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**USE OF TECHNOLOGY, DIGITAL TOOLS AND TECHNIQUES TO IMPROVE
EFFICIENCY IN HEALTH AND SOCIAL CARE**

BSMW4003_LON

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Introduction

In this assignment I will be exploring the use of Contemporary Technology in Health and Social Care. (Teach with digital technologies, 2021) Digital Technology are electronic tools, systems, devices and resources that generate, store or process data. Well known examples include social media, online games multimedia and mobile phones. Digital learning is any type of learning that uses technology. It can happen across all curriculum learning areas.

(Goodman, 2021) Digital technology has transformed a number of aspects of modern life. Travel, work, entertainment are just some of the areas that have been revolutionised as a result of technological advances in the past two decades. It is now rare to find a device or piece of machinery that does not incorporate some form of digital technology.

Goodman also highlights that the benefits of Digital Technology include:

- Social Connectivity
- Communication Speed
- Versatile Working
- Learning Opportunities.
- Automation
- Information Storage
- Editing
- Accurate Duplication

THE USE OF CONTEMPORARY TECHNOLOGY IN HEALTH CARE

(Rauv, 2017) states technological innovations in healthcare have improved and has led to better communication within healthcare organisations. Medical professionals can now use media such as video, online discussion platforms and real-time meeting capacities to communicate and advance the spread of knowledge in the field.

(Jones, 2018) writes that technology improves the care of patients. Technology has placed at the disposal of the healthcare community various potent tools to improve patient care. Since EHIRs are easily available to physicals, they can access complete medical histories of patients and make the most well- considered medical decisions. Doctors are able to quickly identify possible medication errors.

(Healthcare Technology: What It Is + How It's Used | Built In, 2021) highlights that technology is being implemented in everything from hospital administrative processes to cancer research and surgery in order to improve efficiency throughout the industry and make the patient experience as painless as possible.

DIAGNOSTIC

According to Cambridge Dictionary, Diagnostic means identifying a particular illness using a combination of signs and symptoms. The following are some of the commonly used medical technological tools used for Diagnosis:

Sphygmomanometers are used to measure blood pressure, it is also used to determine the general wellbeing of an individual, it is used to diagnose diabetes, High or Low blood pressure, artery Hardening, arterial plaque, hypotension etc.

Otoscopes are used by physicians to look at the outer ear canal and eardrum through its magnification lens, it is used in diagnosing Ear infections, Tinnitus, Causes of dizziness etc.

Electro cardio graphs are used for monitoring the conditions that affect the heart, it is often used to diagnose any heart problem.

Mass space pen is a diagnostic technology that can be used to identify cancerous tissues in 10 seconds.

Ophthalmoscopes are used by a physician to see the fundus in the eye, they can be used to diagnose bacterial infections, detached retinas, glaucoma etc.

ADMINISTRATIVE

Administrative assistants and secretaries spend much time using office productivity programs including Microsoft Word, Microsoft Excel, and other programs in the Microsoft Office suite. Administrative managers use these programs and project management tools that include Microsoft Project and SharePoint (These 6 administrative skills will help you land any job | CareerBuilder, n.d.)

CARE SUPPORT

(Dementia: Technology in care homes - SCIE, n.d.) states that if a care or nursing home is being established or upgraded, it is worth considering the contribution technology, and the clever use of data, can make to improve the care and support of residents with dementia living in the care or nursing home. Technology offers an efficient way to capture and record care notes. For example, hand held mobile devices with appropriate software, can allow staff to update in real time, the care given or information they want to note.

Technology can give people more control over their health, safety and wellbeing, support them to be more independent, link them to services which are important for them, enhance the care or treatment providers offer, help them communicate with family members, professionals and staff.

THE USE OF TECHNOLOGY DURING COVID 19

The pandemic is the most disruptive event healthcare organisations globally have ever faced, and in and in the UK, when the NHS was already navigating the need to transform in the face of global trends such as an increase in older patients, capacity issues around skilled workforce, and rising costs. Responding to these challenges is among the top priorities in both the NHS's Five Year Forward View and Long Term Plan (Digital identity | Digital skills | Royal College of Nursing, 2021).

Even prior to the coronavirus pandemic, the NHS recognised a need to rethink healthcare user-centred design principles, based on populations, not organisations. Technology could support the delivery of health care in a number of areas: providing and storing information and advice, administration and transactions- e.g., making appointments. (Royal College of Nursing, 2021).

The NHS mobile app was designed to track individuals with symptoms and monitor the rate of people infected with the virus within each local area. The app was launched to help keep track of information regarding COVID 19.

Introducing apps to help/support those suffering from mental illness during lockdown, provides them with necessary medication and monitoring their mental state, organizing their medical review, through digital technology such as Zoom and other sources to help ease stress and anxiety.

Most health fitness companies develop a variety of apps for people who are cautious of their health and keeping up with their daily exercise as gyms remain closed.

Contactless payment is used more now than before and the majority of shops now only accept card payment. Some have even had to increase spending limits to encourage people to make payments using their contactless cards.

Due to restrictions in places, online communications have become more important in every home. With most people working from home during the pandemic, the only form of communications among co-workers are currently done online.

Coronavirus testing is being done mostly in person, but the results are distributed technologically, which means you do not have to go to your GP surgery to get your test results, further reducing the risk of infection.

THE USE OF DIGITAL COMMUNICATION, COLLABORATION AND PARTICIPATION

Communication, collaboration and participation looks at the way in which you interact with others. It focuses on how you work with people, join in and connect through digital means. Communication with others using a variety of different tools such as emails, social media, photo sharing, presentations and video (Introduction to Communication, collaboration and participation - Digital Capability Toolkit, n.d.).

DIGITAL IDENTITY AND WELLBEING AND SAFETY

Is the ability to use digital technologies in ways that support personal well-being and safety and that of others. Demonstrate and champion ethical, positive, healthy and appropriate attitudes and well-being and safety of self and others. (Royal College of Nursing, 2021)

THE USE OF DIGITAL LITERACY FOR PROFESSIONAL CAREER DEVELOPMENT

There are various technological aids teachers use to enhance the teaching and learning process, such as:

Blackboard is a "Web-based course-management system designed to allow students and faculty to participate in classes delivered online or use online materials and activities to complement face-to-face teaching. Blackboard enables instructors to provide students with course materials, discussion boards, virtual charts, online quizzes, an academic resource centre, and more". Presentation software is used to provide visual aids to enhance teaching, stimulate discussion and allow out of class teaching. PowerPoint is a presentation software. (What is Blackboard?, n.d.)

E- LEARNING

(Lawless, 2018) defined 'e-learning as the training, learning or education delivered online through a computer or any other digital device. E-learning tools and technologies used in online training.

E-learning makes use of many technologies some of which have been developed specifically for it, whilst others conveniently complement the learning process, for example, computer games, communication technologies are also widely used in e-learning.

Starting with the use of emails and instant messaging, message forums and social networks.

SELF DEVELOPMENT

Technology can be used to improve oneself, there are different ways whereby technology can enhance personal and self-development. For example Fitness Technology is often used to help improve health and the general wellbeing of individuals, through technology there are different fitness apps designed for people to use any day and any time.

Productivity Technology: These technological apps help people to become better through time management tools, organizing to do lists. There are different technology apps such as Toggl, Hours, and Observe etc.

We can improve ourselves through reading, technology has improved many people's lifestyles, we can now download different books on our tablets, computer, and mobile phones. Through technology, we can download self-improvement books that will help us make better decisions in our lives.

THE RELEVANCE OF TECHNICAL PROFICIENCY FOR INFORMATION DATA

Technical proficiency is a key element in the framework you will need to become increasingly versatile as digital tools develop and are introduced into the working environment. You are

crucial to the success of any system. Your feedback on the systems you use is vital (Royal College of Nursing, 2021).

REFERENCES

Social Care Institute for Excellence (SCIE). n.d. *Dementia: Technology in care homes - SCIE* . [online] Available at: <<https://www.scie.org.uk/dementia/support/technology/care-homes>> [Accessed 29 April 2021].

The Royal College of Nursing. 2021. *Digital identity | Digital skills | Royal College of Nursing* . [online] Available at: <<https://www.rcn.org.uk/clinical-topics/ehealth/digital-skills/digital-skills-digital-identity#:~:text=the%20ability%20to%20use%20digital,personal%2C%20professional%20or%20organisational%20security>> [Accessed 29 April 2021].

Goodman, P., 2021. *16 Advantages of Digital Technology* . [online] TurboFuture. Available at: <<https://turbofuture.com/computers/Advantages-of-Digital-Technology>> [Accessed 29 April 2021].

Builtin.com. 2021. *Healthcare Technology: What It Is + How It's Used | Built In* . [online] Available at: <<https://builtin.com/healthcare-technology>> [Accessed 29 April 2021].

Digital Capability Toolkit. n.d. *Introduction to Communication, collaboration and participation - Digital Capability Toolkit* . [online] Available at: <<https://digitalcapabilitytoolkit.wp.derby.ac.uk/introduction-communication-collaboration-participation/>> [Accessed 29 April 2021].

Jones, M., 2018. *HealthCare: How Technology Impacts The Healthcare Industry* . [online] Health Care in America. Available at: <<https://healthcareinamerica.us/healthcare-how-technology-impacts-the-healthcare-industry-b2ba6271c4b4>> [Accessed 29 April 2021].

Lawless, C., 2018. *What is eLearning?* . [online] LearnUpon. Available at: <<https://www.learnupon.com/blog/what-is-elearning/>> [Accessed 29 April 2021].

Rauv, S., 2017. *The Impact of Technology in Healthcare: Trends and Examples | elcom* . [online] Elcom.com.au. Available at: <<https://www.elcom.com.au/resources/blog/the-impact-of-technology-in-healthcare-trends-benefits-examples>> [Accessed 29 April 2021].

Education.vic.gov.au. 2021. *Teach with digital technologies* . [online] Available at: <<https://www.education.vic.gov.au/school/teachers/teachingresources/digital/Pages/teach.aspx#:~:text=Digital%20technologies%20are%20electronic%20tools,across%20all%20curriculum%20learning%20areas.>> [Accessed 29 April 2021].

Careerbuilder.com. n.d. *These 6 administrative skills will help you land any job* | CareerBuilder . [online] Available at:
<<https://www.careerbuilder.com/advice/these-6-administrative-skills-will-help-you-land-any-job>> [Accessed 29 April 2021].

Business.nova.edu. n.d. *What is Blackboard?* . [online] Available at:
<<https://www.business.nova.edu/faculty-staff/onboardingmanual/documents/What-is-Blackboard.pdf>> [Accessed 29 April 2021].