Using a multi- or metaliterary approach to enhance digital agency amongst undergraduates: A UAE case study

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Abstract
Understanding the digital skills of young people around the world is key to informing research as well as enabling us to examine future trends in industry and society. There has been much celebratory discourse on how younger people have some inherent expertise in using devices, navigating online spaces, creating content and engaging with social media. A more realistic analysis shows that even those born into a digital world need guidance and training in honing their digital abilities. Until recently, different types of literacies have often been examined separately. The reality though is that they are used in interconnected and overlapping ways. This paper reflects on how information, digital, media and news literacies can combine under the multi- or metaliterary framework to promote digital agency. The data obtained in three different studies at the same higher education institute is used to consider the digital practices of students and how these constitute digital agency. As a case study, the findings can be used to reflect on how a holistic approach to academic and media literacies will enhance the knowledge, skills and outlook of young digital consumers.

Keywords
Multiple literacies, metaliteracy, digital agency, intersectionality, higher education, undergraduates.

Introduction
For people born in the 21st century it is difficult to imagine a time when technology did not form an integral part of their lives. Ignoring for a moment

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the phenomenal inequalities that still exist around the world because of digital divides, access to a wide array of tools to engage in a digital culture (Gere, 2009) are taken for granted by millions of people, particularly those who are in their teens and early twenties. Academia sometimes compartmentalizes people's digital experiences by focusing on distinct sectors such as education, employment, political activity, leisure or entertainment but increasingly the overlap and seamlessness of different digital spheres result in a blurring of the lines between formal, professional and personal lives. Digital permeates almost every aspect of our lives and as such it is important to understand how these aspects intersect and correlate to create a set of knowledge, skills and practices – indeed an identity that can be described as digital. Using Passey et al's (2018) concept of digital agency, this paper examines the digital lives of undergraduates at the United Arab Emirates University (UAEU) in Al Ain, UAE, drawing on data from three studies conducted at the same institution. The paper combines these results to present a snapshot of the attitudes, experiences and behavior of young people in relation to academic and media literacies and shows how they are drawing on skills gained from different literacies.

Over the past few decades, the range of literacies has increased significantly and it is not difficult to imagine how these will continue to be added to as the world develops newer information and communication technologies (ICT). Previous research has often highlighted one specific literacy, but more recent studies have examined the concept of multiple or metaliteracies (Kalantzis, Cope, & Cloonan, 2010). In our digital culture it is not always possible to make a clear distinction between one literacy and another because in practice there is an overlap of knowledge, skills and application and the boundaries between them are not clear. Examples of this are evident in an educational setting where students use both information and digital literacy to complete an assignment or in a recreational setting where a person can search the worldwide web on a mobile device using a specific browser but be aware of how algorithms will affect the search results. In practice therefore, there is an intersectionality of the use of digital tools and competencies. Kalantzis, Cope and Cloonan (2010) state that the new communication environment of the 21st century offers unprecedented opportunities for multimodal meaning making; linguistic, visual, audio, gestural, tactile and spatial. As a result of these opportunities, they argue that the repertoire of literacy practices needs to expand to incorporate multi literacies, practiced with proficiency, in educational settings.

Definitions, concepts and practical applications of *literacy* have transformed and developed considerably over the years, reflecting changes in the texts that

we consume. Whilst often still carrying connotations of the ability to read and write texts in the print context (Goodfellow, 2011), they are still linked to some level of competence, which constitutes literacy in the digital age as a much broader concept. In the last 20 years, we have become familiar with a vast array of literacies connected to media and ICT with new types of literacies being added to our repository all the time. For example, Goodfellow (2011) notes computer, online, networked, web-based, e-, ICT, learning, recreational and media literacies. By 2013 transliteracy, multimodal, cyber, internet, health, scientific and 25 other types, including environmental and visual literacy, were added to the list (Stordy, 2015). Buckingham (2015) in defining digital literacy, including TV, cine, economic, emotional and spiritual, asks do we really need yet another literacy. Cooke (2018) adds critical literacy and metaliteracy to the ever-increasing list.

This functional list of literacies will continue to grow, but what has become of greater interest is the "view of literacy as a *social* phenomenon rather than a set of cognitive or technical abilities associated with individuals. Digital literacies refer to the practice of communicating, relating, thinking, and 'being' associated with digital media" (Jones, & Hafner, 2021: 12-13). Similarly, assuming we can give all the literacies in the list a digital component, Lankshear and Knobel (2015) describe how they should not be seen as 'things' or simply a set of skills. Rather, they argue, digital literacy is "shorthand for a myriad social practices and conceptions of engaging in meaning making mediated by texts that are produced, received, distributed, exchanged etc. via digital codification" (2015: 13). Each of these practices has a social, economic, cultural and political context and it is not just about tools or skills, but about the outcome of digital actions and whether we are digitally literate or not. It is partly for this reason that Cooke (2018), amongst others, argues for looking at 'the bigger literacy picture' and adopting a metaliteracy approach, especially in the context of fake news and misinformation. Instead of fragmenting our approach to literacies which will result in always excluding one or more specific skill "metaliteracy provides a holistic lens through which to contemplate how critical consumers can interact with information and encourages participants to be active in the construction and distribution of knowledge" (2018: 19). This approach resonates with Philpott's (2019) conceptualization of digital literacy as encompassing three interrelated components: skillset, toolset and mindset.

Passey et al (2018) argue that "digital literacy does not adequately capture the sophisticated nature of today's, nor indeed tomorrow's, digital challenges. We argue that the term digital agency offers a deeper, richer and more holistic concept and one which provides a blueprint for ensuring that people can engage

with technology in a 'meaningful' and 'capital enhancing' way, as opposed to merely 'functioning with technology'" (2018: 437). They divide agency into three parts: competence, confidence and accountability. Competence is the ability to safely and effectively navigate the digital world and has its foundations in traditional literacy and numeracy, knowledge and critical thinking. The focus here is on teaching and learning competence as a multi-stage process. Confidence is neither a matter of self-perception nor of the assumptions that are made about young people and technology. In both cases too much credence is given to skills and abilities simply because people are young and connected. This superficial understanding of confidence is critiqued as in reality many young people lack confidence in their interactions and engagement with digital technologies and whilst they may be involved in digital activities, expertise levels and skills transfer is basic. Finally, accountability encompasses notions of responsibility for oneself and others, ethics of the digital world, security and privacy and the overall impact of our digital actions.

This multifaceted understanding of literacies has also been developed in Jisc's (2022) building digital capabilities framework. They identify six elements which can be used to develop digital capabilities within an organization or educational setting: digital proficiency and productivity; digital creation, problem-solving and innovation; digital learning and development; digital identity and wellbeing; information, data and media literacies, and; digital communication, collaboration and participation. These elements correspond to the practice of digital agency and reinforce the idea that our digital actions intersect in a number of ways. The most relevant of these elements to this paper are information, data and media literacies.

The concept of *intersectionality* has gained prominence in the social sciences in several different contexts and its predominant theme has been to examine how the different interrelated characteristics and experiences of an individual or group, such as age, gender, ethnicity, nationality, disability, language, social, economic or political status and education affect their experiences, specifically regarding discrimination and marginalization (Runyan, 2018). Digital intersectionality could then explore how young male college students that speak a local dialect living in rural areas experience the digital world differently to older, professional women working in urban areas who have a physical disability. Any explanation or discussion of their access to, use of and competency levels with digital tools and technology would need to acknowledge the multifaceted, interconnected factors and characteristics that intersect and result in very particular opportunities, choices, restrictions and decision making.

In the MENA context, we can compare the experiences of populations that have different demographics and characteristics from Morocco to Iraq, from Syria to Yemen – where data on internet penetration, device access and ownership, use of social media, state media laws and strategies on media literacy vary greatly (Statista, 2023; Grizzle, 2016). Access to digital tools in the educational and work setting, individual proficiency, government initiatives and the economy differ vastly. It is almost impossible to talk of MENA and the digital experience, as if we were to talk about European and Asian experiences. There are certainly common factors that bind the region and make it plausible for researchers to compare but recognition of the diversity and disparities is important in studying digital intersectionality. Moreover, Grizzle (2016) argues that social, economic and political developmental goals are themselves affected by a population's level of media and information literacy, one affecting the other in a virtuous cycle.

Intersectionality then can be approached from a number of perspectives as can digital intersectionality. For this paper it is operationalized as the intersection of different literacies that align with a digital identity. The notion of metaliteracies is applied to the idea of digital intersectionality as these two concepts represent a similar set of knowledge, skills and practices in real life. Furthermore, the intersection of different literacies enhances the opportunities for young people to have higher levels of digital agency. In the MENA region media and information literacy are quite often used interchangeably (Abu-Fadil, Torrent, & Grizzle, 2016) further underscoring the rationale to study them in an overarching literacy framework.

Malik, Courtesy and Gasser (2013) explain how news literacy is at the intersection of both information and media literacy as news is a type of information which can be delivered through media. Using this idea of intersection and following on from the literature on multiple or meta literacies and digital agency, this paper proposes that intersectionality of different literacies is evident in the data collected from participants in both qualitative and quantitative work. It provides a case study of the application and practice of literacies in the digital environment of a selected cohort, but which could reasonably be applied to similar groups worldwide. The following two research questions are proposed to examine these ideas:

RQ1: Do participants in the studies demonstrate the use of multi or metaliteracies?

RQ2: Does the application of different literacies (metaliteracies) show that young people have digital agency?

Methods

The data sets used for this paper were obtained from three different studies. *Table 1* summarizes the focus of these studies and their respective data collection methods. The cohort for the three studies is university students with little or no practical restrictions to digital infrastructures both on and off campus. Internet penetration is 100%, device ownership is much higher than in other countries around the world and subscription to social media platforms is high (Ahmed, & Roche, 2021). Whilst the same students were not studied for each research project, their demographics are the same in terms of age, gender mix, educational experiences, nationality and ethnicity enabling a comparison of the results across the three studies. Most were aged between 18-25, approximately 70% female and 30% male and over 80% were Emirati nationals. Participants also came from GCC countries (Oman, Saudi Arabia and Qatar), other Arab countries (Yemen, Morocco, Jordan, Sudan, Somalia), as well as Afghanistan, Kazakhstan, Bulgaria, and Gambia. They were undergraduates completing courses across a range of colleges, though many were from Humanities and Social Sciences, specifically from the Mass Communication department because this was the department of the principal investigator. The studies were approved by the University's Social Sciences Ethics Committee and included informed consent as well as the right to withdraw from research. Explicit measurement and assessment of literacy skills were not undertaken in these studies but the data gives an indication of the skills and practices of this cohort of the population.

Table 1

Methods used in three studies

Year	Study	Data collection	Analysis
2019	Digital and information literacy (academic literacies)	Survey (n = 344) and focus groups (4)	Qualtrics
2020	Media and news literacy (infodemic)	Media diary and reflective exercise (n = 15)	Manual coding
2022	News and digital literacy (post-COVID)	Survey (n = 435)	Qualtrics

Source: Author

The first study (2019) used a mixed methods approach of four focus group interviews (1 male student only, 2 female students only and 1 mixed gender group) and a survey (n = 344) with male and female students. The survey used the pre-existing ECAR Survey (Dahlstrom et al, 2012) questions (35 plus

questions on demographic and general data) which were modified for language and local context. The survey explored students' digital literacy following Beetham and Sharpe's (2011) digital literacy model; access (and ownership), skills and practices and Qualtrics was used to administer this online during classes. The interview was semi-structured and consisted of several broad themes, including, use of technologies (social and educational); student and staff experiences of ICTs; credibility of information, and self-study. A qualitative data analysis software package, NVivo, was used to analyze the interviews transcripts.

The data for the second study (2020) was collected using media diaries locating it within the practice of ethnography. As a qualitative research method, the aim was to collect detailed information about people's news consumption habits and provide opportunities for informants to describe experiences using their own frames of reference. The objective was to understand media consumption habits relating to news and information about Covid-19. Fifteen participants completed a seven-day diary (any time between 7–20th April, 2020), in which they documented all the media content they were exposed to or accessed in both traditional and new media, including social media. This could have been accessed on any device; available in English or Arabic; include reading, listening or viewing. A section on sharing was also added because of the anticipated high levels of social media usage.

Participants were sent a follow-up reflective exercise, in which they were asked questions about patterns of use, overload, management, avoidance and the infodemic. Combining the two documents generated data that could be tabulated, though not representative, as well as reflexive and expressive. Using the two corresponding types of data provided a snapshot of media use by the cohort in the study. Data was analyzed manually by coding and tabulating each reference in the media diaries according to source and platform. Similarly, reflective exercises were manually coded for responses about information and news; infodemic: fake or false information/news; overload; and avoidance.

The last study (2022) used a Qualtrics survey to collect data between April and June 2022 in both face-to-face and online classes at the university. A total of 555 questionnaires were initiated but not all were completed satisfactorily so that response rates for most questions varied between 435 and 470 (survey completion rate was approximately 80%). The survey consisted of a 20 multi-item questionnaire (Dörnyei, & Csizér, 2012) with questions categorized under the following themes: understanding, consuming, and evaluating news; verification practices; sharing, communicating, and creating habits; and news literacy (news

production processes, skills, and knowledge; self-perceptions). Most items were closed-ended and utilized a 5-point Likert rating scale to increase validity by eliciting accurate answers to measure respondents' attitudes, behavior, and practices (Wimmer, & Dominick, 2011). The Qualtrics matrix layout was used for most questions enabling ease of navigation on mobile devices (laptops and smartphones). The survey results were analyzed in relation to the themes listed above using features in Qualtrics (such as Results, Crosstabs iQ, Text iQ, and data visualization).

Whilst not a longitudinal study (using the same participants), using the three data sets together provides an opportunity for a case study analysis of how young people are using multi or metaliteracies to exercise digital agency. Rather than an extensive and detailed analysis of the data obtained from these studies, the case study approach presented here has examined how each of the components of digital agency are evident in participant's experiences, attitudes and behaviours. Following Yin's (2008, in Priest, 2010) idea that case study research is more a 'strategy' than a 'method', this paper draws on both qualitative and quantitative data collected to provide depth as well as reinforcing the findings from each of the studies. Whilst the descriptions and analyses are focused on the UAEU, it is not unrealistic to anticipate some comparable data from similar institutions both nationally, regionally and even internationally.

Results

Competence

Some students at the university had completed a course in information literacy but broader digital literacy skills were taught less systematically as there was no formal institutional framework that guides digital literacy training and instruction. Inevitably, some faculty, courses and colleges were more engaged with digital literacies as part of their curriculum compared to others as was affirmed by students during focus groups. However, the overall findings from these studies showed that participants had considerable competence with regards to digital tools. Apart from higher levels of access compared to their global counterparts in the US, UK and Australia, for example, their ownership levels and the national internet penetration levels were higher (Ahmed, & Roche, 2021). They possessed most of the foundational skills that constitute digital literacy including some level of critical thinking. Their ability to incorporate digital tools, for example websites, videos, blogs and wikis into their educational projects is testimony to this competence. In addition, they are continuously using and engaging with these tools for their personal and social

needs. Though the assumption that educational use equates with social use should not be made, there is certainly a degree of transfer between the two. Searching for information on the worldwide web, evaluating that information and then creating products from it in an academic setting are examples of competence. As media literate and news literate consumers, these young people are demonstrating competence through their choice and use of digital media for information and news. This can be seen from entries in the media diaries during the pandemic, but also subsequently from survey responses.

The understanding and skills young people were pushed to develop during the pandemic have continued to be implemented making them more critical audiences. Explicitly teaching students about credibility of both academic sources and news sources has been an important aspect of developing this competency. The information literacy course taught by library services as well as training in the media department are two aspects of the formal instruction received by some students. Unfortunately, this instruction has not been systematic or comprehensive for all students, which results in varying degrees of competency and individual's own competencies, experiences and motivation to engage with the digital world will influence the differing levels of ability. Several studies (Miller, 2015; Coldwell-Nielsen, 2017; Jamil, & Alazrak, 2023) have recommended that an institution-wide framework would ensure standardization of skills ensuring all graduates leave the university with at least a basic understanding and application of academic literacies. Most young people in the studies were confident about using, navigating, learning and engaging with digital tools. However, "while young people may appear more adept with technologies than the older generations and therefore more skilled or fluent in navigating devices and software, this outward display of confidence frequently masks inabilities to use technology effectively or judiciously" (Passey et al, 2018: 429). This is especially important in an academic context, but also relates to social and informal use. Assuming these skills are inherent amongst young people as part of their educational experience may be doing them a disservice and ignoring a potential skills gap that often exists. Boyd (2014) explores how the notion of digital natives is problematic and that we should not ascribe digital expertise or wisdom to younger people simply because they were born and have always lived in an era surrounded by digital culture. The journey from school or college to higher education does not guarantee an acquisition of digital literacy skills and commencing students are held back from achieving their potential unless they are given training in this area (Aduloju, 2019).

Confidence

Selwyn (2009, cited in Passey et al, 2018) makes reference to the digital divide when discussing digital confidence and here we see direct relevance and application of digital intersectionalities. "Young people's abilities to access digital technologies remain patterned strongly along lines of socio-economic status and social class, as well as gender, geography, and many other entrenched 'social fault lines' which remain prominent in early 21st century society" (ibid: 372). Within the MENA context, we can see how experiences in Arab Gulf states are vastly different to other countries in the region. Here the intersection of several variables determines whether young people are confident about digital skills depending on how much they have experienced it explicitly and incidentally. Population demographics, socio-economic factors, political structures as well as other factors mean that Tunisia, for example, is considerably different from Palestine or the UAE and Bahrain. So not only are we questioning the idea of digital natives, but we are exploring how digital divides will create significant differences within MENA. A further aspect of digital confidence is the considerable disconnect between people's own perceptions of their digital ability compared to accurate measurements. Younger people are particularly inclined to having higher levels of perceived self-efficacy due to various factors. For example, ease of access; heavy use; familiarity with new applications and platforms; preference for digital tools and the willingness to experiment with innovative technologies all give them higher levels of confidence. This higher degree of confidence is evident in all three data sets as described by participants own measure, though several teaching staff or faculty did not share this confidence about students. Patterns and habits noted in the media diaries as well as practices in the news consumption survey reflected a confident engagement with news data and information. Filtering, screening, evaluating, platform selection, verification, interpretation and sharing were all processes undertaken by respondents displaying an awareness that technology usage consists of more than just hardware and software operations. It relates to outcomes of actions and habits that have an impact on personal and group dynamics, including the wider community (Ahmed, 2020).

These managing behaviours show agency and link to Passey et al's (2018) three components of digital confidence – expert use of software and applications, particularly the internet; confidence to use ICTs in a variety of contexts (learning, social, shopping, e-government), and; digital autonomy (knowing the informed basis of one's choices and actions). These components are also discernible in news literacy behaviors, especially in managing and dealing with fake news and misinformation (Islam, Das, & Tabassum, 2023). It is worth noting here

that digital confidence is complex and multifaceted. As with other examples of attitudes, abilities and behavior in digital spheres, confidence is nuanced and actual abilities may differ significantly from perceived abilities. Having said that, the participants in this research all had positive attitudes and were proactive with respect to digital ICTs.

Accountability

The third category of digital agency that Passy et al (2018) expound is digital accountability. What does it mean to be responsible in the digital spaces that we occupy both for ourselves and for others? Safety and privacy issues have long been discussed, along with the ethics of cyberspace. Young people in these studies are possibly more aware of and concerned about these issues than their counterparts around the world, and possibly in MENA, because of ongoing government interventions. The UAE government was already aware of problems with online safety but became even more concerned during the pandemic. The 'National Policy for the Quality of Digital Life' was approved in January 2021 aiming to maintain a safe digital community in the UAE and promote positive identity through appropriate digital interactions. It has four key pillars: digital capacities (building the capacities of members of the community and enabling them to use the internet in a risk-aware manner); digital behavior (consolidating positive digital values and behaviors); digital content (guiding the community to use positive content), and; digital communication (protecting users from the risks of dealing with suspicious parties) (UAE Government, 2023).

Accountability relates to a variety of behaviors that were evidenced in the data sets. Information literacy is seen in the use and acknowledgment of sources in the production of academic texts, ensuring academic integrity is maintained. This does still pose a problem for some students in many contexts where plagiarism is not fully understood and more work needs to be done to implement appropriate referencing, paraphrasing and summarizing. Another example is where social media literacy is applied when judging whether social media discourses can negatively impact others. Media and news literacy are exercised when decisions are made about sharing sensitive, unethical, unverified or potentially harmful news and information. Arguably, the context within which undergraduates in the UAE are consuming media information is considerably more regulated by both the government as well as socio-cultural expectations and because of this accountability is a significant factor in determining and influencing people's online or digital activities. Does this mean that people are not engaged in antisocial or inappropriate digital behavior? It does not, but the potential impact is reduced compared to other places around the world where

there is less regulation and where both young and old people alike are less concerned with legal repercussions.

Data from media diaries showed clearly that participants were acting as gatekeepers in filtering and sharing information and news. Additionally, the survey on news habits also proved that accountability and responsibility were being practised when making decisions about the credibility of news content, particularly that consumed on social media platforms and messaging applications (WhatsApp). The infodemic (WHO, 2023) experienced during the Covid-19 pandemic has increased the importance of accountability considerably. The digital news media spheres that have enabled greater access to vast amounts of information have also exacerbated the occurrence of misinformation, disinformation, fake news and alternative versions of the truth (Ahmed, 2023). Digital accountability is crucial in this environment and correlates with a range of behaviours that young people in these studies have exhibited. They are cognizant of the fact that their digital actions can have a positive or negative impact on those they interact with in shared virtual spaces.

Returning to RQ1 which asked whether young people in the three studies demonstrated an application of multiple or metaliteracies. This is supported by the data collected which found participants exercising information, digital, media and news literacy. In many practical instances these literacies are intersecting and complementing each other, for example, accessing credible news content from verified platforms shows an awareness of most of these literacies. The intertwined nature of our digital landscapes results in the inevitable application of more than one literacy at any given time. So, whilst each has its distinct focus and aim, they are often utilised in a complementary way for practical purposes.

The data also answers RQ2 affirmatively as digital agency is evident in various forms amongst the cohort studied. Competence, confidence and accountability are all practised to varying degrees, some more apparent than others. There are instances in which one aspect of digital agency is stronger than the other two, for example, accountability when deleting dubious news or not sharing content that comes from a non-official source. In other instances, the interplay between the three components of digital agency is more subtle. Multiliteracy, metaliteracy and digital agency may be conceptualised in different ways but in reality there is considerable overlap between each of these and how they in turn relate to the components of digital agency. There is not always a clear demarcation of where information literacy stops and digital literacy begins or how media and news literacy combine with other digital literacies. This is in fact how we operate in the digital sphere.

Conclusion

This paper reflects on how young people are developing and implementing literacy skills in a way that enhances their capabilities and enables them to exercise digital agency. As in several previous studies, this paper has reinforced that a holistic approach to these multiple, intersecting literacy skills provides a comprehensive and effective framework within which to teach, learn, practice and be empowered through digital agency. Teaching each of the 21st century literacies as unrelated knowledge and skills is not constructive and does not reflect the reality of our engagement with digital tools and experiences. At the level of higher education, the approach to training young people in the new literacies that they will need in all aspects of their lives – academic, employment, citizenship, social, personal etc., needs to be complementary. Some digital interaction is mandatory (e.g., e-government, health services) but other components must be seen as part of a wider framework that is needed to enable people to become expert digital agents.

The digital divides that exist in MENA and indeed globally are no doubt connected to the intersectionality of several factors, most notably economic and educational development. By using a multi/metaliteracy model to raise awareness, impart knowledge and provide efficient infrastructures, the digital agency of individuals and groups can be strengthened. As well as learning about existing literacies which are necessary to navigate the digital environment at present, new and emerging skills can be incorporated into this comprehensive approach. For the MENA area this should also include teaching literacies in Arabic so that we expand the skillset, toolset and mindset of young people to give them confidence in more than one language (Melki, & Maaliki, 2016). The digital native that is the subject of much debate brings with him or her a particular attitude towards the digital world. Often this is a positive outlook - willing to use, engage and experiment with ICTs – and is the starting point that helps those responsible for educating and developing the knowledge and skills of young people. In each of the three studies referred to here, young, male and female university students have shown positive attitudes towards academic and media literacies. This positivity needs to be channeled by educational institutions to enhance their aptitude and help them move from lower to higher order activities on Beetham and Sharpe's (2011) developmental e-learning model so that they have the attributes of digital experts.

The digital agency concept, along with national initiatives such as the National Policy for Quality of Digital Life, are intended to guide the development and implementation of digital skills for the national population. These two initiatives

overlap in several ways reinforcing a shared understanding of what is needed to be digitally literate, competent and confident. It is about taking the latent potential that young people have and focusing it on ways that will make them informed and engaged participants in a digital world. It is also about recognizing that they need a structure and framework to guide their digital journey and not be left without direction just because they are young and excited about the digital world.

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