



A STUDY OF THE PERCEPTION OF B.ED. PUPIL TEACHER ABOUT DIGITAL CITIZENSHIP.

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Introduction

Introduction of the study

The Internet is the new world in which each and every person has made an artificial space according to which they live their real life. The Internet has a very specific role in today's scenario in fact it has become a basic need for everyone. We all use the internet for web browsing, to search on Google, anything can be searched by just a simple click on Google, many people use the internet for playing video games, watching movies, studying etc. Almost everything is possible through the internet. Each day we woke up with a new innovation in the field of technology and slowly it became a part of our life. The invention of cheap smartphones has made the internet more convenient for the people. We all depend completely on the internet whether it is for buying groceries from online applications like big basket or purchasing anything from amazon, Alibaba, flipkart. There are some applications which are very famous among teens like pubg and mini militaria for gaming. For study purposes some use unacademy. It has been seen that teenagers and adolescents have the curiosity to explore new technology and they get familiar to it very quickly. It has become very important for parents and teachers to guide their children about the safe use of the internet.

The Era in which we are living is known as the Era of the Digital World. In this Era each and every person is somehow connected to the internet, every day we come across a new technology or a new brand that attracts the citizen. People are so occupied by the technology that even after sitting in the same room they don't communicate verbally and prefer texting. If we observe our surroundings, we will find that each and every age group of people is equally involved in the usage of technology, whether it is the people of old age group or young. We can't categorise usage on the basis of age. Nowadays even a 5-year-old child knows how to use the internet and an 80-year-old person also. So, age is not a barrier in accessing the internet.

Students use the internet for surveying, E-lectures and most commonly for social media to share and follow the trends of the world. In this fast-changing world where students use the internet every day for every basic thing, we need to teach them about Digital citizenship so that they don't face problems related to cyber-crime. It has been seen by cyber security that the number of cybercrimes has been exceeded over a period of time. Each year thousands of cases are filed related to cybercrime and maximum of them are the cases in which the culprit is not aware that he/she is committing any criminal activity. So, with such a rapid change in the society and with the dependence of every citizen whether a student, a teacher, technology leader there is a need to educate people about digital ethics, rules, etiquettes, rights etc.

Teaching with the use of ICTs and technology has become the recent trend of 21st century education. ICT was introduced in the Indian education system in 2004 and then it was revised in 2010 to provide better understanding among the students of secondary level. But with the rapid growth in the education system ICT has become an important part of curriculum for the students of each and every level. Each and every teacher takes the help of ICT to make learning interesting and easy for the student. ICT is not just a part of the curriculum but a means to make students digital and work in this digital world. Teachers encourage students to use technology and help them to make optimum use out of it but somewhere moving from traditional methods to the internet world, we forget to entitle our students about the negative effects of technology on them, which may also lead to the misuse of the technology. New technologies are used by teachers to make their students digitally active, teachers perform online classes and safe searching, and promote the same to the students. But still there is a need to properly educate students about the good networking surveying and bad networking surveying. As there is a very thin line between learning and getting involved in non-learning things (like spending a lot of time on social media). It has been seen that students are not prepared properly to use the internet and get involved in illegal downloading, cyber-bullying and many other cybercrimes. Students are not taught about safety measures while downloading any online material and this may sometimes lead to installation of wrong material or virus. It is also seen that many of the students use the internet only for social-networking sites and for sharing personal life on the internet which may lead to destruction. These social sites play a very crucial role in the life of the student as they make it a very important part of their personal life. These social networking sites sometimes may lead to cybercrime like cyber bullying, unhealthy comments etc. Many cases are filed every year that contain reports related to cyber bullying. Many people get depressed when they don't get likes on a specific post and even many cases are observed in which students do anything to maintain their social life. In this Era where students focused more on social life rather than their own life. It is much needed to educate them and make them aware about the safe use of the internet and how they can keep their real life separated from their digital life.

Digital citizenship is a term derived from the term Digital citizen, a person who is engaged in the internet for social, political and government use. Each and every person is a digital person as they are somewhere connected with the internet. So digital citizenship is very important to be taught to each citizen. Digital citizenship is considered as appropriate and responsible use of the internet by users. Digital citizenship is the concept which helps teachers, technology leaders and parents to understand what students, children, technology users should know to use technology appropriately (www.digitalcitizenship.com). It is a way in which teachers as well as parents can guide

their children to use the internet in an ethical manner, and how they can avoid the cases of misuse of the internet due to unawareness.

It is seen that teenagers spend maximum of their time online whether for entertainment or for studies. By putting that in concern various measures were taken by the education system to make students aware about it. MHRD has published a booklet named “A handbook for adolescents/students on cyber security” in 2018. The book is about various cybercrimes and how students can prevent themselves from it. This book is a step to make students a good digital citizen and to guide them how they can save themselves from the internet world.

In the same year 2018, Google and NCERT became partners for training internet safety in school. It was a step to educate teachers as well as students about digital citizenship. It is a safety course in ICT curriculum that will educate students and teachers about safe internet and how they can be a good digital citizen.

Digital citizenship is a concept in which students are aware about a healthy internet environment. Digital citizenship helps in developing the sense of good digital citizens, who are aware of Digital etiquette, cyber-bullying and learn to present their personal information. Digital citizenship is a concept in which we teach technology users to use the internet appropriately and ethically, and have some basic knowledge related to the internet safety and rules that are important for everyone to have knowledge about. It is not only important to students but it is also important that each and every person should have knowledge about digital citizenship so that they can be safe online and don't face any problem related to cybercrime and didn't get involved in any such criminal activity.

There are various terms that help in understanding digital citizenship in more detail one of them is iMature which means internet mature, a person who is a mature user of the internet or a mature Digital citizen (Pandit, 2017). An iMature person is a good digital citizen who uses the internet wisely and effectively. An iMature student knew about Digital rights and responsibilities which he needs to follow to become a good Digital person. Knowledge about Digital citizenship helps in safeguarding the threats caused by the internet like cyber-bullying, cybercrime etc. An iMature student is more flexible as compared to a non-iMature student. An internet mature student is well aware about the safe usage of the internet. It is very important that a student should be iMature so that he/she can make the best use of the internet and avoid negative effects of the internet on them. An internet mature person can make effective use of the internet and become a 21st century Digital student. Therefore, the knowledge about the internet helps the student to learn more, as the internet is an ocean of information and by the use of its student can learn maximum and sky are the limits.

There is also a cyber security cell in India that works on cyber security to protect citizens from the cybercrime world. It has been seen that India comes under the 3rd rank among the highest users of the internet after America and China. It has been seen that the cases related to cybercrime has been exceeded in India from the year 2016. Many cases are filed in which innocent people are got trapped by the cybercriminal. By keeping in concern about the need of the hour and by the introduction of Digital India Movement various steps were taken to educate citizens about Digital citizenship. Digital India talks about universal Digital literacy as a very important part for the growth of the country. Digital India movement is an initiative by the government of India to make India a digital country. There are three key pillars - creation of Digital infrastructure, delivering services and Digital literacy. In its various

videos are uploaded to teach citizens about cyber security and various innovations in the field of internet. The main purpose of universal digital literacy is to at least make citizens be literate so that they don't face any problem while accessing the internet.

Digital citizenship is the norm of appropriate and responsible use of technology. There are many terms related to digital citizenship which are used by cyber security and citizens to get aware and educated about it. Some terms related to digital citizenship given by various Digital citizens that give better guidance about Digital citizenship.

- Introduction to Web 2.0
- Digital literacy and online content sharing
- The mature way of Social Networking
- Basics of Professional Networking
- Online Forums & Communities (online group discussions)
- Smart Blogging
- Smart Searching
- Online educational resources
- Cyber Safety (Theory and case-studies)
- Cyber Ethics (Theory and case-studies)
- Cyber laws
- Online reputation
- Avoiding Internet Addiction
- Digital access
- Digital commerce
- Digital communication
- Digital wellness and health
- Media literacy
- Plagiarism
- Digital footprints

All these are the terms related to Digital citizenship. Some of these are given by the famous writer Mike Ribble in his book “Digital Citizenship in School”. The book is about the major elements that are required to educate students about digital citizenship so that they don't face any problem of cybercrime in their life.

There is also a non-profitable organisation named common sense media that introduced a grade k-12 curriculum. In this there are chapters according to the grade to teach students about digital citizenship. some of the terms above are taken from that source too. There many organizations that promote and support digital citizenship

It is important to be taught digital citizenship in the school as well as in colleges as we live in the 21st century where the internet has become a very important part of everyone's life and due to availability of the internet at such an ease. In today's world every person has smart phones, iPad, laptop due to which accessing the internet has become very easy.

Incorporation of digital skills is very important in today's world as we can see from the present scenario of a pandemic situation in which everything is done online whether it is online earning or e-commerce. All are so dependent on the internet that for everything they are using the internet. schools and colleges are using online forums to educate students and to make them compete in the world.

There are also many series and social staff that teach about the need of the hour. Some of these are on the criminal mind of the teenagers like hacked and some are on transaction fraud. All these are the kinds of information to educate citizens about the need that each and every person should have knowledge and understanding regarding digital life. they should know how to safeguard themselves from these criminals. specially in the cases of students as they are innocents and also not so mature to take decisions and sometimes their wrong decision can lead them in doing a criminal activity about which they are not aware

There are many researches done on the misuse of the technology by the students due to unawareness. But no one focuses on the need to develop a healthy and good Digital environment by training the students and teachers about the rights and responsibility that each person should know for using the internet. So, the focus should be to educate citizens about healthy Digital life and how they can maintain their as well as other digital reputation. Because now a day's digital reputation is very important. So, it is much needed to educate students about it.

Rationale of the study

The term digital citizenship is not so known to the people. Many people think it's a technical word and some might have never heard about it but we all are digital citizens, as we all use the internet in our daily life and enjoy it a lot. We all are so dependent on the internet that in today's world people feel offended if they are not wished on public media. Even no one remembers anybody's phone number as they have all this data “safe” in their phone. We can find anything just by searching on the internet. We are just a click away and the information about anything will be in front of us. Even children are also so engaged in the /internet and phones that a 5-year-old child has their personal social accounts, they have every knowledge about how to search anything on the internet. But do they know that

there are some rules, some ethics to use the internet? These rules, ethics are very important to safeguard children from various cybercrimes, so there is a need to educate children about safe internet and how they can be safe online. Using the internet at every point of time and not knowing what the pros and cons of the internet is not a responsible digital citizen. In this 21st century where students use the internet for every small thing, the internet has become a very important part of everyone's life but in this Digital world there is also a need to understand the importance of a healthy, safe and good Digital environment.

This research is about finding the perception of the B.Ed. pupil teachers about digital citizenship. The researcher focuses to know the perspective of the pupil teachers about digital citizenship and how much they are aware about it. As they are the pillar of our education system. If a teacher is educated then a nation is educated. Here are some of the reason which are considered to be important to educate digital citizenship:

- Nowadays each student relates to technology some due to education and some because of social media. Students use the internet without the surveillance of teachers and parents so to make them an iMature student there is need that he/she has the knowledge of technology and they are good digital citizens.
- It is important because there are many threats related to the cyber world. Digital person will be aware about his/her rights and can safeguard himself/herself from them. So, it's important to teach students about digital citizenship.
- It is also helpful for employment, as nowadays jobs are offered with the primary requirement that the person should be familiar with the technology and social media. So, it is very important to teach students about how to create a positive and healthy profile on the internet and how to protect themselves from the cybercrimes.
- Cyber-bullying is another major reason to teach good Digital citizenship as many people are unaware about it and suffer a lot of problems because of their unawareness.
- Another major reason for the good Digital citizenship is that many people are not aware about the sites and the illegal ways by which they can face problems. Information search and analysis are an important aspect of Digital citizenship.
- Students lacking the information about good Digital citizenship can face inferior learning processes at best and being left behind at worst.
- Educating about digital citizenship is a need of hours. A world in which each and every person uses the internet it is important that they should know how to be safe online too.
- Cyber grooming is also a major problem nowadays among teens. one out of ten students face the problem of cyber grooming and they don't even take any appropriate action against them. so, there is need that students should have knowledge about digital citizenship

As being the second most populated country and being on the third rank in the usage of the internet it is important that citizens should have knowledge about digital citizenship so that they can save themselves as well as the nation from digital crime. Digital citizenship is very important for everyone as being a responsible digital citizen is like being responsible towards the nation and once self. In this research the researcher will try to know the perception of B.Ed. pupil teacher about Digital citizenship and how they look towards it. As students at a higher level have a clearer thought and thinking process and also the next step for them is a job. So, to secure the future of the student he/she should have a knowledge of Digital citizenship. And also, for a bright future of the students whom these pupil teachers will teach in future.

Justification of Study

The researcher conducted the study to know whether the pupil teachers have knowledge about digital citizenship or not. The researcher focuses to know whether pupil teachers understand the needs of today's world i.e. internet safety. The research is about finding the perception of B.Ed. pupil teachers about digital citizenship. It is important to know about the perception of pupil teachers because they are the pillars on which our future will be built upon. it was important to conduct this researcher because of following reasons

1. To find out that pupil teachers are aware about digital citizenship or not.
2. To see whether the terms related to digital citizenship are clear to pupil teachers or not.
3. To find the barriers that pupil teachers face during teaching digital citizenship and what are the barriers in the curriculum.
4. To know whether the digital citizenship concept is clear to pupil teachers or not.
5. To study the various documents related to digital citizenship.
6. To find out whether pupil teachers acknowledge students about digital citizenship in their internship period.

The research is to find the perception of B.Ed. pupil teachers so that the researcher can see how much pupil teachers are aware about digital citizenship.

Statement of the Problem

The Internet is such an important part of everyone's life but still there are people who are unaware about the term 'digital citizenship'. The researcher wants to find out how many B.Ed. Pupil teachers are aware about digital citizenship and how many of them use it in their teaching during their internship. Digital citizenship is the need of the hour. In today's world everyone uses the internet and due to excess in the use of the internet there are also excess threats related to it. The problem is that people are not aware about digital citizenship. whereas everyone is a digital citizen as India is on the 3rd rank when we talk about usability of the internet after America and China. Even then people don't consider it important and talk about it. There are many students that are not aware about cybercrime

and get involved in such criminal activities so there is a need to educate students about how to be safe while using the internet. The researchers aim is to find out how many B.Ed. pupil teachers are actually aware about the term digital citizenship and the terms related to it. So that they can teach their students about it and make them a good digital citizen. As the internet has been that part of the society that no one can replace it or ignore it and in such a need it's very important that everyone should have knowledge about digital citizenship. The researcher will find out the perception of the B.Ed. pupil teachers regarding digital citizenship and how they use it in their internship period while teaching students and making them search online. As ICT and multimedia teaching lesson plans are a part of curriculum and if teachers are not aware about digital citizenship then how, they will teach students or other citizens.

Research Questions

The following questions served as guiding questions for this research.

1. What is the role of digital citizenship in the 21st century education system?
2. What are the barriers in educating about Digital citizenship?
3. What are the threats related to Digital Citizenship?
4. How does good Digital citizenship help in enhancing digital awareness among B.Ed. pupil teacher?
5. How does Digital Citizenship help in enhancing the Education system?
6. How does digital citizenship help B.Ed. pupil teacher in enhancing their digital skills?

Research Objectives

The study focuses on the following research objectives.

1. To study the conceptual framework of digital citizenship.
2. To know the awareness level of the B.Ed. pupil teacher about Digital citizenship.
3. To analyse the role of Digital citizenship in the 21st century education system.

Operational Definition of Key Terms

- Digital citizenship: Digital Citizenship is a concept which helps teachers, technology leaders and parents to understand what students/children/technology users should know to use technology appropriately. Digital Citizenship is more than just a teaching tool; it is a way to prepare students/technology users for a society full of technology. Digital citizenship is the norm of appropriate, responsible technology use. (Ribble,2017)

- Digital literacy: Students should be able to create all types of digital contents (text documents, images, presentations, videos etc). They should understand the technicalities of sharing content publicly online. They should also understand ‘Intellectual Property’ issues. (<http://edtechreview.in/digital-citizenship>)
- Cyber-bullying: Cyber-bullying is bullying that takes place over digital devices like cell phones, computers, and tablets. Cyber-bullying can occur through SMS, Text, and apps, or online in social media, forums, or gaming where people can view, participate in, or share content. Cyber-bullying includes sending, posting, or sharing negative, harmful, false, or mean content about someone else. It can include sharing personal or private information about someone else causing embarrassment or humiliation. Some cyber-bullying crosses the line into unlawful or criminal behaviour. (<https://www.stopbullying.gov/cyberbullying/what-is-it/index.html>)
- Cybercrime: cybercrimes offences that may be committed against individuals, companies or institutions by using computers, internet and mobile technology. (*a handbook for adolescents/students on cyber safety, MHRD*)
- iMature: immature means internet matures a person who is a mature user of internet or a mature digital citizen (*Pandit, R. (2017), became an iMature student*)
- Digital safety: Students should understand all the types of threats in the cyber world. They should learn hands-on ways to avoid those threats. They should become experts in following the “FAST CAR & Secret Location” mantra for online safety. (<http://edtechreview.in/digital-citizenship>)
- Digital rights and responsibilities: The definition of digital rights and responsibilities is having the right and freedom to use all types of digital technology while using the technology in an acceptable and appropriate manner. As a user of digital technology, you also have the right to privacy and the freedom of personal expression(<https://sites.Google.com/site/digitalcitizenshipferris/digital-rights-and-responsibilities>)
- Digital etiquettes: Digital Etiquette is integrity, or sense of self management, and general responsibility for your actions as well as yourself on the internet and treating people like you would in real life. Some basic digital etiquette would be like respecting others, following the rules of the website you're using, or just being kind to others. (<https://digitalnetiquetteproject.weebly.com/>)
- Cyber grooming: Cyber grooming is the process of ‘befriending’ a young person online “to facilitate online sexual contact and/or a physical meeting with them with the goal of committing sexual abuse. (<https://www.childsafenet.org/new-page-15>)
- Email fraud: Email fraud (or email scam) is the intentional deception made for personal gain or to damage another individual through email. Almost as soon as email became widely used, it began to be used as a means to defraud people. Email fraud can take the form of a "con game", or scam.

- Online transaction fraud: illegal withdrawing or transferring of money is called online transaction fraud. In this cybercriminal fools you by asking about your account details by becoming a bank employee and transferring money from your account.
- Media literacy: media literacy is a term used for accessing the media appropriately. Media literacy means creating, evaluating, accessing all forms of communication appropriately.
- Digital footprint: it is the trace of the data that the person searches on the internet like the websites you searched, communications etc. it is also known as digital shadow which keeps the record of everything that the person does on the internet.
- Plagiarism: writing someone's idea by writing your own name is known as plagiarism. It is one of the most down crimes nowadays and people are not even aware about it.

Limitations of the Study

There are many limitations in A study of the perception of B.Ed. pupil teachers about digital citizenship. The first limitation is the limitation of time frame because of which the researcher has chosen a qualitative research methodology. The second limitation is permission from the colleges to collect data. So, the researcher has taken B.Ed. colleges of Guru Gobind Singh Indraprastha university for collecting data. The third limitation is that the topic of research is so new in India that the researcher has limited literature related to it. So, the researcher has studied foreign researchers which have different cultural, educational and political scenarios.

Conceptual Framework

Conceptual framework is an analytical tool that is used to analyse the concept of the concerned context. It is used to analyse, evaluate and explore the context and find out the relationship in between the context. In this chapter the researcher has focused on the concept behind digital citizenship and how it is important for everyone. the researcher took the references from various books and online sites to write the conceptual framework.

Digital citizenship is the process in which students, teachers, technical experts etc are taught about safe and responsible use of the internet. Digital citizenship is the responsible use of the internet by following all the ethics. The Ministry of Electronics and Information Technology, Finance Ministry launched a campaign named Digital India movement on 1st July 2015 under the supervision of our honourable prime minister Shri Narendra Damodardas Modi. The campaign talked about Digitalization and focuses on three things. Those three things are Digital Infrastructure as a Core Utility to Every Citizen, Governance & Services on Demand and Digital Empowerment of Citizens.

In this the third point supports Universal Digital literacy. It is an ongoing digital awareness campaign that supports and promotes digital knowledge among the citizens of India. It focuses on the e literacy of the citizens of India so that they don't face problems while exploring the digital world. By this campaign 'Digital India movement' people started using the internet for more than just chatting. This campaign helped to understand digital importance and need, and made millions of people digital citizens. It also talks about digital literacy that means educating citizens about safe transactions, online frauds, cyber bullying and many other threats.

In 2018 on safer internet day NCERT and Google joined hands to provide a course on digital citizenship in ICT curriculum. The course focuses on being safe online and having knowledge about digital etiquettes, digital laws, digital ethics etc. The course covers four points -Being Smart, Being Safe, being a Digital Citizen and Being Future Ready. This also talks about educating teachers about digital citizenship.

There is an NGO in San Francisco, California, United States named common sense media which has been working since 2003. This is a non-profitable organization that provides education and advocacy to families to promote safe technology and media to children. They have given a K-12 curriculum on digital citizenship to educate children. There is a specific curriculum from grade K -12 in which 12 topics are taught to children that make them aware about digital citizenship

There is a book written by Mike Ribble named 'Digital citizenship in school' in the 2007 second edition that talks about the nine elements that are needed to be educated to children to make them digital citizens. These nine elements help to understand digital citizenship more easily to the child. The elements provide a framework for better understanding of technology. These addresses various needs of the current time like digital communication etc.

All this information made digital citizenship more understandable for the citizen. Digital citizenship is a concept in which citizens are guarding how they can be responsible online while using the internet. The term Digital citizenship has come from the term digital citizen that means a person who is using information technology for social, political and government use. Nowadays each and every person is a digital person, we use the internet for banking, playing games, chatting ,buying clothes and many other things and in such a time where we all are so dependent on the internet there is a need that each and every person should have knowledge about a safe internet. Digital citizenship is a very given term that comprises many terms that make it more understandable like digital rules, cyber bullying etc. digital citizenship is a new term and very few people are aware about it so there is a need that people understand the meaning of digital citizenship and be a good digital citizen. so that they can protect themselves as well as the society from the cybercriminal world.

Review of Related Literature

This chapter presents the literature related to this research. Reviews of related literature are the comprehensive summary of the work done in the field of the researcher's study. It is a literature that is concerned with the topic that the researcher is doing research on. It provides the knowledge related to the literature and the work done in the field of the study. Review of related literature is important to understand the need of the student and what are the works done in that literature. It provides a background about what researchers are doing in the field and what are the literature concerns to the study. It also provides an understanding about the various literatures related to it. Review of related literature is important to have the knowledge about the previous researchers done in the field of the study, so that the researcher can understand the problems and the results that other researchers faced during conducting the research. It tells about the authenticity of the topic taken by the researchers and how it is different from the work of the other researchers. Review of related literature is very important for a researcher to see the relevance of their research and to see what can be done more in the field of the study. The importance of review of related literature for a researcher are as follow

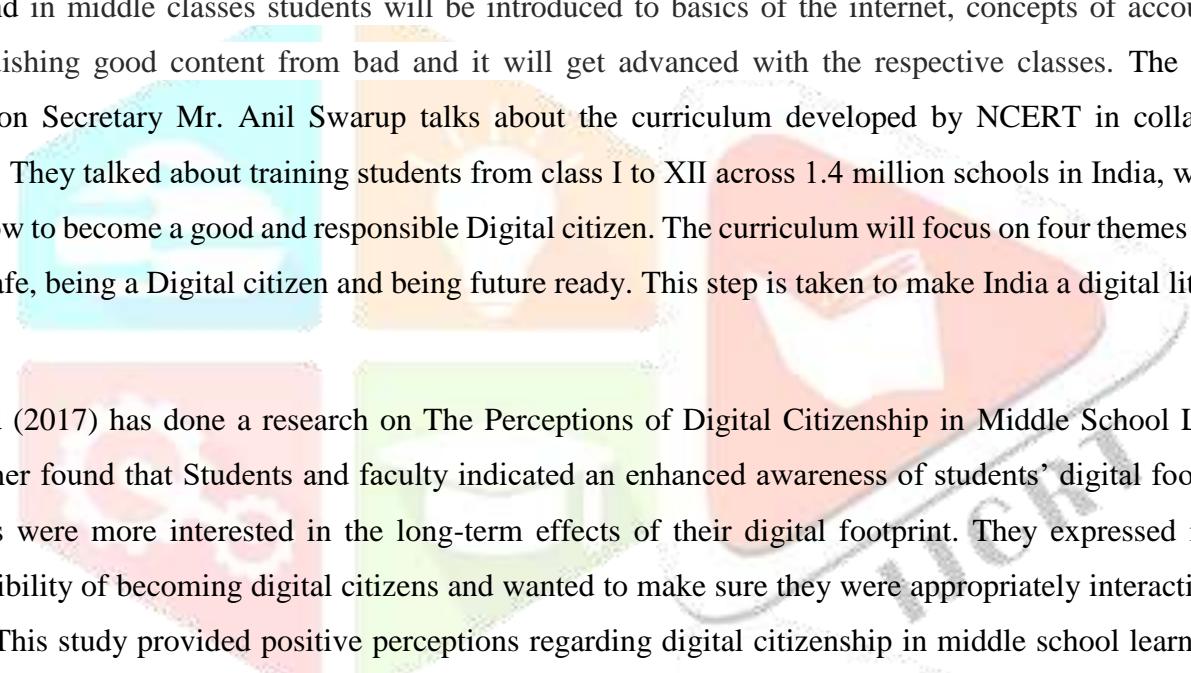
1. It gives an in-depth knowledge about the theoretical/conceptual background of the research.
2. It helps the researcher to gather the helpful data and ideas that they can use in their research.
3. It helps the researcher to have a clear picture about the material related to the study.
4. It is important to see the relevance of the study.

Review of related literature forms a linkage between the studies already done in the field of research and the research of the researcher. It consists of various articles, journals, research papers", websites, books and other literature that are related to the literature of the study.

This chapter will give the view of various researches and work done on digital citizenship. As the topic of the research is new and it was recently launched under the Digital India movement in 2015. There is no research done in India and there are limited resources related to literature if we see from the base of Indian writers and literature. There is one book published by MHRD that talks about digital safety. There are some writers like Ribble who has written a book on digital citizenship in school which promotes digital citizenship. There are also some research papers written by foreign writers like Payne, Logan etc that talk about digital citizenship. There are many sites that

have information and articles related to digital citizenship. This review of related literature will be about those studies and books.

Google, NCERT partner for internet safety training in school, PTI updated on February 6th ,2018(*thehindubusinessline.com*), Google and NCERT signed an agreement to integrate a course on Digital citizenship and safety in information and communication technology curriculum. It is a step to educate students about how to behave like a responsible digital citizen while using the internet. The program is about the safe use of the internet, and training students about digital citizenship. The curriculum is not only for students but also for teachers so that they can also be trained in educating students about digital citizenship. The program is made by keeping in mind all the age groups. The program is a collaboration of intellectual and curiosity needs of the present time that fulfil the needs of each and every student irrespective of their age. The curriculum is made by focusing on the needs of each student like for lower classes students will learn to engage in technology and use basic digital tools and in middle classes students will be introduced to basics of the internet, concepts of account safety and distinguishing good content from bad and it will get advanced with the respective classes. The Union School Education Secretary Mr. Anil Swarup talks about the curriculum developed by NCERT in collaboration with Google. They talked about training students from class I to XII across 1.4 million schools in India, where they will learn how to become a good and responsible Digital citizen. The curriculum will focus on four themes – being smart, being safe, being a Digital citizen and being future ready. This step is taken to make India a digital literate country.



Holland (2017) has done a research on The Perceptions of Digital Citizenship in Middle School Learning. The researcher found that Students and faculty indicated an enhanced awareness of students' digital footprints, where students were more interested in the long-term effects of their digital footprint. They expressed interest in the responsibility of becoming digital citizens and wanted to make sure they were appropriately interacting in a digital world. This study provided positive perceptions regarding digital citizenship in middle school learning from both the faculty and student participants due to an increased interest in one to one world learning.

Logan (2016) has done a research on Digital citizenship in 21st century education. The researcher found that only 68% of the overall participant has little to no understanding about Digital citizenship. There is a need to develop understanding regarding copyright, creative credit, internet safety, privacy, Digital images, Digital footprints, Digital literacy and Digital relationships and communication. As very few participants have knowledge about these the only knowledge that the maximum of the student has was cyberbullying. The researcher found that there is need for funding and there is limited access to Digital citizenship.

Payne (2016) conducted a case study of teaching digital citizenship in fifth grade. The research was to determine how sunshine school system 's fifth grade teachers were educating their students about Digital citizenship. Seven teachers were taken under the study and it was found that teachers were not completely using digital citizenship in

the classroom. Maximum of the teachers were demanded by the computer teachers for the work related to computers and internet, they also demanded computer teachers to develop awareness among students about the safe use of the internet. She uses the C3 framework for Digital communication and tries to prepare teachers to use it in the classroom. The researcher sees that there is a need to develop consciousness of all the teachers and also there is a need to encourage teachers to inculcate the sense of good Digital citizenship.

Dillinger (2015) has done research on Digital Citizenship and Today's Online Student. The researcher found that the time spent on the Internet by the students in their everyday lives has increased more than ever and the amount of time daily spent on the Internet is increasing. The teaching of digital citizenship helps students embrace responsible behaviour while using technology. Teachers and librarians working together provide guidance to students on how to be safe, responsible, Internet users.

MHRD published a booklet named "A handbook for adolescents/students on cyber safety". The book is divided systematically into eight chapter proceeding from 'What is cyber security?' to the different types of threats that one can face while using the internet. The booklet is about various problems that a student faces while using the internet. The book also focuses on the precautions that the child must take while accessing the internet. The major threats considered in the booklet were

1. cyber bullying: harassing someone online by using mean words and actions.
2. cyber grooming: sexually assaulting someone by becoming friends online.
3. email fraud: sending spam and fraud messages online.
4. transactional fraud: transferring money from someone's account without their concern and knowledge.
5. online gaming: harassing someone online by using gaming sites.
6. social networking sites safeguard: informing students about how they can protect themselves online.

The booklet is a step to educate students about safe networking and how they can protect themselves online

EdTech review media pvt. Ltd. (2017), it is a community of and for the people who are connected with education technology. They discover, learn, utilize and share about the best way technology can help in improving teaching and learning in the 21st century education system. They work by keeping in mind the changing world that is more digital and to deal with this world there is need that each and every person irrespective of their age should have sufficient knowledge about how they can be safe online .EdTechReview.in has also grown into India's premier media platform for educational stakeholders to find useful news, information and resources on educational technology having a niche readership from over 220 countries and territories across the globe . Its mission embeds 21st century knowledge and technology in education.

SSM has done research on Student Perceptions of the Effectiveness of a Digital Citizenship Intervention. The researcher has found that students want to improve their digital citizenship by keeping themselves safe online through taking actions such as: limiting their personal information, increasing privacy settings, and thinking twice before posting content online. The students showed interest in learning about digital citizenship.

Choi (2015) has done research on Development of a Scale to Measure Digital Citizenship among Young Adults for Democratic Citizenship Education. The researcher uses a multi-step scale developed to measure the perception and behaviour of the citizens regarding digital citizenship. The finding of research suggested that the digital citizenship scale is a reliable and valuable concept to assess the individual sense of digital citizenship skills, perspective and action-based elements. The digital citizenship scale presented in this study had good reliability and construct validity and the evidence that there is a significant relationship between Internet self-efficacy and Internet anxiety.

O'Brien (2010), *Creating Better Digital Citizens*, The Australian educational leader (*official journal of the Australian council for educational leaders*). The journal is about teaching students and the citizens of Australia about good digital citizenship to prevent students from cyberbullying. It focuses on the Ribble (2004) book and talks about various elements that are essential to educate students about digital citizenship. Empowering citizens by educating media literacy about what is good and what is bad.

Ribble (2007), *Digital citizenship in school (second edition)*. The book is about educating students about digital citizenship. The book talks about a flexible framework for students that has nine elements that Ribble says are important to teach students about digital citizenship. The nine elements that are considered to be important to teach students to give them better understanding about digital citizenship are

- A. Digital access: Full electronic participation in society.
- B. Digital Communication: Knowledge about electronic mode of communication
- C. Digital Commerce: Buying and selling of goods by electronic medium
- D. Digital Literacy: The process of teaching and learning about technology and safe use of technology.
- E. Digital Etiquettes: Knowledge about electronic standard of conduct and procedure.
- F. Digital Law: Being responsible about electronic actions and deeds
- G. Digital Rights and Responsibilities: Those freedoms extended to everyone in digital life.
- H. Digital Health & Wellness: physical and psychological well-being in a digital

technology world.

I. Digital Security (self-protection): electronic precautions to guarantee safety.

All these nine elements help the student to become a good digital citizen and develop an understanding about digital citizenship. These nine elements work on three principals

1. Respect Yourself/ Respect Others

1.1 Etiquette

1.2 Access

1.3 Law

1. Educate Yourself/ Connect with Others

2.1 Literacy

2.2 Communication

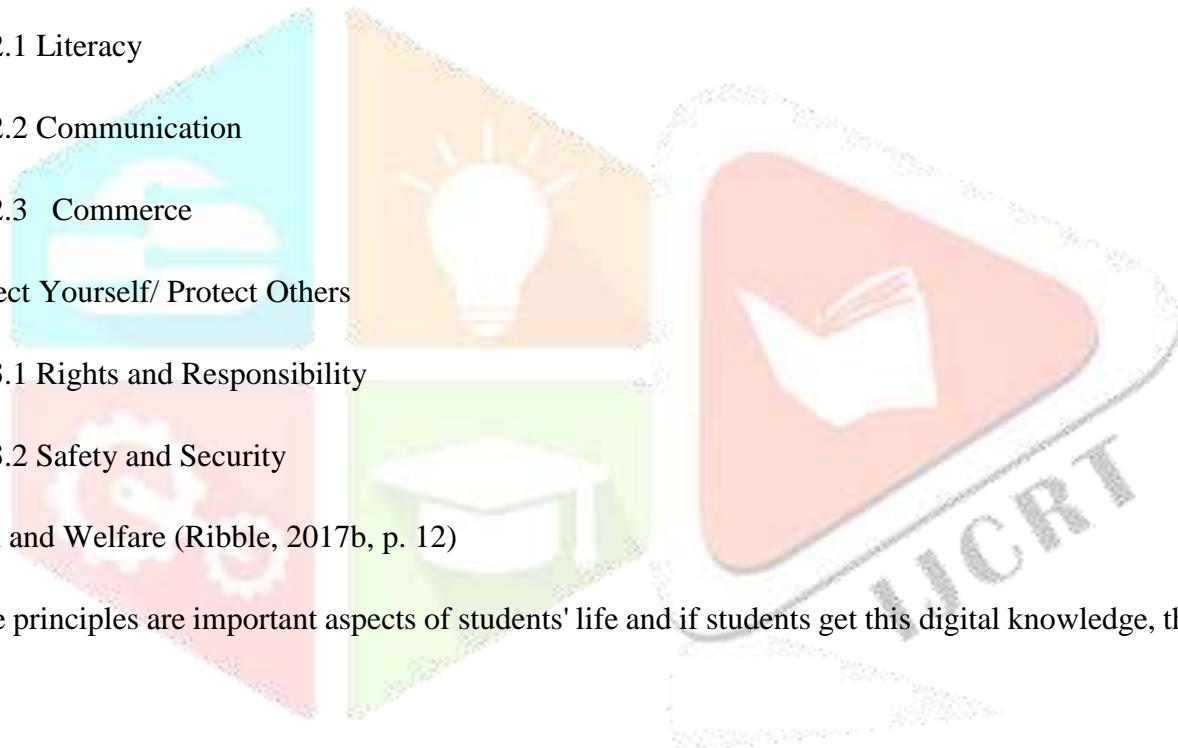
2.3 Commerce

1. Protect Yourself/ Protect Others

3.1 Rights and Responsibility

3.2 Safety and Security

Health and Welfare (Ribble, 2017b, p. 12)



Noula (2019), digital citizenship; citizenship with a twist? is a book published by media@LSE (*London School of Economics and Political Science*). Noula discusses various definitions given by various websites, Ribble and Bailey and other NGOs and critically analyses these terms. The paper aims to illustrate the ideology of mainstreaming of the ideas of Ribble and Bailey model of digital citizenship.

Isman, Gungoren (2014), DIGITAL CITIZENSHIP, TOJET: The Turkish Online Journal of Educational Technology (volume13, issue1). The journal aims at building extensive skills, technology knowledge, internet and technology access among the students and citizens in the light of today's era the journal is about the need to educate digital citizenship in the school so that students have the skills and training regarding being a good digital citizen. There are nine elements from Ribble and Bailey books on digital citizenship that the journalist thinks are important

to teach the students in the school. The researchers aim at developing skills in the citizen about digital citizenship by making them understand these nine elements given by Ribble and Bailey.

Common sense media is an organisation that started a campaign in 2003 by the name Common Sense Education that provides education to students from grade K to 12 about various internet measures that the student should follow and have knowledge about in this digital world so that they can be safe online. They also provide a curriculum framework that supports good digital citizenship. They focus on six topics that they teach from grade k-12. those topics are

1. Media Balance and Well Being
2. Privacy and Security
3. Digital Footprint and Identity
4. Relationship and Communication
5. Cyberbullying, Digital Drama and Hate Speech
6. News and Media Literacy

These are the topics that are considered to be taught to students from grade 1 to make them a good digital citizen and to develop understanding regarding digital citizenship. The organisation works for making students a responsible digital citizen and works on it.

Teach Digital Citizenship skills to prevent Cyber bullying, (August 2018), a fact sheet by the United states government to prevent cyber bullying among teens. The fact sheet talks about various digital skills that are needed to educate students about cyberbullying and by which the maximum number of teens can be protected. It says that teachers and parents play a major role in educating teens about cyber safety. There are various majors by which parents can guide students about cyber safety so that they don't get involved in it either as a victim or a culprit.

Alqantani (2017) has done research on the extent of comprehensive knowledge with respect to Digital Citizenship among Saudi Arabia teachers. The researcher uses a mixed method research design to identify the scope and perception of digital citizenship awareness among the Saudi Arabia teachers by using Ribble's characteristics of digital citizenship. The study focuses on how gender, grade level of teaching and year of experience can influence the teacher regarding digital citizenship. The study shows that there is a significant difference between the knowledge of male teachers and female teachers. There is also a statistical difference between the knowledge of the teachers of the middle class and higher class. Overall, the study shows that the Saudi Arabia teachers have a good level of awareness regarding digital citizenship.

Synder (2016) has done research on Teachers perception of digital citizenship development in Middle school students using social media and global collaboration projects. The study explores the growth of the students regarding positive digital citizenship while making their participation in one digital citizenship project using Global collaboration and social media. The findings show that the global collaboration project and social media served as catalysts. they motivate the students to become a good digital citizen and to overcome the barriers in digital citizenship. to use social media for learning and collaboration and encourage them to adopt a less ethnocentric view of the world.

Methodology

This chapter contains the research methodology and research design that the researcher used to find the perception of the B.Ed. Pupil teachers regarding digital citizenship. research methodology is the specific and systematic procedure or techniques used by the researcher to identify, select, process and analysis information about the study. The objectives of research methodology are as follow:

1. To analyse the data collected by the researcher.
2. To verify the facts related to the research.
3. To analyse the phenomena, events and process of the research.
4. To solve the research questions made by the researcher.

The chapter provides explanations about the sampling design, data tools, description of tools and statistical techniques used by the researcher to conduct the research. Research methodology is a very important part of the research paper as it tells about the research design, techniques and tools that the researcher uses to find the result of the research.

Type of Research

The researcher uses descriptive research design to find out the perception of the B.Ed. Pupil teachers about digital citizenship. Descriptive research is that research methodology that describes the characteristics of the current phenomena in the population. It focuses on 'what' rather than 'why'. It is a design to obtain pertinent and precise information concerning the current status of phenomena and to draw conclusions from the facts that are discovered. It is a qualitative approach that focuses on the qualitative aspect of the population. It is the holistic way to find the present status of the research. To find the perception of Digital citizenship among the B.Ed. pupil teacher the research

will describe, analyse and interpret the data that the researcher will collect during the research. The researcher uses qualitative measuring tools to analyse the behaviour of the B.Ed. pupil teacher. The researcher targets specific sources of books and people to collect data related to the research. The participants are chosen by using the appropriate approach to find the result of the study.

Population and Sampling

Population and sampling are a part of research methodology. In it the researchers choose the appropriate same from the population by using the appropriate technique. In the research population refers to the target audience from which the researcher will choose its sample and do the research on .sample is the respective unit that the researcher selects as his/her sample. Sampling is done by choosing the appropriate technique to get the right sample from the population. In the research the researcher uses random probability sampling for collecting the data from the target audience.

- The researcher will take B.Ed. colleges affiliated by Guru Gobind Singh Indraprastha University in Delhi as population size.
- The researcher will take four B.Ed. colleges affiliated by Guru Gobind Singh Indraprastha University as sample size.
- 50 students and 5 teachers from each B.Ed. college will be taken by using random probability sampling.

Random probability sampling is a technique in which each and every sample gets the equal opportunity. This technique is used so that the researcher can be unbiased towards the sample. The researcher uses this technique to collect the information from the sample.

Tools and Techniques

The tools and techniques that the researcher will use in the study according to each objective are as follow:

S.NO.	OBJECTIVES	TOOLS
1	To study the conceptual framework of digital citizenship.	The researcher will do content analysis.
2	To know the awareness level of the B.Ed. pupil teacher about Digital citizenship.	The researcher will develop the questionnaire to find the awareness.

3	To analyse the role of digital citizenship in the 21st century education system.	The researcher will conduct an interview.

Description of Tools

Objective 1: To study the conceptual framework of digital citizenship.

The researcher uses content analysis for this objective to analyse the content related to digital citizenship. It is used to identify the relationship between the content and to analyse the content deeply.

Objective 2: to know the awareness level of B.Ed. pupil teacher about digital citizenship

The researcher used a questionnaire for finding out the awareness level of B.Ed. pupil teachers. The questionnaire is used to get samples from a larger number of audience and also it is a use for analysing the attitude and awareness of the audience. It is less time consuming so the target audience will not feel uncomfortable to share their time and views.

Objective 3: To analyse the role of digital citizenship in the 21st century education system.

The researcher uses interviews for this objective. An interview is the best tool when the researcher wants to have face to face communication. The researchers use interviews to get authentic data and the researcher can use observation as another tool to get more accurate results.

Data Analysis

Data analysis is a process of inspecting, processing, cleansing, transforming and modelling data with the goal to discover useful information, inform conclusions and support decisions (Wikipedia). The data analysis is a way to

get extract out of the data that is being collected by the researcher. the researcher developed qualitative data analysis tools to collect the data.

Data analysis is the most important part of the research paper as it defines the body of the research on which the complete research is dependent on. The researcher uses three tools to analyse the data. The first tool is content analysis in which the researcher analyses two texts i.e. a handbook for adolescents/ students on cyber safety and a book by Mike Ribble named digital citizenship in school, the researcher also uses the grade k-12 digital citizenship curriculum given by common sense media, an organisation for promoting digital citizenship. in all the three sources the researcher analysis the elements that are important to be a responsible digital citizen and how that can be taught to the students so that they can be protected from the digital crime going around on the digital media. The second tool that the researcher uses is a questionnaire to find the awareness of the B.Ed. pupil teacher regarding digital citizenship. The questionnaire formed by the researcher is a close ended questionnaire. The researcher uses observation techniques to observe the attitude of the B.Ed. pupil teachers while filling the questionnaire. The third tool used by the researcher is an interview to analyse the role of digital citizenship in the 21st century education system. the researcher also uses observation as an additional tool to see the attitude of the B.Ed. pupil teachers regarding digital citizenship. The interview was also recorded to have first-hand information regarding the data collected. The data was then interpreted into English from bilingual language i.e. Hindi and English. The teachers were very supportive and adjusting.

The data collected by the researcher is authentic and was done by using random probability sampling technique. It is a technique which is used to collect samples by choosing random samples and in which each and every sample gets equal opportunity to be the part of the sample. The data is collected with the complete permission of the authority of the colleges.

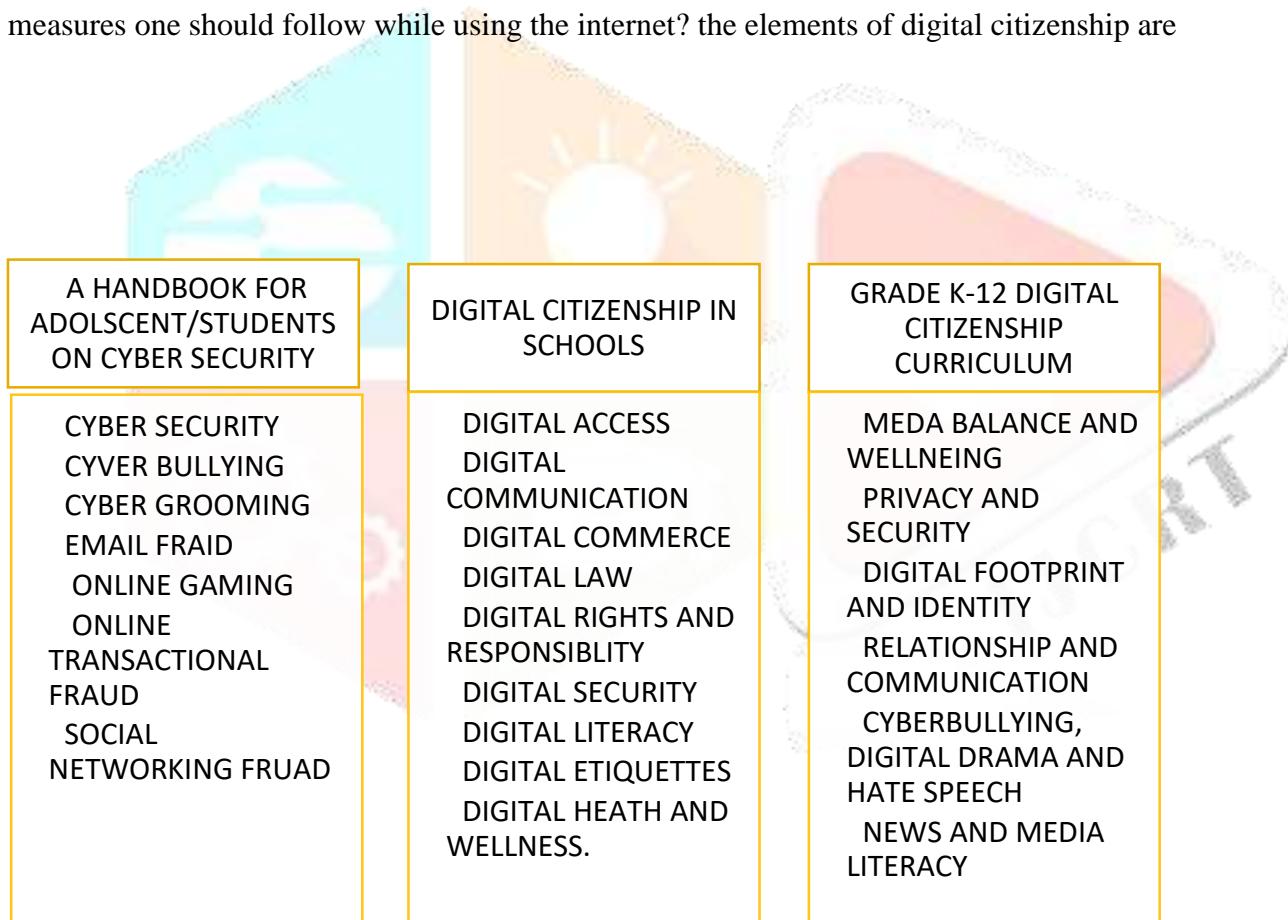
CONTENT ANALYSIS

OBJECTIVE 1 - TO STUDY THE CONCEPTUAL FRAMEWORK OF DIGITAL CITIZENSHIP.

The researcher uses content analysis for the first objective to find out the conceptual framework of digital citizenship. Content analysis is a process to analyse the data, themes, relations, concepts in the given text. Content analysis is the systematic analysis of documents, text, images to get deep knowledge about the study. The researchers use three sources to analyse the concept of digital citizenship and the terms related to it. The first source of data is a book published by the Ministry of home affairs (Government of India). The booklet is on cyber security named “A

Handbook for Adolescents/Students on Cyber Safety". The book is divided into eight chapters talking about various things that a student should be taught regarding the digital world. The second source of data is a book by Mike Ribble (second edition,2007) named "digital citizenship in school ". The book talks about nine elements that the student should have knowledge to be a responsible and good digital citizen. The third source of data is the curriculum given by an organisation named "common sense education ' ". the curriculum is made for the students from grade K-12 to educate them about digital citizenship. They use major six elements that the student should have knowledge about.

There are some other sources that the researcher uses to analyse the content. The researcher uses various websites, textbooks and e content to get to the actual concept of digital citizenship. In this the researcher will explain digital citizenship in depth according to the resources from which the research will do the content analysis. the sources have many common topics on which they explain about what is digital citizenship? Why is it important to be taught to the students? What are the threats of using the internet? How can students prevent themselves from it? What are the measures one should follow while using the internet? the elements of digital citizenship are



The aim of the booklet by MHRD is to educate students and adolescents about cyber security and tell them how they can protect them from major problems of the internet world. The booklet has been prepared with the consultation of cyber security experts. The booklet was made by keeping in mind the digital space in which each and every student spends a lot of time from their daily life. The booklet is for children above the age of 13. The handbook can also be used for younger children to teach about cyber safety and cyber security. The booklet is divided into eight chapters

that talk about various measures to protect students from getting into cybercrime. The other book by Mike Ribble was made with concern to educate students about digital citizenship in school. Ribble gave nine elements that are important for a student to know while using the internet. The common sense media is an organisation that works for educating students from Grade K-12 about Digital citizenship. There is a curriculum formed to educate students about safe internet and how they can be safe online while searching or enjoying their personal life's.

“According to Indian computer emergency response team, over 53000 cases of cyber security incidents were reported in 2017 in India”

DIGITAL CITIZENSHIP

Digital citizenship is a concept in which students, teachers, technology leaders and parents are taught about responsible and safe internet. as we all use the internet some for fun other for searching or learning or for making friends or for playing games online. It is important that each and every person should have knowledge about how they can be safe online and be a responsible citizen. Digital citizenship is a concept with a lot of elements that describes it in detail like threats related to it , safe measures to be taken while using the internet and many more things . It is important to teach students about digital citizenship so that they can be safe online and feel responsible while using the internet. We all are digital citizens as we all use the internet so it is our duty to keep ourselves safe online. Teenagers and adolescents are the prime victims and culprits of cybercrimes. So, making them a good digital citizen is much needed in today's world. In all the three books the writers focus on what to be done to prevent students from online crimes and how can be made a responsible and good digital citizen.

CYBER SECURITY AND DIGITAL SECURITY

Cyber security is a practice to prevent ourselves from cybercrime. Cyber security is the practice of defending computers, servers, mobile devices, electronic systems, networks, and data from malicious attacks. It's also known as information technology security or electronic information security. There is a book by the cyber security of India that gives the major highlights about how the cybercrime has been increased in India from few years

- India comes under third rank in internet usage all over the world after America and China
- The cases of cybercrime have been increased at a great rate after 2017.
- There are four sources of cyber threats
 1. National states
 2. Cybercrime organisation
 3. Terrorists, DTOs etc
 4. Hackers

All these are the information provided by the cyber security cell of India. There are many threats about which one should have knowledge about.

Digital security is the electronic precautions to guarantee safety. Digital security is important because it is necessary to prevent yourself from online viruses and threats like we prevent ourselves from the virus of the world by making a protected sheet around ourselves. It has been seen that the security problems not only occur due to flaw in the equipment but due to carelessness of the user. There are many reasons behind it:

1. We share our password with anyone without thinking about the consequences.
2. We easily become friends with anyone online.
3. We share our personal life online like pictures, phone numbers etc.

Digital security is not just about protecting ourselves, it's also about creating awareness regarding various crimes happening around us online. Privacy and security are important and a child should know how to keep his personal life safe and how to keep privacy from unknown people. As sharing about ourselves is a common human behaviour and its normal also but sometimes this may lead to problems for the child. It is important to teach students about how to keep their privacy while using any social media or while being online. Digital security and cyber security are important to make a child aware about how they can be safe online.

CYBERCRIME

Cybercrime is computer-oriented crime. The crime in which a person uses internet as a platform to commit a crime like hacking, copyright infringement, unwarranted mass-surveillance, sextortion, child pornography, child grooming, cyber bullying, online fraud etc. Cybercrime is increasing at a great rate. In today's world where everyone uses phones there is a need to educate students about cybercrime and what are the major threats and how can they prevent themselves from it. Cybercrime is a type of crime that is done by using the internet. Cybercrime can be done by anyone either intentionally or unintentionally. Anyone can do this by sitting anywhere on this world and destroying someone's life just by clicking on one button. Cybercrime has become a major threat in the life of teenagers as they spend maximum of their time in using phones and maintaining their online social circle. Due to the increase in the use of the internet it also leads to increase in online crimes.

The next question that comes after is then how can we prevent yourself from cybercrime or who will tell us about what the measures are. There are various ways by which one can protect themselves from cybercrime. But for that the person should have known that the different types of cybercrimes are so that they can find out if some type of criminal activity is going on with them or not.

DIGITAL COMMUNICATION

The electronic exchange of information is known as Digital Communication. The Internet has changed the way we communicate. Cell phones , social networking sites and texting have given a new angle to the mode of communication. The reason behind studying digital communication is to guild students about how to use these platforms wisely and appropriately. Students use phones to text and sometimes they feel that the text sended by them is personal and if they delete it , it will go away but in reality even if the message is deleted it still remains in cyberspace. So it is important that the child should have knowledge about how to use these platforms wisely.

Some threats of cyber life that everyone has once faced in their life.

Cyber bullying

There are some common cybercrimes that are committed by the students without their knowledge. One of them is cyber bullying, it is an act of harassing someone online by sending mean and rude messages. Each and every person gets bullied in his/her life once in life. Usually cyber bullying is faced by everyone whether a normal citizen or a film star. We saw many times people comment on social networking sites of celebrities. Cyber bullying is also faced by teenagers, usually students bullied each other by posting mean comments or posting unauthentic pics. A cyber bully can be anyone, sometimes people don't even know that they are bullying someone. Sometimes cyber bullying leads to a lot of problems in the child's life like he might get depressed or have emotional and psychological outburst. So, to prevent one from cyber bullying some precaution is given in the book like

- Don't accept friend requests from any unknown person.
- Don't share your personal information with anyone as this may lead to problems.
- Don't install any unwanted application or software to your phone
- If you feel any problem talk to someone older or your parents.

Cyber bullying is one of the effects of not being aware about how to communicate on a digital platform. Yes there are many cases in which people do it purposely but sometimes culprits and not being aware about what they are doing

Cyber Grooming

"Cyber grooming is the process of 'befriending' a young person online "to facilitate online sexual contact and/or a physical meeting with them with the goal of committing sexual abuse." Cyber grooming is the other threat of cybercrime. In it the cybercriminal tries to build an emotional or over friendly relationship with the person and then tries to make online sexual contact with him/her. There are many children who don't even know about cyber grooming but have faced it in their life. The cyber groomer can use fake id or use online gaming or any social networking site to make close contact with you, they can ask for pictures, videos by asking you about modelling job offers or other work. They can send you gifts or give you compliments and later can send their own pictures and videos and ask you to share your pictures and videos of sexuality. Usually the victims of cyber grooming are teenagers as they are very anxious to explore new things and even their hormonal changes encourage them to do these types of things. Cyber grooming can also lead to blackmailing sometimes. Some way by which student can protect herself/himself from cyber grooming are:

- Don't use a webcam while talking to any unknown person.
- Don't meet anyone alone. Take an elder with you if you want to meet
- Avoid talking about sexual and physical things to any unknown person.

- Don't share any personal content with anyone you don't know
- Block the groomer
- Inform someone elder if you face any problem

Online Gaming

Online gaming is the other source by which a child has threats online.

We don't even think that online gaming can also be one source by which one can face threat. Children of any age group love to play games and when it's free that's the cherry on the top of their favourite cake. But we never see that this online gaming can be harmful also. There are many cases in which people face bullying, there are many aggressive players who harass, bully people while playing. Sometimes cyber criminals and adults also play online and act like children to become friendly with them and win their trust. They can use this as a scam or get in personal with you.

Sometimes online games ask for credit card and debit card numbers to buy coins online. This can lead to online fraud by which they will easily make transactions from your account and transfer money. So, don't give your card details. Don't install any random application while playing it can contain viruses.

Safeguards for social networking sites

We all share our pictures and videos online. It is a new trend now a day people share each and every part of their life on social networking sites. Cyber criminals and cyber bullies can use social networking sites to harm teenagers.

Some threats related to social networking sites are;

- Cybercriminals can make fake accounts and can use it for illegal things.
- Cyber bullying is the main problem on social networking sites. Bullies can bully you online by commenting bad comments and sending mean messages
- Cyber groomer can also meet you on social networking sites.

Some ways by which one can protect himself/herself are:

- Put a complex password and make a habit of changing it regularly.
- Never share your password with anyone.
- Don't make your post visible to all.
- Avoid accepting friend request from unknown
- Don't share your personal information on social networking sites
- If you ever feel any problem contact any elder or your parents.

Email fraud

“Email fraud (or email scam) is the intentional deception made for personal gain or to damage another individual through email. Almost as soon as email became widely used, it began to be used as a means to defraud people. Email fraud can take the form of a "con game", or scam.” Email is used by everyone; actually, it is a basic requirement in the online world. you need an email for opening any account on a social site to chat with someone or for some official work. Each and every person uses Email for connecting your bank account, for form filling etc.

A cybercriminal can trigger your email by sitting anywhere on this earth and can get all our data by just one click. They use simple and attractive mail to attract the user and by opening those mail can get hacked or face problems of email fraud. Email hacking is also a way of cybercrimes.

Some of the safeguard that can have in preventing Email fraud are

- Use a complex password so that you don't get hacked.
- Use two factor authentications for login.
- Never share your password with anyone.
- If you are using your friends' phone or computer, or any public computer don't pop yes to remember my password and clear your history and log out your all accounts.
- If you use email on your phone use a strong password for your phone.
- If your email gets hacked message your contact to be alert and report it.
- Don't open emails that are from unknown sites.
- Develop a habit of changing your password after an equal interval of time.

Online transaction fraud

Online transaction fraud that can happen online in which money is transferred or withdrawn by fraud by cybercriminal. These usually occur when people put their card details on unauthentic sites or when someone hacked any site. Cybercriminal can fake their identity as a bank employee and ask for information that can lead to online transaction fraud. Some ways to prevent online transaction fraud

- Never share your bank details, card details with anyone.
- Make a habit to regularly change your bank online password.
- Always type your bank website on your own whenever login to your internet banking.
- Check your monthly statements.

- Always check that the website is authentic or not
- Report immediately when your card gets lost.

DIGITAL LITERACY AND MEDIA LITERACY

Digital literacy is the process of teaching and learning about technology and the use of technology. Digital literacy is important to provide every citizen with knowledge about how to be responsible while using the internet. Digital literacy is important to make citizens E-literate. They should have basic knowledge regarding using the internet on phones and laptops. Digital literacy helps to make the citizen a responsible and good digital citizen. Media literacy is the literacy regarding how to be responsible while using media. Media literacy is very important in today's world where everyone uses the internet. Media literacy talks about how to make a citizen literate about using media or any online forum. It is important to teach students about media literacy so that they can be safe while using social networking sites and being online.

DIGITAL ETIQUETTES

The electronic standards of conduct or procedure. Digital etiquettes are like giving respect to everyone online, not using abusive language or being polite and etc. Earlier parents used to teach their wards about how to behave with someone and tell them about basic etiquettes that one should have. But in today's world and with the increase in the usability of technology it is equally important that students should also be told about how to be a digital etiquette citizen. Digital etiquette includes how to use the internet that does not affect anybody's feelings while using an online platform. Using appropriate content that doesn't hurt the feeling of anyone. Giving respect to everyone by not getting engaged to any cyber crime like cyber bullying, cyber grooming etc.

DIGITAL HEALTH AND WELL-BEING

Physical and psychological well-being in a digital technology world is known as Digital health and well-being. One should not make their life limited to the digital world. There is need that the child should keep their personal as well as digital life apart so that they do not get emotionally attached to anything happening online like getting less likes etc. digital health and wellness is equally important to be a digital citizen because if a person is not digitally healthy then they can create havoc in their life due to it. One should avoid repetitive motion that can cause injury psychologically to them. One should try not to get addicted towards the internet or video games as it will also lead to many physical problems like eyesight problems, obesity etc.

Media balance and well-being

As with the increase in the usability of the internet it has been the duty of the parents and teachers to guide children about media balance and well-being. Media balance talks about how students should be guided to maintain balance in their personal and media life. Media balance is important so that students can create balance so that they can be emotionally and psychologically strong.

DIGITAL ACCESS

Full electronic participation in society is known as Digital access. Each and every student should have knowledge about how to access the internet. There should be equal opportunity to all the students about how they can access the internet in the best possible way. Digital access is important so that citizens have knowledge about accessibility, safety and be a digital citizen who is responsible towards their duties and rights.

DIGITAL LAW

A digital citizen should be aware about all digital laws that are needed while operating a computer or any document online. Digital laws are the electronic responsible behaviour of the digital citizens. This includes responsible actions and deeds while using the internet. Some of the digital laws are that one should not steal someone's identity. One should not promote or do sexting and share illicit photos of someone. Hacking is a crime and one should not hack someone's account or computer. One should respect other people and their feelings.

DIGITAL RIGHT AND RESPONSIBILITY

Being responsible is very important whether online or in real life. Digital rights and responsibilities are those requirements and freedoms extended to everyone in the digital world. Using technology responsibly and by following all the policies. Using online material ethically and not using your name while writing someone's thoughts. Do Not use technology for cheating. Using the internet ethically and reporting cyber crime if faced.

DIGITAL COMMERCE

The buying and selling of goods on an electronic platform is known as digital commerce. We all use the internet for buying products. But do we use it safely, do we read all the terms and conditions before buying anything or not. A digital citizen is a person who uses an online platform wisely by reading all the terms and conditions before ordering anything. There are many cases in which people buy products online and do not get the same product because of carelessness and negligence of the citizen. So it's important that the person should be careful while buying anything online.

INTERPRETATION OF THE ANALYSIS

It is important to educate students about digital citizenship. It is important to teach students about the various rules and responsibilities that the student carries along with the privilege of using the internet. There are many cases in which we see that the child gets involved in cybercrime. There are many movies, series that talk about various ways by which one can destroy their personal life due to their negligence and careless behaviour. One should know their responsibilities while accessing the internet. It is important that one should know about the various threats that they can face in their life and how they can get out of it by taking the precautions and the steps that are required to be taken while using the internet. One of the biggest cases that has come nowadays is about the group on Instagram in which the teenagers use vulgar language. They are into the world of cyberbullying and cyber grooming. There are many such incidents that don't get filed. So there is a need to educate students about digital citizenship and the various elements and threats related to it. This text helps to understand the need of today's world that we should be

careful while accessing the internet so that we don't face any problem related to it in the future. Digital citizenship is equally important to everyone whether it's a child or some adult because we all are digital citizens and being a digital citizen is only important not for themselves but for the nation. Digital citizenship should be a part of the curriculum so that students should have knowledge about how they can be safe online.



QUESTIONNAIRE ANALYSIS TOOL

**OBJECTIVE 2: TO KNOW THE AWARENESS LEVEL OF THE B.Ed. PUPIL TEACHER
ABOUT DIGITAL CITIZENSHIP.**

The researcher uses a questionnaire to know about the awareness of the B.Ed. pupil teachers because it is one of the convenient methods to collect data from a large number of samples and also it is the best tool to find out the awareness of the sample. And most importantly it is time consuming as there was a limited time frame. The analysis of the data collected by applying questionnaires on 50 B.Ed. pupil teachers.

Percentage of the responses.

S.No.	Question no.	Correct answer	A	B	C	D
1	1	Depend on students.	72%	20%	8%	0
2	2	A	24%	6%	12%	58%
3	3	B	94%	6%	0	0
4	4	C	18%	2%	72%	8%
5	5	A	98%	2%	0	0
6	6	C	34%	34%	22%	10%
7	7	C	2%	6%	90%	2%
8	8	B	22%	52%	14%	12%
9	9	A	74%	2%	24%	0
10	10	A	82%	4%	8%	6%
11	11	D	10%	4%	4%	82%
12	12	D	4%	10%	4%	82%
13	13	B	2%	98%	0	0
14	14	B	6%	84%	4%	6%
15	15	B	48%	38%	12%	2%
16	16	C	4%	8%	80%	8%
17	17	A	36%	28%	30%	6%
18	18	A	52%	10%	38%	0

1. How much time do you spend on the internet daily?

a. 2-4 hours

- b. 6-8 hours
- c. 8-12 hours
- d. More than 12 hours

Analysis : 72% of the B.Ed. pupil teachers spend 2-4 hours on the internet.

2. Which website domain should be used by a person if the person is researching on the Delhi state historical sites?

- a. .gov
- b. .edu
- c. .in
- d. .com

Analysis : In this item only 24% of B.Ed. pupil teacher gave the right answer. Maximum of teachers ticked 'D' as the right answer. Therefore the item has a negative response because '.edu' is used to search anything on the government site.

3. A URL that begin with https: is

- a. Secured
- b. Not secured
- c. Don't know
- d. Either of the both (a) and (b)

Analysis : In this item 94% of B.Ed. pupil teacher gave the right answer. Maximum of the B.Ed. pupil teachers are aware that the sites which have https: URL are secured. Therefore the item has a positive response.

4. What will you do if you get an uncomfortable message or email?

- a. Ignore it
- b. Show to friends

- c. Report it
- d. Reply it

Analysis : In this item 72% of B.Ed. pupil teacher gave the right answer that if you receive any uncomfortable message or email, you should report it. Therefore the item has a positive response.

5. When using a shared computer, it is important to_____.

- a. Logout your all account when done
- b. Sanitize the keyboard
- c. Charge the battery
- d. Leave a note for next user

Analysis : in this item 98% of pupil teachers gave the right answer. Maximum of the B.ed. pupil teachers are aware that it's important to logout your all accounts while sharing a computer. Therefore the item has a positive response.

6. What a person should not use while using a public wifi?

- a. Browse content
- b. Upload photos
- c. Buy a gift for friend on amazon
- d. Send a file online

Analysis : In this item 34% of the B.Ed. pupil teachers ticked option 'A' and 'B'. And only 22% B.Ed. pupil teacher ticked the right option i.e 'C'. maximum of the B.Ed. pupil teachers doesn't know that buying anything while using someone else's or public wifi can lead to a problem. The person might steal your personal information like mobile number, address by operating this wifi. Therefore the item has a negative response.

7. Which type of password is the strongest?

- a. Password
- b. 12345

c. RlavasE1@

d. Iillovveel

Analysis : In this item 90% of the B.Ed. pupil teacher gave the right answer. It means that they are aware that a strong password should have both upper and lower case , number and symbols. So that no one can crack your password. Therefore the item has a positive response.

8. What is plagiarism?

a. Writing someone else's work or idea

b. Writing someone else's idea and work with one's own name

c. Writing someone else's idea and work with another person name

d. Writing someone else's idea and work with the original person name

Analysis : In this item 52% of the B.Ed. pupil teacher gave the right answer. Maximum of the B.Ed. pupil teachers are aware about plagiarism. Therefore the item has a positive response.

9. Which one is the best example of cyberbullying?

a. A student you know at school sends you a rude or mean message like "you are ugly"

b. A student sends an email about report on environment day

c. Someone pushes u purposely at school

d. One of you classmate tell you that you send him a request on social networking site

Analysis :In this item 74% of the B.Ed. pupil teacher gave the right answer. That means a maximum of the B.Ed. pupil teachers are aware about cyber bullying. Therefore the item has a positive response.

10. The easiest rule of digital citizenship is?

a. Be kind online

b. Never use technology

c. Always power your devices

d. Always use free Wi-Fi

Analysis : In this item 82% B.Ed. pupil teacher gave the right answer. Maximum B.Ed. Pupil teachers are aware that the easiest rule of digital citizenship is to be kind with everyone online. Therefore the item has a positive response.

11. What should you do if you are cyberbullied?

- a. Block the bully
- b. Tell the trusted adult
- c. Take a screenshot of the bullying incident
- d. All of the above

Analysis : In this item 82% of the B.Ed. pupil teacher gave the right answer that the person who ever gets bullied by anyone should block the bully , tell the trusted adult and take a screenshot of the bullying incident. Therefore the item has a positive response.

12. What does it mean to be a good digital citizen?

- a. Hang out with friends
- b. Post mean messages
- c. Say something mean
- d. Be respectful

Analysis : In this item 82% of the B.Ed. pupil teacher gave the right answer. Maximum of the B.Ed. The pupil teacher knew that being respectful is a good digital citizen. Therefore the item has the positive response.

13. What is the digital footprint?

- a. A track that animals leave behind
- b. The information about you on the internet
- c. Shoes you buy online

d. None of the above

Analysis : In this item 98% of the B.Ed. pupil teacher gave the right answer. It means that maximum of the B.Ed. pupil teachers are aware about digital footprint. Therefore the item has a positive response.

14. Cyberbullying is using _____ to hurt someone purposely.

- a. Tools
- b. Technology
- c. People
- d. Words

Analysis : In this item 84% of the B.Ed. pupil teacher gave the right answer. Maximum of teachers know about cyberbullying and how it takes place. Therefore the item has a positive response.

15. What is the best response for a text you received from an unrecognized number?

- a. Ask who it is
- b. Tell your parents and report it
- c. Spy on the water fountain and see who shows up
- d. Send a text back saying 'no'

Analysis : In this item maximum of the B.Ed. pupil teacher ticked wrong option i.e 'A'. It means that they don't know that if they receive any message from an unrecognized number they should report it and tell someone adult to be safe. Only 38% of the B.Ed. pupil teacher gave the right answer. Therefore the item has a negative response.

16. What is “the trail, traces or footprint that people leave online”?

- a. Genetic footprint
- b. Computer prints
- c. Digital footprint
- d. Digital handprint

Analysis : In this item 80% of the B.Ed. pupil teacher gave the right answer. It means that maximum of the B.Ed. pupil teacher knew what digital footprint is. Therefore the item has the positive response.

17. Being a good digital citizen means?

- You keep your personal information private
- Thinking before you post something online
- Giving respect to people online
- None of the above.

Analysis : In this item only 36% of the B.Ed. pupil teacher gave the right answer. 28% and 30% B.Ed. pupil teachers gave 'B' and 'C' respectively. Less number of B.Ed. pupil teachers are aware that it's important to keep your private information safe while being online. Therefore the item still has a positive response.

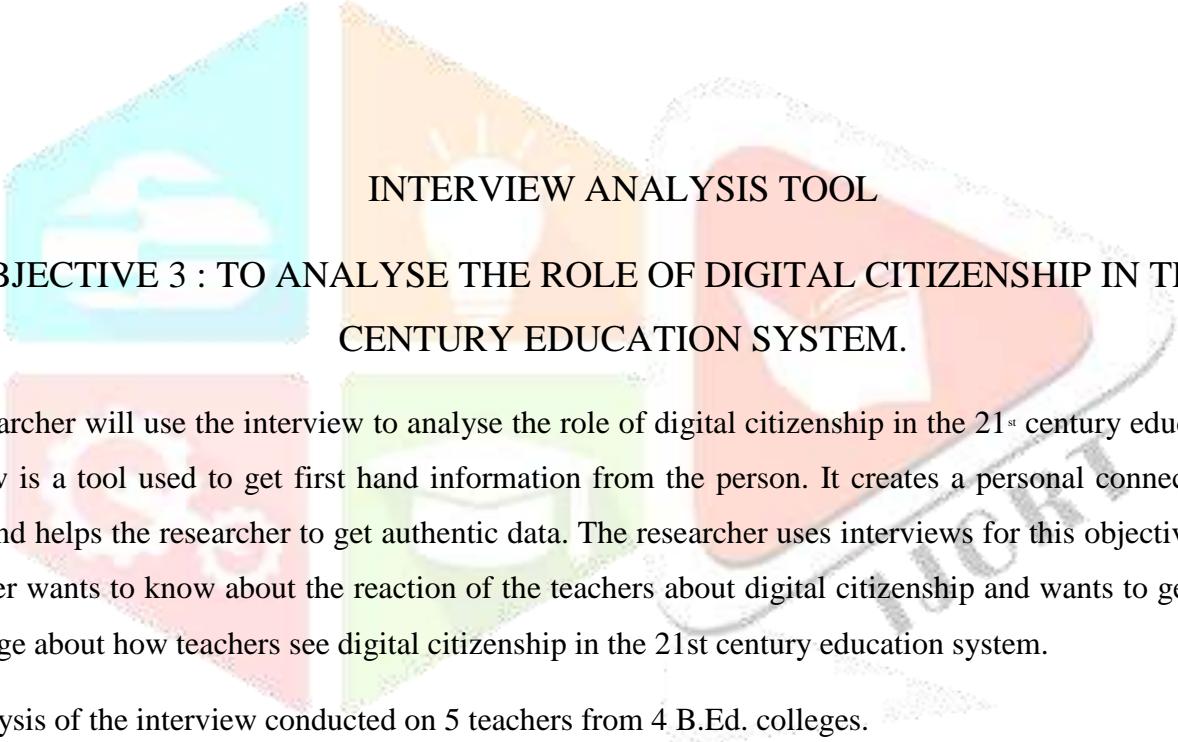
18. How often a password should be changed?

- 6 months
- 1 year
- 15 days
- 1 week

Analysis : In this item 52% B.Ed. pupil teacher gave the right answer that it's important to change your password after every 6 months so that no one can hack your account. Therefore the item has a positive response.

INTERPRETATION OF THE ANALYSIS

Maximum of the responses are positive that means that B.Ed. pupil teachers are aware about Digital citizenship and they are a responsible digital citizen. Only 2 out of 18 items are having a negative response. B.Ed. pupil teachers have understanding regarding digital citizenship. They have knowledge about the terms related to it and know how to prevent themselves from cybercrimes like cyberbullying. Maximum of the B.Ed. pupil teachers are aware about digital citizenship.



INTERVIEW ANALYSIS TOOL

OBJECTIVE 3 : TO ANALYSE THE ROLE OF DIGITAL CITIZENSHIP IN THE 21ST CENTURY EDUCATION SYSTEM.

The researcher will use the interview to analyse the role of digital citizenship in the 21st century education system. Interview is a tool used to get first hand information from the person. It creates a personal connection from the person and helps the researcher to get authentic data. The researcher uses interviews for this objective because the researcher wants to know about the reaction of the teachers about digital citizenship and wants to get the in depth knowledge about how teachers see digital citizenship in the 21st century education system.

The analysis of the interview conducted on 5 teachers from 4 B.Ed. colleges.

1. What do you understand by the term digital citizenship?

ysis : Maximum of the teachers knew the meaning of digital citizenship and they also educate their students about how they can be good digital citizens. One of the standard definitions given by maximum of the teachers was that digital citizenship is a concept related to educating everyone about a safe internet.

2. How much time do you spend on the internet for studying and do you recommend students to use the internet for studying?

ysis : Teachers have different responses over it. Some prefer books over the internet. There were few teachers that spent more than 4 hours on the internet studying. Maximum teachers said that they encourage their students to use the internet to explore new things and to study but they don't provide any online lectures or contents to the students.

3. For what purpose do you commonly use the internet?

ysis : Maximum of the teachers use the internet for using social networking sites. It is observed that young teachers use the internet for reading whereas older teachers prefer books.

4. What are your thoughts on online learning games and tools?

ysis : teachers are in favour of online learning games and tools. But there was no provision related to it in the colleges and also they show less interest to form any online learning tools for students.

5. How will you use online learning games and tools in the classroom?

ysis : teachers don't use any such tool in their teaching. As they feel that there is no scope of adding online learning games for B.Ed. pupil teachers.

6. Are you aware about digital ethics?

ysis : maximum of the teachers are aware about digital ethics and they promote that. They guild their students about it and encourage them to become a responsible and good digital citizen

7. Do you think digital knowledge is important in the 21st century education system?

ysis : maximum of the teachers said that it's important to have digital knowledge because everything today is online and to live in the 21st century it's important that students should be digital and should have an education system that can work both online and offline .

8. How does digital citizenship make a person digitally responsible and safe?

ysis : maximum teachers said that digital responsibility and safety is a part of digital citizenship and that digital citizenship can be studied without the knowledge about digital responsibility and safety. So a digital citizen is a responsible and safe digital citizen.

9. Do you think educating about digital citizenship is important?

ysis : Maximum teachers said it's important to teach students about digital citizenship to make them a responsible digital citizen. Digital citizenship is important so that students can know about various threats and preventions that are needed while using the internet and also to make citizens E-literate.

INTERPRETATION OF THE ANALYSIS

most of the teachers are aware about digital citizenship and consider it an important part of the 21st century education system. Some teachers are not comfortable with digital life but still they feel that it's important to teach students about digital citizenship so that they can have a safe digital life and can compete in this world .



Finding and Suggestions

The researcher uses interview ,questionnaire and content analysis to find the perception of the B.Ed. pupil teacher about digital citizenship. Following are the findings that the research finds during the research.

Finding of the study

OBJECTIVE 1 : To study the conceptual framework of digital citizenship.

The researcher applied content analysis to study the conceptual framework of digital citizenship. Following are the finding of this objective

1. The researcher found that there are many barriers related to the digital world. Some of them are
 - Unawareness of the digital citizens about various elements related to the digital citizenship
 - Careless behaviour while using the internet.
 - Lack of education about the digital world.
 - Sharing personal information like phone number, pictures etc with unknown people.
 - No space of digital citizenship in the syllabus.
2. The researcher found that there are many threats related to digital citizenship. Some of them are
 - Cyberbullying ,which is very common nowadays and many people are victims of it.
 - Cyber grooming, becoming friends with someone to assault them online .
 - Online transactional fraud, transferring money from someone's account without their knowledge and permission
 - Hacking, operating someone's account and computer without their permission.
3. There are many texts that promote and aware teachers about digital citizenship and there are various elements that help in understanding digital citizenship more easily and help in becoming a good digital citizen.

OBJECTIVE 2 : To know the awareness level of the B.Ed. pupil teacher about Digital citizenship

The researcher uses questionnaires to find the awareness of the B.Ed. pupil teacher about digital citizenship.

The researcher visited 4 B.Ed. colleges to get the sample and the researcher took the sample of 50 B.Ed. pupil teachers. Some of the finding of this objective was:

1. The researcher found that the maximum number of B.Ed. pupil teachers are aware about digital citizenship.
2. They know how to protect themselves online while using social networking sites.
3. Digital citizenship helps the B.Ed. pupil teacher to enhance their knowledge about good and bad surveying.
4. As a maximum of the citizens spend time on the internet and it has been a very important part of everyone's life. Digital skills are very important and B.Ed. pupil teachers have skills required to work online .

OBJECTIVE 3 : To study the role of digital citizenship in the 21st century education system.

The researcher found that digital citizenship plays an important role in the 21st century education system and uses interviews to study the role of digital citizenship in the 21st century education system. Some of the findings are.

1. Digital citizenship plays a very important role in today's education system and everything in today's world is online from filling the admission form to giving examinations.
2. Digital citizenship is important to make the students E-literate so that they can access the internet easily without facing any problem .
3. Teachers prefer online learning games but there is no place of it in the curriculum
4. Teachers prefer online education but they are not comfortable with it.

CONCLUSION

There is a positive response of the finding as the B.Ed. pupil teacher has a positive perception regarding digital citizenship and thinks that there is a need to educate digital citizenship to all. So that every person can be a digital person and can be safe online while using the internet .

Educational suggestions

Some of the educational suggestion of this research are:

1. There should be separate papers for digital citizenship in the curriculum of every grade student.
2. Each and every teacher should acknowledge students about digital citizenship
3. Teachers should help students to learn digital skills.
4. Teachers should motivate students to use the internet safely and ethically.

It is important to make digital citizenship a part of the education system and involve a separate paper on it so that students should understand the need of being a digital citizen and don't face or create problems in the future related to it. By educating students we are educating our whole new generation which deal with everything online .

Suggestions for further studies

1. The researcher can check the role of digital citizenship among B.Ed. pupil teacher
2. The researcher can check the accessibility of the teachers about digital citizenship
3. The researcher can also do this research on students in schools to check whether they are aware about digital citizenship or not.
4. The researcher can also do a quasi experiment in which he can use two class and in one the researcher teaches about digital citizenship and in another the researcher doesn't provide any information about digital citizenship and after 6 months the researcher can check the change in the behaviour of the students online , who have knowledge about digital citizenship and who doesn't have.

5. The researcher can do research on the effect on the students who don't have knowledge about digital citizenship.

Summary

Knowledge about Digital citizenship is very important in the 21st century education system. Nowadays everyone uses the internet some for entertainment and some for studying. The Internet has become such an important part of your life that we can't even imagine a day with it. We are so dependent on the digital world that for anything we just google and find the answer in such a speedy world where everything is online, we need to educate the citizens about digital citizenship. Digital citizenship is a concept in which the technical leaders, teachers, students in short each and every person is taught about safe and responsible use of the internet. In this research the researcher studied the perception of the B.Ed. pupil teachers about digital citizenship. the researcher takes the sample of 50 B.Ed. pupil teachers and 5 teachers for finding the perception about Digital citizenship. There are three objectives of the research.

The first objective is to study about the conceptual framework of digital citizenship. For this the researcher uses content analysis as a tool and critically analyzes the three texts 'A handbook for adolescence/students on cyber security', 'Digital citizenship in school' and grade k-12 digital citizenship curriculum by common sense media. In this the researcher studies the various elements that are important for a student to study to become a good digital citizen. There were also threats and precautions that needed to be taken while using the internet by everyone. The books talk about cyber bullying , cyber security , cyber grooming , digital communication , online frauds etc. The second objective is to find out the awareness of the B.Ed. pupil teachers about Digital citizenship. For this the researcher uses a questionnaire and applies it on 50 B.Ed. pupil teachers of 4 B.Ed. colleges. The researcher found a positive response as maximum of the B.Ed. pupil teachers are aware about digital citizenship and know how to be safe online. The last objective is to analyze the role of digital citizenship in the 21st century education system. For this the researcher uses interviews as a tool. The researcher take interviews of five teachers and see what they feel about digital citizenship and how they educate the students about it in their teaching.

Maximum of teachers feels that it's important to teach digital citizenship among students so that they can be safe online and many of them are also aware of how to be safe online. Although many teachers don't use online platforms to teach students, they encourage their students to become a good digital citizen. The researcher found that the B.Ed. pupil teachers have positive perception regarding digital citizenship and promote digital citizenship among their students. Many B.Ed. pupil teachers talked about various ways they can educate students about digital citizenship.

The researcher found that digital citizenship is not a separate concept but a part of one's life as every person is a digital citizen and needs to be educated about digital citizenship to make them a good digital citizen.



Appendix

OBJECTIVE : TO KNOW THE AWARENESS LEVEL OF THE B.Ed. PUPIL TEACHER ABOUT DIGITAL CITIZENSHIP.

1. How much time do you spend on the internet daily?

a) 2-4 hours

b) 6-8 hours

c) 8-12 hours

d) More than 12 hours

2. Which website domain should be used by a person if the person is researching on the Delhi state historical sites?

a) .gov

b) .edu

c) .in

d) .com

3. A URL that begins with https: is

a) Secured

b) Not secured

4. What will you do if you get an uncomfortable message or email?

a) Ignore it

b) Show to friends

c) Report it

d) Reply it

5. When using a shared computer, it is important to

a) Logout your account when done

b) Sanitize the keyboard

c) Charge the battery

d) Leave a note for next user

6. What a person should not use while using a public wifi

a) Browse content

b) Upload photos

c) Buy a gift for friend on amazon

d) Send a file online

7. Which type of password is the strongest

- a) Password
- b) 12345
- c) RlavasE1@
- d) Iillovveel

8. What is plagiarism

- a) Writing someone else's work or idea
- b) Writing someone else's idea and work with one's own name
- c) Writing someone else's idea and work with another person name
- d) Writing someone else's idea and work with the original person name

9. Which one is the best example of cyberbullying?

- a) A student you know at school sends you a rude or mean message like "you are ugly"
- b) A student sends an email about report on environment day
- c) Someone pushes u purposely at school
- d) One of you classmate tell you that you send him a request on social networking site

10. The easiest rule of digital citizenship is

- a) Be kind online
- b) Never use technology
- c) Always power your devices
- d) Always use free Wi-Fi

11. What you should do if u is cyberbullied

- a) Block the bully
- b) Tell the trusted adult
- c) Take a screenshot of the bullying incident
- d) All of the above

12. What does it mean to be a good digital citizen?

- a) Hang out with friends
- b) Post mean messages

c) Say something mean

d) Be respectful

13. What is digital footprint

a) A track that animals leave behind

b) The information about you on the internet

c) Shoes you buy online

14. Cyberbullying is using _____ to hurt someone purposely

a) Tools

b) Technology

c) People

d) Words

15. What is the best response for a text you received from an unrecognized number?

a) Ask who it is

b) Tell your parents and report it

c) Spy on the water fountain and see who shows up

d) Send a text back saying ‘no’

16. What is “the trail, traces or footprint that people leave online”

a) Genetic footprint

b) Computer prints

c) Digital footprint

d) Digital handprint

17. Being a good digital citizen means?

a) You keep your personal information private

b) Thinking before you post something online

c) Giving respect to people online

18. How often a password should be changed?

a) 6 months

b) 1 year

- c) 15 days
- d) 1 week

OBJECTIVE : TO ANALYSE THE ROLE OF DIGITAL CITIZENSHIP IN 21ST CENTURY EDUCATION SYSTEM

1. What do you understand by the term digital citizenship?

2. How much time do you spend on the internet for studying?

3. For what purpose do you commonly use the internet?

4. What are your thoughts on online learning games and tools?

5. How will you use online learning games and tools in the classroom?

6. Are you aware about digital ethics?

7. Do you think digital knowledge is important in 21st century education system?

8. How does digital citizenship make a person digitally responsible and safe?

9. Do you think educating about digital citizenship is important?

References

1. Digital Citizenship , Ribble (2017) ,<http://www.digitalcitizenship.net/>
2. An official website of the United States government <https://www.stopbullying.gov/cyberbullying/what-is-it/index.html>.
3. Ministry of Human Affairs , Government of India (2019) <https://cybercrime.gov.in/cybercitizen/home.html>.
4. Digital Rights and Responsibilities <https://sites.google.com/site/digitalcitizenshipferris/digital-rights-and-responsibilities>.
5. Digital Etiquette,Central Coast New Tech , <https://digitalnetiquetteproject.weebly.com/>.
6. Payne,J.L.(2016). A case study of teaching digital citizenship in fifth grade.
7. Ministry of Human Resource Department[MHRD],(2018,Oct,31) . A handbook for adolescents/students on cyber safety.
8. Logan , A.M.(2016). Digital citizenship in 21st century education.
9. Ed tech review media (2017). Digital citizenship and internet safety. <http://edtechreview.in/digital-citizenship>.
10. Ministry of Electronics & Information Technology Government of India . Digital India Movement . <https://digitalindia.gov.in/content/programme-pillars>.
- 11.Pandit , R. (2017) . Became an iMature student
- 12.Google, NCERT partner for internet safety training in schools(2018,feb,6). <https://www.thehindubusinessline.com/news/education/google-ncert-partner-for-internet-safety-training-in-schools/article22669848.ece>
- 13.Holland , L.M.(2017). The perceptions of Digital Citizenship in Middle School Learning.
- 14.Dillinger, A. (2015). Digital citizenship and today's online student.
- 15.SSM. Student perceptions of the effectiveness of Digital Citizenship intervention.
- 16.Chi ,M. (2015). Development of a Scale to Measure Digital Citizenship among Young Adults for Democratic Citizenship Education.
- 17.Ribble ,M. (2007). Digital Citizenship in school (second edition).
- 18.Noula ,I.(2019). Digital citizenship ; citizenship with a twist?.
- 19.Isman,A & Gungoren, O.C. (2014). Digital citizenship.
- 20.Common sense education . <https://www.commonsense.org/education/digital-citizenship/curriculum?topic=media-balance--well-being&grades=k,1,2>

21. Factsheet by USA (2018, August) . Digital citizenship skills to prevent cyber bullying.
<https://www.stopbullying.gov/sites/default/files/2018-08/Digital-Citizenship-Factsheet.pdf>

22. Alqahtani, A.S.(2017,July). The Extent of Comprehension and Knowledge with Respect to Digital Citizenship Among Saudi Arabia Teachers.

23. Snyder, S.(2016). Teachers' Perceptions of Digital Citizenship Development in Middle School Students Using Social Media and Global Collaborative Projects.

24. An official book by NITI aayog. Saraswat , V.K. (2019,September). Cyber security.
https://niti.gov.in/sites/default/files/2019-07/CyberSecurityConclaveAtVigyanBhavanDelhi_1.pdf

