The Relationship between Social Media and Pedagogy

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Ву

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CONTENTS

List of Figuresvi
List of Tables vii
Acknowledgments viii
Glossary ix
Chapter 1
Chapter 2
Chapter 3
Chapter 4
Chapter 5
Chapter 6
References

LIST OF FIGURES

Figure 1. Kennedy's (2005) spectrum of CPD Models	75
Figure 2. Framework for technological pedagogical and content knowledge (TPACK: Koehler and Mishra 2008)	84
Figure 3. Williams' (2022) framework describing the main themes of social media and pedagogy	08

LIST OF TABLES

Table 1. Smith's (2016) key questions in education	26
Table 2. How learners have benefitted from personalised digital technologies	49
Table 3. Trowler's (2008) first socio-cultural theory proposition	63
Table 4. Trowler's (2008) second socio-cultural theory proposition	64
Table 5. Trowler's (2008) third socio-cultural theory proposition	64
Table 6. Trowler's (2008) fourth socio-cultural theory proposition	65
Table 7. Trowler's (2008) fifth socio-cultural theory proposition	65
Table 8. Trowler's (2008) sixth socio-cultural theory proposition	65
Table 9. Cherry's (2018) practical applications of socio-cultural theory .	68
Table 10. Why mobile devices are increasingly important	70
Table 11. OECD (2005) key purposes of CPD for teachers	81
Table 12. CPD in TEL objectives	85
Table 13. Strategies for technology integration	86

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GLOSSARY

AAP American Academy of Paediatrics

AC Abstract Conceptualization
AE Active Experimentation
AI Artificial Intelligence
CE Concrete Experience

CHAT Cultural-historical Activity Theory

CK Content Knowledge

CLEx Changing Learner Experience

COPPA Children's Online Privacy Protection Act

COVID-19 Coronavirus disease

CPD Continuous Professional Development

DfE Department for Education
DPA Data Protection Act
ECF Early Career Framework
ECT Early Career Teacher

GDPR General Data Protection Regulation

GPS Global Positioning System

HE Higher Education

ICT Information and Communications Technology

IWB Interactive Whiteboards

LMS Learning Management System
LOTI Levels of Technology Framework

MP Member of Parliament
NC National Curriculum
NQT Newly Qualified Teacher

NSPCC National Society for the Prevention of Cruelty to Children
OECD Organisation for Economic Cooperation & Development

OU Open University

PD Professional Development

PEAT Partnership on Employment & Accessible Technology

PGCE Postgraduate Certificate in Education

PK Pedagogical Knowledge

x Glossary

PMLE Persuasive Multimedia Environment

QTS Qualified Teacher Status RO Reflective Observation

SAMR Substitution Augmentation Modification and Redefinition

SD Standard Deviation

SEN Special Educational Needs SLT Senior Leadership Team

SPSS Statistical Product and Service Solutions

SNS Social Networking Services

STEM Science Technology Engineering and Mathematics

TCoP The Technology Code of Practice
TEL Technology Enhanced Learning
TES The Times Educational Supplement

TPACK Technological Pedagogical Content Knowledge

TK Technological Knowledge

UK United Kingdom

US United States of America VC Vulnerable Children

VLE Virtual Learning Environment

VR Virtual Reality

ZPD Zone of Proximal Development

CHAPTER 1

INTRODUCTION

In today's increasingly network-driven society, we have a generation of individuals who are not only part of the digital age but also of the social media subculture. Social media was initially defined as 'part of our everyday communication and information sharing' (Spencer 2014, p. 323). As digital platforms evolved, using social media and social networks as interchangeable terms became redundant. Social networking creates a profile and makes connections (see Soderholm et al. 2016), whereas social media involves turning web-based and mobile communications into social dialogue (for example, as outlined in Cohn 2018; Soderholm et al. 2016). The distinction is important as this book explores how and why educators prefer some social media platforms over others. Social networking sites hold the potential to drive our primary form of communication, and they can dictate who is popular and who is not; they advertise products we did not know we wanted, and through information processing and artificial intelligence (AI), they sub-consciously educate us. Social media impacts all parts of our lives. Thus, with such a large scope, it can be more complex than first imagined, defining the phenomena accurately-nevertheless, social media centres around communication, participation, and community building.

The ubiquity of social media, including the major platforms Facebook, Instagram, X, TikTok, Snapchat, and YouTube, is no more apparent than in the education industry, as it can aid communication between educators and learners. Pupils arrive at school and instantly recall last night's social media activities, sharing information or content from digital technologies. Nevertheless, few schools take advantage of how children become enthused in these ways and the potential these platforms may have in formal learning contexts. Ferguson (2013) reported that many teachers are not implementing social media strategies in their classrooms. This appears to be the case almost a decade on (as in Dennen, Choi and Wood 2021). Schools have

introduced 21st-century technology into their classrooms with little, if any, alteration to the delivery of information. For example, classrooms will use the web and 4.0 technologies, yet communication, participation and community building are less established.

Social networking sites have been thought to break down traditional hierarchies regarding society and global geography. Twitter (Now X), for example, can empower learners to engage with individuals worldwide, often sharing educational resources for free. The benefits of using Twitter and its growing role in education accelerate debates about how best it can promote learning and improve engagement (Lewis 2017; Juno et al. 2011; Junco, Elvansky and Heiberger 2012). Notably, platforms such as Moodle, Canvas and Blackboard, all popular Virtual Learning Environments (VLE) in education, have transformed from simple filing systems with resources into social learning platforms with features resembling the major social networking sites. This transition into an increasingly collaborative and social platform has been welcomed across higher education (HE) (Williams 2022).

This book will use the latest research from the social sciences to present an overview of social media in pedagogy. The book will explore whether social media can be incorporated into pedagogy successfully, carefully analysing theoretical perspectives, professional development, and the contentious term Technology Enhanced Learning. Whilst this book does not intend to be a comprehensive guide to using social media in the classroom, there are some practical examples of how social media can be embedded into best practices.

1.1 History of Technology in Education

Looking back at the history of education and technology can provide an opportunity to acknowledge issues and factors that can only be revealed with the benefit of hindsight. The historical development of Technology Enhanced Learning (TEL) can provide educators with possible ramifications and frameworks that new technologies seek. Social Networking Services (SNS), Virtual Learning Environments (VLE), and Artificial Intelligence

(AI), amongst others, can only have a sound understanding if the processes influencing TEL are examined.

Direct links between education and technology are long-standing, especially in 'numeric' uses of computers (for example, pocket-sized calculators). Higher Education Institutions (HEI) began using computers for teaching, learning, research, and administrative purposes in the early 1960s. As the 1960s progressed, using computers in 'non-numeric' forms, such as tutorial and coaching instruction, became popular. The term' computer-assisted instruction' was heralded by the philosopher Patrick Suppes. Computer tutors, where a computer presents material to a learner and asks questions about it, ensured the equitable future of educational provision, allowing everyone access to top-quality teaching and learning (this form of teaching became increasingly important during the COVID-19 pandemic and subsequent lockdown). Additional developments in TEL during this period included drill and practice instruction, problem-solving, dialogue systems, computer laboratories, database use, and educational games.

Between 1950-1980, the UK government supported applying technology to pedagogy. This is evidenced through sustained government investment in educational technology (as described in Ingleby 2016). During this period, all the above developments spread across schools and educational institutions nationwide. The 'Technology' writer Christopher Evans (1979, p. 18) correctly predicted that 'portable, personal teaching computers will sweep through the education system in the Western world'. Educators became enthused with a direction towards computer-assisted learning as it encouraged critical thinking and creativity, which also matched the perceived learning styles of pupils at that time.

This was a remarkable period in Western education as schools that had formally been instructor-centred moved towards a heavily student-centred approach. Whilst schools enjoyed the benefits of technology, a second reform was needed to make computers readily available to all pupils. This began in 1979 with new policies by Margaret Thatcher's government to increase the use of technology within the education sector. For example, the National Council for Education Technology was established, and until

1991, computers in schools rose from 18 to 98 per cent. Similarly, the ratio of students per computer dropped from 125:1 to 18:1 (Selwyn 2016).

However, the astronomical rise in the availability of TEL needed to be supported with parallel computer education for teachers. Research studies in the late 1990s found issues with teacher expertise and computer confidence (such as Conte 1997). In other words, teachers were not TEL-ready. Conte (1997, p. 23) argued, 'in many schools, computers sit idle much of the time or are used for passive learning routines rather than to cultivate higher-order thinking skills like synthesis, analysis, and communication'.

These issues remain problematic for educators today despite the technology changing from computers to tablets. In other words, it would be common for schools in the UK to have a collection of iPads that regularly sit in storage cupboards unused. The reasons for this contribute to the key themes of this book. The small-scale work by the government from 1997 onwards has impacted the emergence of social media in classrooms. Theoretically, through the commercial competitiveness of Information Technology (IT) companies such as Apple, Microsoft and IBM, the last ten years have been an opportunist time to enable our classrooms with new technology.

The last 60 years have demonstrated some important 'lessons learned' for successfully managing the rise of social media. Technological remedies and quick technology fixes, for example, cannot be assumed to integrate within the education system without 'social engineering'. Social engineering is a concept Alvin Weinberg first mentioned in 1966 when discussing the 'clashes' of TEL with structures of education, in other words, the curriculum. Essentially, there is no reason for teachers to use technology if the curriculum does not reflect the changes in practice. This is why implementing technology in classrooms can be problematic. However, it would be unfair for teachers to be solely responsible for limited showings of technology in education provision and practice. TEL has to fit around examination regimes, timetabling, curriculum, and formal and informal governance of schools. That being said, it would be naïve to assume the new wave of technology, social media, will repeat high profile failures of TEL in the past, and there is a suitable reason to expect this can perhaps be 'the

one', as many educators use social media outside their profession. This book argues that this was absent in the 1990s with microcomputers.

A recent Conservative Party Manifesto argued that 'world-class public services are equated with technology' (Conservative Party Manifesto 2017, p. 4), hence, their commitment towards continuing to invest in TEL. The importance of this support cannot be underestimated. West (2017) argues that SNS now yields over 70,000 jobs at any time and that omitting this tool in education is highly irresponsible. Almost all industries, including corporations, non-profit and government organisations, share the need for employees to have social media expertise.

1.2 The Evolution of Social Media

The presence of the virtual world has dictated how humans communicate, and for many, online communication is now one of their most significant methods of social connection. Over the course of a year, an individual may spend more minutes communicating with peers on WhatsApp than face-to-face, for instance. Online communication facilitates both formal and informal group and network collaboration. However, the Internet has not always been social. As Poore (2016, p. 5) describes, 'the earliest version of the web was read-only, meaning that we could only view content others had published on their websites'. This version of the virtual is commonly referred to as Web 1.0.

Although electronic computing technologies have existed since the early 1940s, computers did not become social until the conception of the Internet. Internet-enabled devices communicate across vast distances by providing the hardware and software to share data-based information. Internet-connected computers can be linked via cables, phone lines, powerlines, radio, or satellite links.

Whilst this chapter does not examine the underlying technologies in great detail, it is important to note that the Internet is, at its core, a system that allows computers to interact with one another. This holds relevance in discussions about how knowledge is constructed through social interactions (Williams 2022). This section will describe the evolution of the web and

how social networking sites fit into the virtual world. The phrases 'Web' and 'Internet' are frequently used interchangeably, perhaps due to the literature in this area deriving from digital and marketing domains and not the social sciences. Whilst there will be references to marketing and business literature, this will be discussed through the lens of pedagogy, i.e., what this means for teaching and learning. Often, terminology in digital and technological discussions is grouped in education, largely due to convenience. However, there are complications in working this way, especially in light of an increasingly digitally minded agenda. Thus, the importance of highlighting what technological key terms actually mean.

The web, formerly known as the World Wide Web, refers to the pages and websites accessible over the Internet. In comparison, the Internet is a network of interconnected computer systems that enables the operation of the World Wide Web and the transmission of data and emails. The Internet essentially connects different websites and enables people to communicate with one another.

1.2.1 Web 1.0, 2.0 and 3.0

The earliest iteration of the World Wide Web consisted of a few individuals developing web pages and material for a broad audience of readers, allowing them to obtain facts, information, and content from the original sources. This version of the website catered to users searching for information. This is commonly referred to as 'the read-only Web' since it lacks the forms, images, controls, and interactivity that browsers enjoy on the Internet today (Kompen et al. 2019).

Web 1.0 consisted of a limited number of people producing material for a huge audience. In contrast, Web 2.0 could be described as a large number of people producing increasingly more content for an expanding audience. Web 1.0 emphasised reading, while Web 2.0 emphasised participation and contribution. Furthermore, Web 2.0 primarily focuses on the user experience (UX), prioritising User-Generated Content (UGC), usability, interaction, and enhanced compatibility with various systems and devices. Kempen et al. (2019) argue that Web 2.0 is the dominant type of web interaction for most users today. The main distinction between the two is that Web 1.0 was

known as the 'read-only Web', while Web 2.0 is known as the 'social, participatory Web'. Web 2.0 is a superior, upgraded version of its predecessor by incorporating web browser technology such as JavaScript frameworks.

In order to determine the definition of Web 3.0, scholars ought to think about the future of technology, as Web 3.0 has yet to reach its full realisation despite some of its components already being accessible (Williams 2023). Web 3.0 is based on decentralisation, openness, and enhanced user usefulness. If Web 1.0 is the 'read-only Web', and Web 2.0 is the 'socially participatory Web', then Web 3.0 is the 'read, write, and execute Web'. This stage of Web engagement shifts users away from centralised platforms such as Facebook, Google, and Twitter and toward decentralised, practically anonymous platforms. Tim Berners-Lee, the inventor of the World Wide Web, originally referred to Web 3.0 as the Semantic Web and envisioned an intelligent, autonomous, and open Internet that utilised Artificial Intelligence and Machine Learning to function as a "global brain" and process content conceptually and contextually (Berners-Lee 2019).

It presents the connectivity of multiple devices and applications through the Internet of Things (IoT). This is made possible by semantic metadata, allowing all available information to be effectively utilised. Individuals can connect to the Internet anytime and anywhere without a computer or mobile device. It is important to acknowledge that Web 3.0 is not a place, and examples include Apple's Siri or Amazon's Echo, also known as Artificial Intelligence (AI). A sub-chapter in the later part of this book is dedicated to AI and its gradual influence on the educational landscape.

1.2.2 Blogs, Wikis, and Social Media

The first weblogs are described as online diaries whereby individuals share their daily lives with other Internet users. When software became available for non-technical users to produce regular content, a significant shift occurred towards blogs. The general public no longer required complex coding or HTML skills as there were ready-to-go templates to create content. Blogger, Livejournal, and Typepad were the first (and simplest) of these web-based blog creation platforms. These websites made it possible

for users to launch a blog within minutes, drastically lowering the barriers to entry for producing fresh web content (Martínez-Roig et al. 2022).

Microblogging is a type of social network that only permits brief and shorter posts. As with conventional blogging, users post about topics ranging from the straightforward, such as "what I am doing right now," to the thematic, such as "sports teams". In addition to promoting websites, services, and products, commercial microblogs facilitate collaboration within an organisation. Twitter is a microblogging service that enables users to post 280-character (previously 140-character) messages (tweets) via the Internet, SMS, and a variety of third-party desktop and smartphone applications (see Martínez-Roig et al. 2022).

Blogs are created by a single blogger or a small group of bloggers, whereas wikis allow all users to contribute to creating material. As a type of social media, wikis enable many individuals to communicate, cooperate, discuss, and present meaningful ideas. Wikis are distinguished from standard Web pages as they emphasise collaboration and the simplicity of creating and changing material; wikis are designed to encourage collaboration by their very nature. Before committing to edit content, users can discuss the potential implementation of the change in this forum. Subsequently, a strong sense of community develops from these regular contact points. The most well-known wiki is Wikipedia.

Wikipedia was founded in 2001 as an online encyclopaedia that anyone may edit. This is particularly interesting as it reflects the notion that the sum of human knowledge can be available to anyone via the Internet. There are presently 42,941,950 pages on Wikipedia. At the time of writing, there had been 907,083,895 edits, with more being made every second (see Bonaccorsi et al 2020).

The most evident characteristic of Web 2.0 sites is that their users are actively involved in their creation. Wikipedia, YouTube, Instagram, Twitter, Flickr, and Facebook are among the most popular websites in the world, and their material is produced and valued by the same set of individuals. Goffman (1956) argued that individuals selectively and deliberately reveal certain information to others in everyday communications.

It is through these interactions and the control we have over them that we establish a social status. In other words, social actors. There will be further discussion of Goffman (1956), self-presentation theory and social anthropology in chapter 3: Theoretical Perspectives. The central argument in this section is that social interactions are a major theme of learning and that everyday communications have evolved, particularly in light of Web 2.0.

Individuals have relied on email, instant messaging, and virtual communities to maintain and cultivate social connections. The most recent development in this field has been the expansion of specialised social networking platforms that provide users with a centralised means of chatting with friends and colleagues and exchanging information. Social networking generally refers to software and websites that aim to connect individuals (Williams 2022). Social networking sites frequently integrate technologies, such as blogs, content sharing, and instant messaging, enabling users to construct an online profile that can subsequently serve as a hub for their Internet communications.

As social media grew rapidly, the economic, social, and political influence of the individuals and organisations who own these platforms similarly increased. Social networking encompasses communication and mass dissemination of facts, news, opinions, cultural beliefs, and values. In other words, whoever controls the information flow across social networks has significant influence.

Facebook, for example, has around 2.07 billion monthly active users worldwide as of November 2017. 1.37 billion of these users access the platform daily. Every 60 seconds, more than 510,000 comments, 293,000 status changes, and 136,000 photographs are shared. It is important to acknowledge Facebook, as privacy issues have dogged the site and its inventor since its inception.

1.2.3 Facemash and Facebook

Before "the Facebook," Mark Zuckerberg created a site called Facemash that illegally used private personal information for problematic purposes.

Zuckerberg initially hacked into protected sections of Harvard University's computer network and copied confidential dormitory ID photographs to develop Facemash. Individual houses have been publishing their paper on Facebook since the mid-1980s; however, Harvard did not have a student "Facebook" (a directory with images and basic information) at the time. Facemash drew 450 users who viewed 22,000 photos online in its first four hours. The site was shut down by the Harvard administration a few days later. Zuckerberg risked expulsion and was charged with a security breach, copyright infringement, and violation of individual privacy by the administration.

Concerns over user data privacy have persisted despite Facebook's global expansion, and this is an interesting theme that will be explored in the chapter on policy and ethical considerations. Numerous governments in Europe, for instance, are probing the platform's use of personal information for commercial reasons without approval. For example, Facebook was sanctioned in 2017 for violations of the French Data Protection Act. In 2021, European Union regulators fined Facebook (now Meta) a record £390 million for privacy violations. At the time of writing, there were still pending decisions on Meta's messaging service, WhatsApp. Whilst Meta and other Big Tech companies have come under pressure from the European Union's privacy rules- some of the world's strictest- individuals have become increasingly savvy about how organisations use their data. In addition to introducing the General Data Protection Act (GDPR) (2018), this indicates that lawsuits and fines will likely become the norm over the next twenty years.

Meta collects information from users of its platform because the data has a monetary value for the business. Third-party businesses pay to advertise their products on Facebook and Instagram, and more recently, politicians have been spending money on these platforms. This tactic has only lately received increased international criticism regarding Russia's suspected "weaponisation" of Facebook during the 2016 US presidential election. Facebook significantly impacted the 2016 presidential election, largely because Donald Trump's campaign embraced Facebook as a crucial advertising channel in a manner never before seen by a presidential campaign. Lapowsky (2016) argues that the campaign, in general, was

willing to deviate from conventional campaigning techniques. For example, the team invested in innovative uses of the digital tools and platforms that now dominate the media environment.

1.2.4 Twitter

Twitter is a web-based social networking service and microblogging programme. Twitter was launched in 2006, a similar time when Facebook began expanding its user base. It enables users to create profiles, follow others, and post brief updates or tweets. Tweets were limited to 140 characters for over a decade; however, in 2017, that limit increased to 280 characters. Elon Musk, Twitter's CEO as of 2022, proposed that the character limit could increase to 4,000 in the coming years (Digital Trends 2022). With 328 million monthly active users posting 500 million daily tweets, Twitter facilitates a vast network of personal and professional contacts.

Twitter reduces the perceived distance between individuals and corporations throughout the globe by providing direct access to friends and family, celebrities, politicians, businesses, and service providers. Twitter has become a source of innovation in social communication and a venue of everchanging cultural relevance and ongoing dialogue. For example, Twitter was the first platform to employ hashtags. These hyperlinked tags can be used in various ways, including to emphasise the main point of a tweet, to lend a sarcastic or ironic twist to what has been stated, or to allow users to follow a specific set of tweets. Social networks such as Twitter are often derided as frivolous and 'not in the real world' (Williams 2022). However, they have become indispensable during natural disasters, political uprisings, and other significant global events.

1.2.5 The YouTube and TikTok Revolution

YouTube is a prominent website for sharing online video clips. Within a year of its inception in 2005, the website was serving 100 million videos each day. In 2008, YouTube views consumed the same amount of bandwidth as the entire Internet eight years prior. Like most Web 2.0 services, YouTube provides an intuitive interface that simplifies submitting

content. YouTube is home to a growing community that utilises videos for interpersonal contact and creative expression. However, critics often describe it as a platform for brief entertainment spurts. Despite this, unlike Twitter and Facebook, YouTube is widely used across the education sector. YouTube is a particularly interesting social media platform as it does not fit with a social networking site's general norms and assumptions as there is less emphasis on the 'profile'. YouTube will be discussed in detail in Chapters 3, 4 and 5.

During the COVID-19 pandemic, the educational role of technology and social media has increased (Coman et al. 2020; Sobiah et al. 2020). This is because digital tools serve to connect people with people at a time when they cannot leave their homes.

While Facebook and Twitter have attracted the majority of attention from universities and other educational institutes, there are new emerging social media that may offer pedagogical possibilities. TikTok, for instance, has considerably grown its popularity since the COVID-19 pandemic (Su et al. 2020). Short videos are increasingly popular in media because they can capture memorable moments in formats that range from a few seconds to several minutes (Zhang, Wu, and Liu 2019). Indeed, videos have succeeded in capturing society's attention on Instagram, Facebook, Snapchat (Wright 2017) and, currently, TikTok (Wang 2020).

With a maximum length of 60 s, the videos can reach great complexity and originality by including images, sounds, video clips, video clip overlays (Serrano, Papakyriakopoulos, and Hegelich 2020), and "split screens" in response to other videos that another person has previously created. According to, TikTok was the most downloaded and installed app globally, with approximately 113 million downloads in February 2020. This number represents a 96.5% increase from February 2019.

One of the reasons for TikTok's rapid success is its simple interface design. Easy access to the application and intuitive use can attract the attention of many users (Garg and Pahuja 2020). Furthermore, owing to the abundance of video editing tools, creating and sharing visual content is quick and easy. In addition, TikTok has an extensive music library. TikTok allows users to

use any part of an original song, a mix of songs, an audio clip, or a previously registered song recording. This provides greater possibilities for creating musical choreographies relevant to corporal expression. However, the main advantage of TikTok over other applications (e.g., Snapchat) is that the video can be shared through different applications, which allows reaching people who do not have a TikTok account (Hayes, Stott, Lamb, and Hurst 2020). This is particularly interesting when considering how TikTok can be leveraged in educational contexts. According to Zhu et al. (2020), TikTok could be used for microlessons, demonstrations, engaging with current events, trends, storytelling, interactive challenges, and Q&A sessions. The application of social media in the classroom will be discussed in Chapter 2.

1.3 The Nature of Social Media in Education

Social media influences 21st-century operations, and whether referenced with communications, business practice or education, social media is at the heart of the modern-day individual. Almost all industries, including corporations, non-profit, and government organisations, share the need for employees to have social media expertise. Within education, few schools have implemented social media strategies in their learning programmes, and at times, the topic is often ignored (Williams 2022). The main reasons for this are outlined by Fox (2013) and include:

- 1. the ambiguity of how to implement the technology effectively,
- 2. accessibility to all students, and
- 3. whether the potential outcome outweighs the additional workload.

In this regard, some scholars have argued in favour of effective, transformative pedagogy as, in this way, technology can be considered in as holistic a way as possible in educational contexts (Dennen, Choi and Wood (2021).

However, outside education, scholars have been inclined to focus on health concerns, professional identity, and social relationships as the significant themes centring on social media. This is particularly interesting as it indicates that there is increasingly a cross-over between technology, health,

and education, and subsequently, professional development that needs to equip teachers for the broader societal challenges may not be particularly useful in the contemporary context.

There may be possible links between a generation of social media-proficient students and a productive workforce. Thus, an absence of social media in the classroom could have a detrimental impact on the future workforce due to the benefits that a 'social media savvy employee' may bring (Junco et al. 2012). Furthermore, the expanded use of social media and the evolution of how humans communicate may be advantageous in promoting and enhancing workforce diversity. Nevertheless, the specifics of how this ought to work in practice are rarely mentioned, and some researchers have even indicated that because social media plays a central role in forming our views, it may be a means of encouraging certain biases (for example, in the work of Pitoura 2020).

1.3.1 Age Restrictions

Facebook, Twitter, and other major social media platforms have age restrictions for users. The Children's Online Privacy Act (COPPA) dictates that the minimum age for using social networking sites in the UK is 13 years. COPPA was first enacted in 1998 to reflect a governance of technologies such as Google and Microsoft.

Essentially, COPPA covers the need for parental consent when companies collect information from children under the age of 13, and this applies to social media companies. In comparison, the introduction of the General Data Protection Regulation (GDPR) and the adoption of The Digital Age of Consent Bill in 2018 means that in the EU, any child below 16 years could not consent to Internet companies to collect and store their data. This law has been described as 'one step further' than COPPA, with much of the GDPR also applying to adult personal data. This child-friendly regulation allows member states to set their data age of consent, and most notably, the UK has established it as 13 years to align with COPPA. However, some exceptions exist whereby states such as Spain and the Netherlands have set it as 14 and 16 years of age, respectively. GDPR states that commercial

companies must take reasonable measures to ensure the child is above the minimum age.

An example is having an age-required field when creating a social account. The UK is now part of the UK GDPR, which incorporates the requirements of EU GDPR with the 2018 Data Protection Act (DPA). There are limitations in how users verify their age on social media, which is evidence of the initiative being government-led rather than industry-led.

1.3.2 The New Tobacco?

Historically, social media companies have supported age limits and, sometimes, lobbied for tighter restrictions on their platforms. However, there may well be incentives for social media companies to allow governments to take control and set these restrictions. There is evidence of Facebook spending £9.5m lobbying for restrictions against themselves (The Guardian 2021). As an organisation, adult data is more valuable than child data, and supporting these restrictions presents a positive brand image in an increasingly hostile environment. I argue that this resembles the complex history tobacco companies have with legislation and regulation of their products.

For instance, they have often resisted legislation that might restrict their business, such as laws mandating health warnings on cigarette packages, limiting advertising, raising the age for tobacco purchases, and banning smoking in public places. However, there have been instances where tobacco companies have supported specific legislation, often believing it will favour their strategic interests. For example, Imperial Brands supported legislation requiring standardised, plain packaging with large health warnings because it made all brands equal, allowing them to compete more on price and less on brand image. In addition, some tobacco companies supported taxes on their products, often to shift the public perception of their willingness to participate in public health efforts. These taxes increased the cost of tobacco products, which can reduce consumption, especially among younger and lower-income smokers. However, this also reinforced the companies' market power, as smaller companies struggled to absorb or pass on these costs to consumers.

There are additional similarities made about the behaviour of big tobacco. It is well-documented that major tobacco companies were aware of the harmful effects of their products for many years before public acknowledgement. Meta's research indicated that Instagram, their photo and video social networking platform, makes body image issues worse for teenage girls. Whilst their research has repeatedly found it is harmful for a large proportion, it was the data on teenage girls that is particularly worrying. The data from the study showed that 32% of teen girls felt bad about their bodies, and Instagram made them feel worse. Teens blamed Instagram for increases in the rate of anxiety and depression.

Among the most concerning findings was that among users who reported suicidal thoughts, 13% in the UK traced them back to Instagram. Another study found that more than 40% of Instagram users who reported feeling "unattractive" said the feeling began on the app; about a quarter of the teenagers who reported feeling "not good enough" said it started on Instagram (McKay 2021).

Comprised of findings from focus groups, online surveys and diary studies in 2019 and 2020, the Instagram research evidenced how aware the company is of its product's impact on the mental health of teenagers. However, in public, executives at Meta, which has owned Instagram since 2012, have consistently downplayed its negative impact on teenagers. In other words, Facebook kept internal research secret for two years that suggested its Instagram app makes body image issues worse for teenage girls (The Guardian 2021). The similarities to big tobacco are not farreaching.

Pratiti Raychoudhury, Vice President and head of Research for Meta, responded to the leaks in 2021 and argued, "It is simply not accurate that this research demonstrates Instagram is "toxic" for teen girls... more teenage girls who said they struggled with that issue also said that Instagram made those difficult times better rather than worse".

Furthermore, just as cigarettes are addictive due to nicotine, some argue that social media platforms are designed to be addictive as well. Features such as "likes," "shares," and "notifications" trigger dopamine releases in the

brain, similar to the reward pathways stimulated by nicotine. The platforms are often designed to keep users engaged for as long as possible, leading to excessive screen time and potential psychological harm (Williams 2022).

Another interesting comparison is that both industries have been accused of targeting young people. For years, tobacco companies were accused of marketing their products to children and teenagers. Social media platforms also focus heavily on younger demographics, and there are concerns about how these platforms impact the mental health and development of young users.

These comparisons are often used in public forums to advocate for greater regulation and oversight of social media companies, with proponents arguing that self-regulation has not been sufficient to address the potential harms caused by these platforms (McKay 2021). However, lobbyists often highlight the clear difference in physical harm caused by tobacco products compared to the less direct and more complex potential harms from social media usage. I am not the first academic to make comparisons between the behaviour of social media companies and the behaviour of big tobacco. McKay's (2021) 'Up in Smoke' paper critically analyses the comparisons and why a regulatory scheme will not work with social media as it did with big tobacco.

1.3.4 Balancing the Benefits and Shortfalls of Social Media

A former American Academy of Paediatrics (AAP) spokesperson Gwenn O'Keeffe (2011), cautioned parents around the dangers of social networking even after the age limit. 'It is not a good idea. Since logic and sophisticated reasoning do not kick in until high school, younger children may not realise one of their posts is inappropriate.' The quote supports the narrative many parents adopt in discussions of young people online. Broadening social connections becomes an insufficient argument for parents and educators when exposed risks include cyberbullying, sexting, and 'Facebook depression'.

In contrast, Longfield (2018) proposed that children aged 8-12 consider social media fun and stimulating and that this helps build relationships

during digital tasks. The report found that those who feel marginalised by disability, migration or sexuality are introduced to a broader selection of peers, thus benefitting their social well-being. Furthermore, the use of social media for personal and health issues is on the rise, with newer research showing evidence that social media has other perceived benefits, such as improved motivation, enhanced self-efficacy and development of leadership qualities (McLaughlin and Sillence 2018).

Of interest, some public social media profiles allow individuals to share and receive emotional support, acting as therapy for social-emotional outcomes. Moreover, Lindly et al. (2022) argue that social media can reduce persistent health inequalities for children. In other words, in children with limited emotional support at home, social media can decrease the gap with those who receive positive emotional support.

Additionally, children may benefit from an awareness of nutritional information online, as medical professionals are considering the physical benefits of social media. Children and young adults share recipes and healthy eating advice on social media. HelloFresh, for instance, has taken advantage of this digital space with its influencer marketing strategy. Young people can see their celebrity idols cooking healthy meals in a short video format and can interact with them using the #freshfriends hashtag. Initiatives that promote healthy lifestyles may reduce the widening 'nutritional gap between rich and poor' (Klassen 2018).

Nevertheless, according to the National Society for the Prevention of Cruelty to Children (NSPCC), not enough is being done to tackle cyberbullying. Whilst a certain amount of blame can be directed towards governments, arguments can certainly be levied at 'neutral' social networking sites and their avoidance of taking responsibility for ensuring that social networking is as safe as possible for young people.

Recently, there has been a blurring over what constitutes hate speech and what should be allowed under the right to freedom of speech. However, it must be acknowledged that governments and even higher educational (HE) institutes grapple with this modern-day conundrum. There are certainly other and more comprehensive books that delve into the discourse of 'free

speech', such as "On Liberty" by John Stuart Mill, which addresses the concept of individual freedom, including freedom of speech, and is as relevant today as when it was written in the mid-19th century.

In addition to social networking sites, policymakers and influencers of policy, i.e., government, schools and activists, have struggled to educate young people on how to become safe online and use social media appropriately. Children at 13 years old are opened up to the digital world without pre-teaching at the primary level, which is risk appetite. Within schools, there is an abundance of information available to children on the risks of smoking, drug, and alcohol abuse; nevertheless, there is an absence when it comes to social media. There have long been proposals that schools cover topics such as digital footprints and the permanency of online content, and some of this has been driven by the charity Common Sense Media, which provides lessons and resources for classroom teachers.

'Natterhub' is another organisation that empowers young people to thrive online by educating them on digital citizenship and safety. Their unique selling proposition is that they provide lessons and resources focusing on social media literacy, including navigating a digital world, the importance of digital relationships and empathy and developing communication skills.

As children mature, social media holds the potential to become increasingly relevant in education. Students can connect digitally using platforms such as WhatsApp and Facebook groups to consolidate learning. Pappas (2016, p. 3) examined this further and concluded that, in such situations, 'small groups with not too many members' are optimal for learning. This is essentially the consequence of members in the group feeling confident alongside having a sense of privacy that is deemed appropriate. As online groups become larger and involve more participants, some members can feel anxious and are less likely to participate actively, which is detrimental to any potential benefits of the group. In other words, WhatsApp groups benefit students as they can foster a more relaxed environment where students can freely discuss, collaborate, and help each other with homework or projects and create study groups to delve into topics in more detail. However, it is important to keep the groups small.

Whilst a teacher-led WhatsApp group can certainly be beneficial in several ways, such as facilitating communication about assignments, sharing course materials, and fostering academic discussions, there are reasons why a teacher-led group does not serve the purpose as a student-led group does. For example, a group run by a teacher or lecturer will likely be more formal and focused on academic content. Students will likely feel less free to chat informally or discuss non-academic topics, making it less useful for social or casual interactions (Pappas 2012). Furthermore, a group without a teacher can foster a sense of independence among students, encouraging them to problem-solve and find answers on their own rather than relying on the teacher (Williams 2022). Moreover, students might want a space where they can freely discuss their concerns or issues without worrying about potential repercussions from teachers or school administrators.

Furthermore, Teoh (2022) revealed that professionals in healthcare are using social media groups for the acquisition of new ideas, to reinforce knowledge, to adjust existing knowledge, to learn about resources, and for career advancement. Teoh (2022) argues that social media can mediate learning but calls for tangible guidance and platform-specific examples to maximise these potential opportunities.

Research on study skills and associated learning processes suggests that social media may benefit students in a pedagogical sense. Alongside these findings, it was once argued that students enter universities as 'digital natives' with an expectation that social media is integrated into all their experiences (Prensky 2001). However, discourse has somewhat shifted from the digital 'native' and 'immigrant' language.

With such demand on HE institutes, it is unsurprising that many embrace social media within pedagogical practice. Freberg and Kim (2018) found that teaching faculties use social media for professional reasons at least once per month. Further studies are finding that social networking goes beyond facilitating class connection and can potentially enhance learning (see Tess 2013; Kinsky, Freberg, Kim, Kushin and Ward 2016).

WhatsApp groups may be influential in supporting student engagement with mass lectures by facilitating a discussion of course material. Although, it is