via email, real-time, chat, video conference, zoom, Skype, GSM telephone/Whatsapp, through writing of article for dissemination of information to students/clients. E-counselling is one on one with the students/clients through counselling sessions. The Zoom medium/video conference, whatsapp video calls covers wider range of students/clients.

ICT helps the counsellor to create a student platform to disseminate information by way of writing articles and sending to the platform for students to read and get the information they needed. If the students need an answer, the counsellor can also read and give answers to their questions.

1. Online
2. Online
3. Hornby (2006)

ICT helps to create database of students/clients for a period of time.

- A counsellor can create a whatsapp platform group for his/her clients for easy communication.
 - Counsellor can organize zoom conference for his/her clients.
 - A counsellor can use the cell phone to access his/her clients via text message and video calls.
 - A counsellor can create a website where his/her client can have access, provided they are given the website code for easy accessibility.
 - The counsellor can teach, counsel and give assignment to the student or client through group chat and instruct the student/client to do their assignment, and send it through a flash drive.
 - **E-mail:** the counsellor can use his/her email to counsel their client via their own email address in a way of disseminating information and getting feedback from their clients.
- Information communication technology (ICT) has been the chief support of the new trend that people enjoy using.
- **Conference call:** where you put a specific number of clients in a conference call where you can counsel, teach and also get feedback from the participants.

The use of ICT Infrastructure

ICT infrastructure are all the information and communications technology organised in systems (software, hardware, firmware, networks and websites) that are used in an organisation.

Software:

Software is an instructor that tell a computer what to do. Software comprises of the entire set of programs, procedures and routines associated with the operation of a computer system. In other words software is used to control a computer. There are different types of software that can run on a computer: System software, Utility software and Application software.

Hardware:

Computer hardware is the physical parts of a computer, such as the case, central processing units, random access memory, monitor, mouse, keyboard, computer data storage, graphical sound card, speakers and mother board. By contrast, software is the set of instructions that can be stored and run by the hardware.

Computer hardware can also be seen as parts of a computer and related devices. Internal hardware devices include mother boards, hard drives and Ram. External hardware devices include monitors, keyboards, mouse, printers and scanners.

Firmware:

Firmware is a type of software that is attached directly into a piece of hardware. It operated without going through Apps, the operating system or device drivers-providing the needed instructions and guidance for the device to communicate with other devices or perform a set of basic tasks and functions as intended.

Website:

A website is a collection of web pages and related content that is identified by a common domain name and published on at least one web server. Notable examples are google.com, amazon.com.

Network:

A computer internet consists of two or more computers that are linked in order to share resources (such as printers and Cd's), exchange file or allow electronic communications. The computers on a network maybe linked through cables, telephone lines, radio waves, satellites etc.

A computer network is an information technology; a network is defined as the connection of at least two computer systems, either by a cable or a wireless connection.

Negative aspect of computer counselling

1. Lack of human contact
2. A limited type of information that the computer can provide.
3. Potential technical problems.

4. Threats to privacy and problem with people not taking information from the computerized counsellor seriously.
5. Computer gadgets are expensive to low income earner.
6. Computer machines, android phones, iPhone are very expensive.
7. Data are expensive to the low income earner.
8. Lack of electricity, incessant power failure.
9. Most of the clients/students don't pay for the service that is rendered to them by the counsellor.
10. They feel that their real life friend do not understand them like their online friend or peer.

Positive aspect

1. It is convenient.
2. Ability to control the flow of information.
3. Accuracy of information.
4. Privacy.
5. Impartiality.
6. It covers a wider range of people all over the world.
7. With the help of information communication technology the students/clients get quick access to problem solving.
8. It helps to minimize the spread of contagious disease e.g. Covid-19.

Safety

- Don't plug in too many power cables into a socket, it can result in the socket being over loaded, overheating and can start a fire. Solution: Never plug too many.
- Fear of theft of the equipment leads to stress and anxiety, this is about personal safety.
- Fire hazard of the computer/several electronics, keep it clean and dust free, this keeps the electronics cooler.

Security

Computer security, cyber security or information technology security is the protection of computer systems and networks from information disclosure, theft of or damage to the hardware, software or electronic data as well as from the disruption or misdirection of the services they provide.

In other words, ICT security refers to relevant incidents as well as measures, controls and procedures applied by enterprises in order to ensure integrity, confidentiality and availability of their data.

Summary

In summary, therefore ICT is use to handle communication process such as tele-communication etc. A counsellor can use email, real-time chat, video conference, zoom, Skype, telephones etc. to communicate with its students/clients. There is difference between data and information as explained in this write-up. ICT infrastructure comprises of software, hardware, firmware, websites and networks. ICT has negative and positive aspects which have been explained and there are ways to secure the ICT equipment's and privacy.

Conclusion

Without doubt, information communication is a valuable tool in modern society as it instruct in teaching/learning situation in the society. It has been scientifically establishes that ICT could be applied by professional counsellors in counselling practice.

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