

## Research Article

# Role of Teachers and Educational Institutions in the Digital World: An Analytical Study

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**Abstract:** *Introduction:* In today's world, digital technologies have become an integral part of our lives both socially, professionally and educationally. The role of educators and educational institutions is important in providing support for students to develop ethical digital behavior. Digital technology has provided many opportunities for innovation and easy access to information; however, with the increased use of digital technology comes the increased potential for ethical issues that individuals face, such as misinformation, cyber-bullying, invasion of privacy, digital surveillance, plagiarism, and irresponsible handling of data. Educators and educational institutions have the ability to influence students' online behavior and actions so they are productive, ethical, and responsible in their use of new technologies and digital platforms. In particular, educators as mentoring adults have tremendous influence on developing students' online ethics by teaching respect, truthfulness, and accountability. *Objective:* The purpose of this study is to explore the role of educators and educational institutions in supporting the development of digital ethics by developing a policy framework and providing a conceptual framework of ethics centered on digital learning. *Methodology:* This study utilizes qualitative, conceptual research methods to meet the purposes set forth above. Since the research is non-empirical, it focuses primarily on the theoretical and critical aspects of the roles and responsibilities of educators and educational institutions in teaching students ethical digital behavior in a rapidly digital Age. *Results and Discussion:* In the document Shaping Ethical Digital Behaviours, a Table and conceptual framework have been produced that illustrates the responsibilities and duties of Educators, as well as Educational Institutions. The role of Educators, as well as Educational Institutions, in establishing Ethical Digital Behaviours is a primary function of their roles within a Technology-Oriented World. Through developing curricula, policies, ethical governance with respect to the use of Educational Technology, and supporting students to develop Ethical Digital Behaviour, Educators, and Educational Institutions provide an environment that supports the development of Ethical Digital Behaviours.

**Keywords:** Internet, Social Media, Artificial Intelligence, Technologies, Innovation, Ethics.

## INTRODUCTION

Our world today is dominated by technology. The role of teachers is essential to the development of ethical digital behaviour and the education of their students on how to approach digital technology in an ethical manner. Technology has grown tremendously since the beginning of the 21<sup>st</sup> Century due to the internet and all of the advances that have taken place, and this has had a significant effect on the way that students learn, communicate and interact with one another and with society at large. The growth of the internet and all of the technological tools associated with it, has opened up many new possibilities for creative problem-solving and has provided access to a vast amount of information. However, the rise of the

internet has also raised many new ethical issues for us to consider including; false information, cyberbullying, loss of privacy, digital monitoring, data theft and unauthorized use of personal information. As discussed in previous studies by Floridi (2013) and Livingstone (2014), without ethical guidance, the advancements we have made in digital technologies will likely weaken social values and democratic principles, rather than enhance them. Educational institutions and the teachers within those institutions are vital to guiding students in their ethical interactions on the Internet and responsible usage of digital technology. Teachers act as mentors for their students and have a significant impact on the online ethics of their students, especially on issues related to respect, honesty, and accountability. Ribble

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(2011) states that the ethical uses of technology are a part of being a digital citizen, which includes the social norms for responsible, appropriate, and respectful use of technology. At present, due to the environment in which we live, educators have an obligation to educate their students not only in their content area but also to help them develop critical digital literacy skills. By developing these skills, students will be able to make well-informed decisions regarding the authenticity of online sources, identify misinformation, and understand how their actions online may carry ethical consequences (Hobbs, 2017). Teachers can assist their students in developing values of accountability, empathy, and integrity necessary for ethical engagement online through their classroom activities, discussions, and assessments.

The structure, culture, and governance systems of educational institutions comprise a context that supports the ethical use of digital technologies. In the eyes of many people, educational institutions (including K-12 Schools, Colleges & Universities) are the primary means through which Digital Ethics is promoted through the institution's curriculum, policies, and governance systems. Researchers have suggested that students can adopt the ethical values of digital citizenship when digital ethics, cyber loss, and responsible use of technology are incorporated into a student's curriculum rather than viewed as external regulations (UNESCO, 2019). Due to the increasing reliance of the private and public sectors on online learning, online assessments and virtual collaboration, institutions now must protect their academic integrity, privacy of individuals and fairness in using digital technologies (Selwyn, 2016). The institutional policies concerning plagiarism, data privacy & acceptable behaviour online not only support the ethical norms of the institution but also assist in creating an atmosphere that is conducive to encouraging responsible digital (online) participation. The institution also serves as a bridge between technology and society in terms of the way in which we engage in digital space. They not only provide awareness training, workshops and digital citizenship programs for students to help them understand how their behaviour impacts others, but also promote Inclusivity, mutual respect and democratic engagement within digital space (Livingstone & Third, 2017).

Educational institutions and teachers are collaboratively working to develop ethical digital behaviour due to the mismatch (gap) between the advancement of today's technology and the advancement of legislation and regulations that govern them. Educational institutions are therefore assisting teachers and educational institutions with value based education and preparing students to be ethical and responsible digital citizens who can navigate the complexities of a rapidly changing technology environment. a digital citizen, who is both educated and

ethical, will contribute to their own academic and professional success and the future of society as a whole.

#### THE OBJECTIVES OF THE STUDY

(1) Specifically, this research study will provide an understanding of the obligations and roles that educators and educational institutions have to help promote ethical behaviour in the digital environment within their educational systems.

(2) This research study will also seek to provide insight into current conceptual frameworks and/or other policies, place(s) and mechanism(s) for developing ethical behaviour in relation to how digital technology is utilised in education.

#### METHODS AND MATERIALS

**(a) Research Design:** This is a qualitative and conceptual based Research Study. This research study uses a qualitative research method, which does not rely on empirical methods, to conduct an in-depth investigation of the role of educators and educational institutions in promoting digital citizenship in our modern world. As a result, this study will focus on an analysis of ethical behaviour associated with digital technology and digital citizenship in the educational sector.

**(b) Nature of Study:** This research study is both descriptive and analytical in both style and intent. It provides a conceptual understanding of the concept of ethical digital behaviour and digital citizenship in an educational context. In addition, it does not rely on quantitative methods to test the hypotheses of this research study.

**(c) Data Sources:** All data for this research study were obtained from secondary sources, including a collection of academic publications, such as books, peer-reviewed articles from academic journals, international guidelines (related to digital ethics and many other media), and reports issued by post-secondary educational institutions, related to the use of education technology.

**Data Collection:** Literature used for this study has been systematically identified via academic database searches and from the published research work of well-known academic institutions. The published works included in this study all represent the researchers who are leaders in the field and/or internationally recognised organisations who can provide academic validity and conceptual richness for the information contained in this paper.

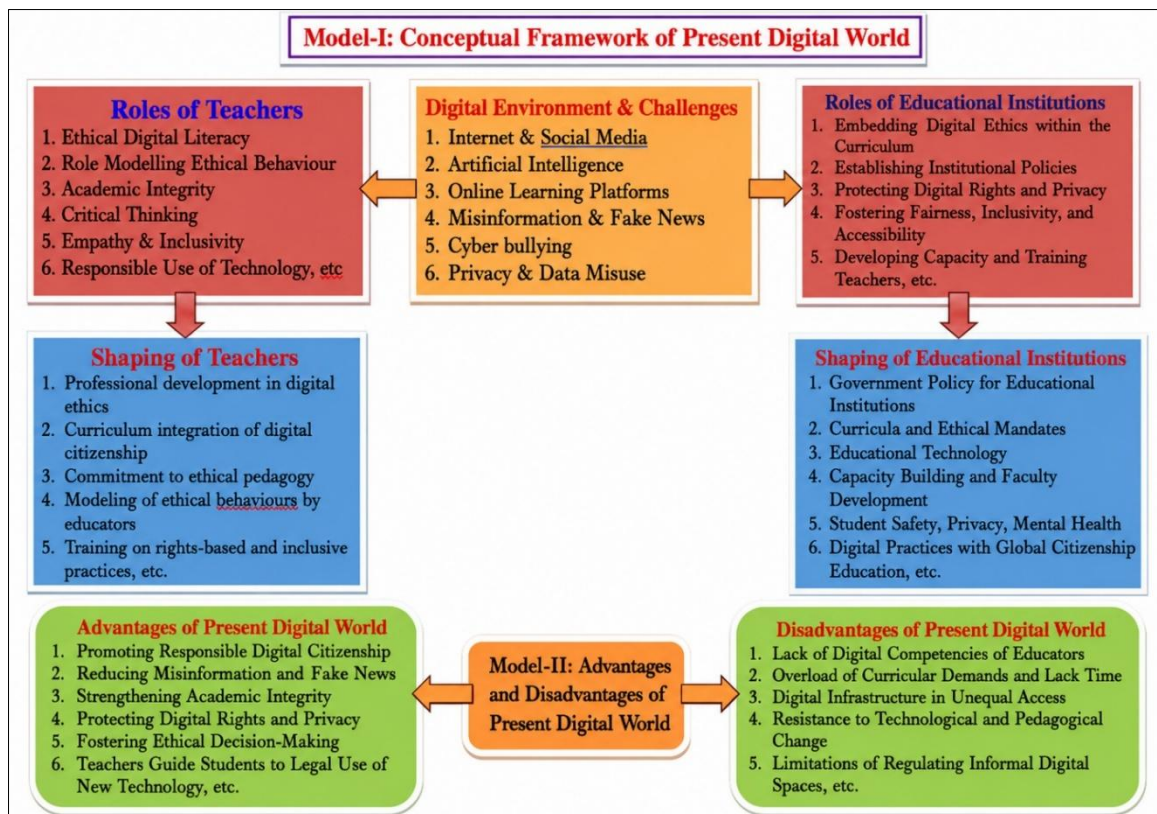
**Data Analysis:** Data obtained from this study has been analysed thematically and interpretively. Themes in this study include (1) Ethical Digital Literacy, (2) Digital Rights and Privacy, (3) Responsible Use of Emerging Technologies and (4) Inclusivity.

**Theoretical Framework:** In terms of the theoretical framework for this study, the authors of this paper will be utilising established theoretical perspectives regarding digital ethical behaviour and digital citizenship as set out by several key scholars and organisations; these include; Floridi, Ribble, Hobbs, Livingstone, and Selwyn. In addition to these theorists and organisations, the authors of this paper will also be employing UNESCO'S Global Citizenship Education framework to provide further context when evaluating the relationship between digital ethical behaviour and digital citizenship as outlined in the international educational policy.

**Scope of the Study:** The study's focus is on the ethics in digital spaces within an educational context as it relates to the teacher's role and their ethical duties, as well as the ethical responsibilities of educational institutions as they relate to digital education in today's world.

**Analytical Approach:** The study emphasises synthesising concepts to help generate policies and insights into best practices within digital education from an ethical perspective rather than generating generalisations through empirical data.

**FINDINGS & DISCUSSIONS**



**From the above Model-I and Model-II,** it is seen that the Conceptual Framework of the Current Digital World is a unifying and integrative explanation of how ethical behaviour online develops in today's educational context. The framework establishes a sense of the digital environment and the impact that it has on learners and educators, as well as some key challenges that arise when someone is learning in this environment such as the influence of social media, artificial intelligence, and learning through the use of technology, as well as a range of issues related to illegal online activity, misinformation, and cyber bullying. The educational institution has a special role as a structural and policy-based facilitator of teaching and implementing digital ethics. Including digital ethics in the curriculum and making institutional policies that protect students' digital rights, privacy, promote fairness

and access, and build capacity for faculty members to be able to support and encourage students to use technology ethically is a critical part of an educational institution's role in the current digital ecosystem. The teacher is an important part of the educational institution's role in the current digital ecosystem. The educator is the key person in the current digital ecosystem and creates the platform that supports how the educator teaches students to be ethically responsible technology users. The teacher uses many resources to help the student learn about being an ethical digital citizen, including providing digital citizenship education and serving as role models of ethical digital behaviour. The actions that the educator takes to become a teacher in the current digital world will influence how the teacher will be able to shape and influence the ethical behaviour of students. As an

educator, the teacher participates in developing digital ethics through professional development, incorporates digital citizenships into the curriculum, and has a commitment to creating a teaching and learning environment centred around ethical pedagogy, inclusivity, and rights-based practices.

The development of institutional practices is influenced by institutions' own policies, institutional ethics, educational technology, faculty development initiatives and student safety and privacy issues. All of these are framed within a global view of citizenship. The model illustrates how the teacher, institution and digital environment interface with one another to produce positive effects on today's digital environment (e.g., digital citizenship, less misinformation, more robust academic integrity, legally protected rights in the digital environment, and better ethical choices). In addition, the model identifies potential negative outcomes of this interface such as the lack of teachers' digital competencies, an overwhelming curriculum, non-uniform access to digital technology, the inability to adjust to the digital method of instruction, and regulation of informal teacher/student digital environments. However, the model does assert that the ethical outcomes of the digital environment are not determined automatically, but instead are created through informed educators, supportive educational institutions, and responsive policies and regulations. Ultimately, this conceptual framework serves as an analytical tool to help identify how an educational institution might work to limit the risk associated with digital technologies while exploiting the ethical benefits made possible by the existence of a digital world.

## ROLES OF TEACHERS AND EDUCATIONAL INSTITUTIONS

### A. Roles of Teachers

**1. Support Students' Developing Ethical Digital Literacy:** As educators, teachers' responsibility will need to be an advocate for students developing their digital literacy skills and the development of their ethical reasoning to have the ability to critically evaluate what they find on the internet. Teachers should teach students to identify fake news, understand how their digital actions (sharing, commenting, and creating content) may have moral ramifications, and help them develop ethical decision-making skills (Hobbs, 2017; Floridi, 2013).

**2. Modeling Ethical Conduct in the Use of Digital Technologies:** In the current digital world, educators have an ethical responsibility to be role models and provide an example of ethical use of digital technologies by exhibiting respect for the intellectual property of others, using digital resources responsibly, communicating professionally via digital means, and protecting one's privacy. In addition, many students will learn about ethical norms through observation of their educators in digital environments (Ribble, 2011).

**3. Encourage Originality & Academic Integrity in Digital Contexts:** As the move towards digital assessments and online learning becomes the norm, educators should take a proactive approach towards supporting academic integrity and originality, allowing students to learn to be honest, fair, and original, as well as to avoid plagiarism, misuse of artificial intelligence (AI) tools and engage in unethical collaboration (Selwyn, 2016).

**4. Develop Critical Thinking & Reflection on Ethical Use of Technology:** Educators help students develop reflective judgement regarding ethical use of digital technologies, including algorithmic biases, misuse of data or manipulating data (Floridi, 2013).

**5. Create a Culture of Respect, Empathy and Inclusiveness:** Online educators will encourage respectful communication, recognizing how to exhibit empathy towards others and sensitivity to diverse backgrounds through their digital communications, and create environments free from cyberbullying, hate speech, and other forms of digital exclusion (Livingstone & Third, 2017).

**6. Guide the Responsible Use of Emerging Technologies:** Increased usage of Emerging Technologies (as is currently seen with artificial intelligence and digital platforms by Students and Instructors) makes it imperative for both parties to understand the ethical limitations, appropriate uses, and the potential ramifications of these Emerging Technologies (UNESCO, 2019).

### B. Educational Institutions' Roles

**1. Digital Ethics Should Be Taught Through the Curriculum:** To have a consistent and coherent approach for teaching ethical values to students, all educational institutions need to incorporate Digital Ethics, Digital Citizenship, Cyber Laws, and Responsible Use of Technology in their curriculum across all disciplines (UNESCO 2019).

**2. Institutions Should Have Policies:** Schools and post-secondary institutions should regulate and enforce their own policies regarding Academic Integrity; Plagiarism; Data Privacy; Cybersecurity; and Appropriate Online Behaviour; and these policies shape how students behave ethically in relation to Digital Spaces (Selwyn 2016).

**3. Protecting Student's Digital Rights and Privacy:** In today's Data Driven Educational Environment, schools and post-secondary institutions must protect their students' personal data, raise awareness about Digital Rights and be transparent about how they use Educational Technologies (Floridi 2013).

**4. Providing Fairness, Inclusivity and Accessibility to Online Instruction, Learning and Assessment of All Students:** Educational institutions must ensure that

Online Instruction, Learning and, Assessment of All Students is delivered with Fairness, Inclusivity and Accessibility to reduce the opportunity for Digital Discrimination against any student and to also ensure that All Students have equal access to the Education materials they are being taught (UNESCO 2019).

**5. Building Capacity and Training Teachers:** Schools and post-secondary institutions must provide ongoing Professional Development Training to teachers on the Knowledge and Skills required to cope with the Ethical Challenges arising from Digital Education (Selwyn 2016).

**6. Provide Education and Resources for Cyber bullying, Digital Addiction, and Misconduct:** To create a positive, safe, and ethical environment within the digital space, institutions should offer workshops, education programs, and counselling services related to Cyberbullying, Digital Addiction, and Misconduct (Livingstone & Third, 2017).

**7. Foster Community Engagement of Parents, Communities, and Policymakers:** Working with Parents, Communities, and Policymakers to create a sense of shared responsibility for Ethical Digital Behaviour, institutions must work together to address the developing Ethical Challenges presented by the Digital Environment (UNESCO, 2019).

## SHAPING OF TEACHERS AND EDUCATIONAL INSTITUTIONS

### A. Shaping and Developing Teachers

**1. Building Their Skills:** The professional learning aspect of digital ethics focuses on the ongoing development of skills that educators need to be experts in these areas - digital literacy, cyber ethics, data privacy and the good use of technology. A teacher needs the skills to exhibit the proper ethical conduct related to their students' use of technology within the classroom (Hobbs, 2017 & Selwyn, 2016).

**2. Integrating Digital Citizenship into the Curriculum:** Digital Citizenship, Media Literacy, and Ethical Reasoning are also integrated into the curriculum to provide teachers with the skills to help their students better deal with the issues of misinformation, plagiarism and other forms of online misconduct (Ribble, 2011).

**3. Commitment to Ethical Pedagogy:** Educators are being asked to move from a traditional technical teaching model to a more reflective and value-based approach. This moves educators away from rigid technical training to providing students with the skills to make ethical decisions and to take responsibility for their digital actions (Floridi, 2013).

**4. Role of Educators as Ethical Role Models:** Educators are influenced by schools' policies on how

educators should interact with students in a professional online manner, respect intellectual property and be responsible with digital communications. This serves to shape educators into ethical role models for their students (Ribble, 2011).

### 5. Training on Rights-Based and Inclusive Practices:

By focusing on the human rights of students, inclusiveness, and student well-being, we have been able to equip educators with the skills to respond effectively to issues of cyberbullying, digital exclusion and online harassment (Livingstone & Third, 2017).

## B. Shaping the Educational Institutions

### 1. Government Policy on Educational Institutions:

The academic integrity, data privacy and security (DPS), the cyber-safety and just use of the internet and other forms of digital communication of educational institutions are to be conducted in accordance with established government policy. The policies of government are to guide the formation and development of ethical standards in the use of digital technology (Selwyn, 2016).

### 2. Curriculum and Ethical Mandates:

The establishment of ethical mandates and curricula at educational institutions is taking place with the introduction of digital ethics, cyber laws and the ethical use of technology in all educational disciplines as part of a systematic approach to ethical learning rather than merely responding to ethical learning needs as they occur (UNESCO, 2019).

### 3. Educational Technology:

The development and ongoing operation of educational technology within educational institutions are to be accomplished through a secure digital platform, including plagiarism detection, learning management systems, and video conference tools. Thereby facilitating the ethical governance of how digital technology is used and disseminated (Floridi, 2013).

### 4. Capacity Building and Faculty Development:

The provision of capacity building and faculty development for faculty and students is through providing regular training, workshops and awareness programs to assist educators and students in responding to the ongoing ethical challenges, including artificial intelligence (AI) and digital technologies (UNESCO, 2019) that arise.

### 5. Student Safety, Privacy, and Mental Health:

The establishment of an environment free from harm and well-being for learners in a digital context requires educational institutions to develop and implement systems supporting and counselling students to address student safety, privacy and mental health as part of their design (Livingstone & Third, 2017).

### 6. Digital Practices and Global Citizenship Education:

To support Well-Being & Mental Health of

Learners in a Digital Context, at the same time, enhance the Utilisation of Digital Technologies by Educators and Educators-with Non-Profit, Global and National Education Technology Policies. According to UNESCO (2019), in the present digital landscape, Educators and Educational Institutions are also being led by Developing New Methods for Supporting and Guiding Learners as Digital Citizens through the development of Curricular Innovation, through Ethical Guidance and through Rights Based Customisation of Technology.

Thus, in the current digital context, educational institutions and educators are being guided through educational training, curricular reform, ethical governance, and rights-based frameworks to encourage responsible and ethical use of digital technology. This guidance will enable the development of individuals with critical awareness, moral grounding and social responsibility as digital citizens.

## **ADVANTAGES AND DISADVANTAGES OF PRESENT DIGITAL WORLD**

### **A. Advantages of today's Digital Society**

**1. Fostering responsible use of Digital Technology:** Digital educators and instructors provide education on being responsible, having integrity and being just, with regards to technology use and also empower students to be responsible participants in the Digital Age by fostering the values of Responsible Digital Citizenship. These core values are foundational as a means to develop students' knowledge of the associated rights and responsibilities of being a Digital Citizen. By educating students on the value of being a Responsible Digital Citizen, Educators have formally prepared the students to know and be aware of their rights and responsibilities in their respective roles as Digital Citizens (Ribble, 2011).

**2. Combating Fake News and Other Forms of Misinformation:** The teaching of Digital Literacy is essential and critical for the student because teachers are teaching students how to assess the credibility of online information and how to avoid being deceived by false information. Digital literacy provides the necessary tools to enable a student to make sound choices concerning the use of digital information resources and thus promotes a more informed public that is aware of the ethical implications of its use of digital technology (Hobbs, 2017).

**3. Supporting Academic Honesty:** Educational institutions and their educators are dedicated to the promotion of an environment that supports the expectation of Academic Honesty through the endorsement of Originality, Honesty and Fairness, with respect to the use of Digital Tools and Digital Learning Resources, and to the condemnation of Plagiarism and other forms of unethical behaviour that may arise in the use of Digital Tools (Selwyn, 2016).

**4. Cyberbullying and Online Misconduct:** In order to reduce the number of incidents of cyberbullying, hate speech and other forms of online misconduct, schools and universities should be providing Value-Based education and support systems that provide access to tools and resources to help students develop Empathy and Respect for Others'. This assists students in developing the ability to communicate Responsibly and Respectfully (Livingstone & Third, 2017).

**5. Digital Rights and Privacy:** Educational institutions must also provide their students with the knowledge and skills necessary to manage and organise their digital rights and Privacy by educating them on issues related to Data Privacy, Consent and Online Safety and Security (Floridi, 2013).

**6. Ethical Decision-Making:** Ethical Decision-Making needs to be included in Digital Curriculum (Floridi, 2013), through the Education practice educators and teachers, who stress the value of Ethical Decision-Making, encourage students to think critically about their actions online and encourage them to continue making Ethical Decisions once they have graduated from formal Education.

**7. Safe and Inclusive Online Learning Environments:** Educational Institutions must provide Safe and Inclusive Online Learning Environments. They provide avenues for equitable access to, inclusive and safe learning environments and ensure that students are provided with the tools and resources to be Successful in the Digital World, while reducing Digital Exclusion and Discrimination (UNESCO, 2019).

**8. Authentic Use of New Technologies:** Teachers provide guidance for authentic Use of New Technologies. They educate their students on the ethical use of new technologies such as Artificial Intelligence and Social Media in order to promote ethical innovation and reduce the potential for misuse (UNESCO, 2019).

**9. Human Moral Values for Every Advancement of Technology:** Educational organizations ensure that the rapid development of technologies is consistent with human moral values, ethics, culture, democracy, and thus the potential threats to the social cohesion of society, due to these changes (Selwyn, 2016).

**10. Social Responsible:** Educational organizations and teachers should help students become responsible and engaged citizens by teaching them how to act ethically in a digital society. This way, they will be able to make a meaningful contribution to both democratic societies and digital communities (Ribble, 2011; Livingstone & Third, 2017).

It is for these reasons that educational organizations and teachers have an essential role to play in developing ethical digital behaviours that contribute to developing responsible citizenship, academic

integrity, digital safety, and ethical decision-making. Therefore, the contribution of teachers and educational organisations Continue to be a significant factor in building a safe, inclusive, and value-based digital society in our world today.

## **B. Disadvantages of Present Digital World**

**1. Digital Competencies of Educators:** Because technology changes very quickly, educators do not have time to become digitally competent in order to help students understand how to behave ethically in a digital world (i.e., lack of training). This lack of training results in a gap in the skill set of educators to teach digital ethics (Selwyn 2016).

**2. Overwork and Insufficient Time Due to Multiple Points of Demand for Educators:** Because many educators have a lot of demands placed on them (i.e., multiple points of demand), the possibility of teaching digital ethics disappears. Therefore, digital ethics are treated as an adjunct or ancillary area of education rather than a core area of study (Hobbs 2017).

**3. Digital Infrastructure & Unequal Access to Education:** There is substantial inequality between the amount of digital infrastructure available to educational institutions in various areas of the world. In many developing parts of the world, the lack of sufficient access to digital infrastructure for educational institutions leads to a lack of access to timely and consistent ethical guidance for these institutions. When there is no consistent method available for providing students with ethical education concerning digital behaviors, an educational gap is created (UNESCO 2019).

**4. Over Reliance on Control & Monitoring Tools to Analyze & Track Students' Work & Behavior:** Institutional monitoring tools (for example, plagiarism detection tools and online proctoring) only facilitate compliance with ethical policies and procedures (i.e., they do not facilitate learning about ethical behavior) (Floridi 2013).

**5. Resistance to stay relevantly in the Area of Digital Ethics:** Teachers often do not feel confident using technology, and many educational institutions are influenced by a culture of inertia. Consequently, teachers are limited in their engagement with digital ethics (Selwyn, 2016).

**6. Informal Digital Settings:** Extremely high levels of unethical behaviour (for example, cyberbullying) are commonplace in informal digital settings (for example, social media) and may not be actively regulated within any formal institutions (Livingstone & Third, 2017).

**7. Fostering General Digital Behaviour Across All Cultures:** While the development of digital guidelines by cultural/educational institutions may be intended to foster general digital behaviour across all cultures, it is

important to realise that these general standards do not take into account the cultural, contextual, or social diversity inherent to different cultures. Thus, they may be seen as marginalising certain perspectives that have not been adequately acknowledged or valued by the guidelines (UNESCO, 2019).

**8. Ethical Dilemmas:** Teachers, as well as educational institutions, face ethical dilemmas presented by rapid advances in technology, including artificial intelligence, and algorithmic tools; therefore, many educators may not even recognise what these ethical challenges are or how they can be effectively handled (Floridi, 2013).

**9. Failure to Reinforce the Ethical Use of Digital Technology:** Parents' and communities' failure to reinforce the ethical use of digital technology will significantly impede the success of educational institutions' efforts to educate their students about responsible use of technology (Livingstone & Third, 2017).

**10. Limitations of Institutional Rules:** Institutional rules only ensure compliance with those rules over the short term and do not foster an individual's thinking and ability to act ethically; the result is compliance in the short term only to ethical digital behaviours rather than continued ethical digital behaviours long term (Ribble, 2011).

Therefore, while both educators and educational institutions have an important role to play in teaching ethical digital behaviours to students, they also face a number of barriers to their ability to do so effectively, including a lack of relevant skills, limitations with regard to the technology available to implement effective solutions for teaching ethical digital behaviours to their students, ethical dilemmas associated with the rapidly evolving technological landscape, and a lack of influence in informal settings that their students are using to engage in digital communication. As such, there is a need for continued building of educators' capacity and a greater focus on collaboration and inclusive approaches involving educators, educational institutions and society as a whole.

## **LIMITATIONS OF THE STUDY**

1. Data for this research was obtained from secondary sources (existing literature, policy documents) and scholarly literature, rather than original, primary empirical data; as a result, the findings cannot be practically validated, as no empirical data was collected.

2. All analysis performed in this study is based on a theoretical perspective only; therefore the effectiveness of organisational policies, intervention strategies, and/or teacher training was not objectively assessed.

3. Rapid advancements in digital technology will result in the frameworks, ethical guidelines, and/or topical recommendations mentioned in this study becoming obsolete very quickly and will not account for new forms of technology that are emerging (e.g., AI-driven platforms and/or virtual learning environments).

4. The analysis has been primarily limited to the education sector, and thus has not provided a detailed evaluation of the varying degrees of access to digital technologies, the types of digital technological infrastructure available, and how students' behaviours vary toward digital technologies; hence, some of the limitations in this study stem from this lack of information.

5. The focus of the analysis has been on a limited number of areas of ethical concerns (i.e., cyber bullying, privacy issues, plagiarism, misinformation); the study has not provided a comprehensive evaluation of many additional ethical challenges that may arise in informal digital environments, social media, and the digital global community.

6. Institutional support for ethical behaviour will vary widely between educational institutions, as the provision of teacher training and/or community support will vary widely between different contexts and situations. Therefore, it is likely that many of the recommendations made in this study will have limited application to some contexts and situations.

## CONCLUSION

In today's digital world, teachers and their educational institutions play a huge part in a learner's development of ethical digital habits. Since modern technology affects how we create knowledge, form friendships, and participate as active citizens and since misuse of technology can lead to many consequences (moral disengagement, exclusion, etc.), teachers have a major responsibility to teach appropriate use of technology so that we can have ethical behaviour in digital spaces. By modelling this type of use of technology, developing critical digital literacy, and encouraging their students to be honest, to show empathy, to respect others and to hold them accountable, teachers are providing the foundation for a learner to internalise the ethical norms associated with

the use of technology rather than simply complying with them out of fear or guilt.

Educational institutions assist teachers by providing the context that supports ethical behaviour with technology through developing their curricula, adopting institutional policies and providing an environment where ethical standards of the use of technology are in place. Educational institutions have a responsibility to embed standards of digital ethics, academic integrity, data protection and inclusivity into their institutional framework as a method of allowing ethical behaviour with technology to be part of the culture of learning. In light of the fact that technological innovation is often much greater than the regulatory mechanisms in place to protect people from abuse through technology (and, therefore, safety for the user), the responsibility of teachers and educational institutions is to align technology with human values and social responsibility. Together, teachers and educational institutions help develop critically informed, ethically grounded and socially responsible digital citizens; thereby, allowing the future of digital technology to be one that is inclusive, democratic and value-driven, not just technologically advanced.

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