The 'Third Space' School Library: Fostering Digital Capability for Young People's Mental Health

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This study seeks to understand better the digital lives of 14-15 year old children with a focus on schools and peers. It applies a theory of change for dynamic digital literacy to foster wellbeing, positive mental health and good consequences in the digital environment and builds on a collaboration between a research centre specialising in digital literacies (CEMP) and the School Library Association (SLA).

The research generates transferable findings to support capacity- building for school librarians to work with young people in third spaces to foster better mental health through digital literacy.

This project report:

- 1. Synthesises the intersection between school libraries and digital literacy with the theoretical concept of 'third space';
- 2. Describes the project's methods, activities and data collection;
- 3. Shares the findings with regard to a new practice model, situating school libraries as a third space in which to enable the positive impact of digital literacy development on the mental health, capabilities and resilience of students.

(1)Intersection

Digital Literacy, Wellbeing and Mental Health

It is important to state from the outset that our definition of mental health for this study was broad and informed by self-disclosure by participants of having experienced challenges in the digital environment, as opposed to diagnosed mental illness. As Ofcom state in their recent report (2023) on mental health and media literacy:

Media literacy initiatives to support mental health could be seen as a spectrum – from treating people with a diagnosed mental illness to protecting people's wellbeing. (Ofcom, 2023: 4).

Within this spectrum, this study is related to the protection of wellbeing through agency and the resilience we were hypothesising as attendant to digital literacy.

Since the 1990s, there has been a vast amount of research into how digital literacy has the power to create positive outcomes for young people (see Livingstone et al, 2021). As definitions have evolved and expanded, research has shown how digital literacy is becoming more central to cultural and civic participation. 3 key elements are common to definitions and conceptions of digital literacy: (1) access to media and digital content, (2) a critical ability to decipher media messages and an awareness of how the media works and (3) digital skills (creativity, communication and production).

These definitions generate a consensus that digital literacy can develop capabilities to influence positive outcomes, such as allowing citizens to participate online and this can facilitate digital engagement with politics and the public sphere. Swart (2021) states that it can also give the public – especially young people – the environment to analyse and understand 'fake news'. With the proliferation of disinformation campaigns and misinformation playing such an important role in public opinion and actions, this kind of contemporary literacy has even been identified by NATO as essential to defence:

Today, resiliency is a quality that governments and defense organizations must encourage. The constant change and disruptions, the complexity of modern societies, demand that citizens become a first line of defense in understanding how information can be weaponized and misused, and how using media and information are essential in addressing the crises of the times, whether that comes from pandemics, financial meltdowns, or natural disasters...Media literacy is a way to help ensure resiliency and problem solving-skills, providing people with the agency they need as active participants in the online and offline worlds. (Jolls, 2022: 4)

Although there are positive capabilities, with access to a seemingly limitless amount of information, comes new responsibility for the user and therefore these capabilities can only be achieved with the correct education in digital literacy because the current media landscape has been marked by the spread of 'misinformation' which is having an unwelcome effect on student and classroom learning (Caled and Silva., 2021). Scholars suggest that digital literacy is closely linked with cognitive abilities and can contribute to online learning activities, playing games and engaging in social media and community (Traxler and Lally, 2016; Mishra et al., 2017).

Young people are at high risk of being impacted by the negative effects of having low digital literacy skills as they access online communities and a vast amount of unfiltered information,

(Liu et al., 2022). In most OECD (Organisation for Economic Co-operation and Development) countries, there is evidence of significantly negative consequences of the digital world on students' life satisfaction, aroused feelings of loneliness at school, increasing the risk of disengagement from school, with detrimental impact on academic performance (OECD, 2017). This literature shows the need for digital literacy programmes in young people's lives, where they can learn to understand how to recognise and develop skills to prevent digital media from having negative effects. Young people may find it more difficult to evaluate whether the information they are seeing online is reliable and can be susceptible to the normative discourses inherent to echo chambers (European Commission, 2018). Therefore, academics and policymakers believe that digital literacy needs to be embedded within the educational curriculum (Purnama et al., 2021).

The DigComp framework (European Commission) identifies 5 key areas of digital competence, in brief these are:

- **Information and data literacy:** To articulate information needs, to judge its source and to store and manage this data. This includes but is not limited to browsing, searching, filtering data, evaluating data and organising or storing data.
- **Communication and collaboration:** To interact and communicate through digital technologies. This is through a range of ways including the use of public and private digital services while being aware of behavioural norms and how to interact with digital environments.
- **Digital content creation:** To create and edit digital content. This can include understanding how copyright licenses apply to data and information as well as programming.
- **Safety:** To protect devices and personal data in digital environments. This is important in keeping young people safe. This area includes protecting private data as well as understanding how to avoid threats to physical and psychological well-being online (for example understanding the dangers of cyber bullying and the use of digital technology for social inclusion).
- **Problem solving:** To identify needs and problems while resolving them and keeping up-todate with the digital evolution. As the digital world is everchanging, it is important to understand where one's own skills need to be improved or updated and to seek opportunities for this self-development where needed.

Many young people are unaware that algorithms shape and filter what they are displayed when they conduct online searches and when they use social media. Young people also face real dangers from deceptive propaganda, cyberbullying, and exposure to extremist ideas and hate speech on the internet. A variety of extremist groups also use the internet and social media to recruit new members and to reinforce divisions and existing prejudices. The public and school students are also targeted by advertisers, opinion makers and those deliberately spreading false information. This can be done through a variety of ways, including using hashtags as Rovetta and Bhagavathula (2020) suggested that generic hashtags are often used by people to spread misinformation, however, it is important to remember there is high value in having digital literacy taught to young people, so they have the tools to ensure they are being safe online so that students can communicate directly with their peers from other schools, countries and cultures, and teachers can broaden the horizons of their students. Instagram also has steps in place which assist in preventing scams, for example, Instagram has a 'no-clickable-link' policy in posts. As the platform only allows for one link in their profile bio it can be useful for preventing spam and countering online scams (Feigenbaum et al 2021).

There can be obstructive tensions in the policy discourse around digital literacy when more 'solutionist' rhetoric is prominent. Whilst children are clearly encountering serious dangers and taking risks every day in the digital environment, at the same time those with less or no access to the online world are increasingly marginalised and excluded, not only in the developing world but also in the UK, where many children are living in poverty. UK schools

are currently provided, by government, with guidance for teaching online safety within a broader *Education for a Connected World* framework which describes the 'digital knowledge and skills' that children need with regard to technology, behaviour and development. Souter (2022), a consultant with the UN and Unesco on the digital society, development, environment, governance and rights cites the UN's 'General Comment 25' on children's rights in the digital environment as a potentially vital intervention as it can herald a shift towards public rights-based policy around digitalisation which is based on children's lived experiences and views their digital lives in a holistic sense. In supporting General Comment 25, Souter articulates his concerns with the discourse hitherto, the same concerns which the digital literacy community has with solutionist approaches. These include the refusal to engage with the complexity of children's rights, lives in general and digital lives today; binary thinking about child protection from adult perspectives and the interplay of privacy and expression and the tendency for adults making policy about children and the internet to see the world from the perspectives of highly-educated, affluent young people.

To address this complexity, the EU funded Youth Skills project (Livingstone et al, 2022) explored, from the perspectives of young people experiencing mental health challenges, the various impacts of the ICT environment on multiple aspects of wellbeing for children and the conditions required to stimulate resilience through the enhancement of digital skills (see also Livingstone and Blum-Ross, 2021).

Livingstone et al (2022) found that young people with mental health difficulties devote significant time to gaining and sharing digital skills, given their vulnerabilities, and the depth of their need for support. This directs their attention to a close analysis of the affordances of the digital products and services they use. However, the complexity and abundance of such affordances is overwhelming, such that even their most sophisticated digital skills can be insufficient. The case of algorithms that amplify triggering content is indicative. Whilst most of the young people interviewed for the Y-Skills project were knowledgeable about these algorithms, they were still not always able to manage them to avoid being upset or finding themselves stuck in a digital space. Another argument emerging from this research is that digital technologies are not binary, either all good or all bad but instead, they can have both positive and negative effects on young people's mental health. On the positive side, the digital world and social media can help young people meet and talk to others, as well as being able to support and help people cope in difficult situations. However, this can also have negative effects on their mental wellbeing as they may see or hear harmful content that they find upsetting. Another significant finding is that young people often feel they are on their own in managing their digital lives and as a result they rarely seek help when they are facing challenges. This can be due to anxiety about being misunderstood or punished and can increase mental health issues if young people 'bottle up' such anxiety.

Misinformation also poses a risk to young people's mental health. Online misinformation is a threat to societies and individuals in general, but young people form a group that could be vulnerable to the potential negative consequences of exposure to such false information. Findings from Vissenberg et al (2022) indicate that social media constitutes young people's main way of keeping up to date with current events and their study participants had a generally good awareness of misinformation on social media and the importance of credibility. However, digital skills have been proposed as a safeguard against the potential negative consequences, Haddon et al (2020) found that there is strong evidence that children's digital skills improve with age, however there is no difference in results between gender. A key implication from this study is that children from higher socioeconomic status (SES) are found to have higher digital skills in around half of the studies that examine this relationship, but an important finding to mention is that children's digital skills tend to be higher when ICT is *more* available in school and or home.

Amnesty International collected responses from 550 young people 13-24 across 45 countries to better understand their experiences, concerns and attitudes towards social media. As Instagram, TikTok and other social media have become daily fixtures in their lives with 59% of young people surveyed by Amnesty International now spending more than two hours of their average day on social media. Some of the young people voiced a sense of a loss of control in relation to their privacy, where three-quarters of respondents found social media's terms of service hard to understand, criticizing the often "technical language" and the take-it-or-leave-it approach social media platforms apply, forcing young people to choose between the perceived threat of social exclusion or signing up at the cost of their privacy. From here, once on the platforms, more than half of the surveyed young people had bad experiences, encountering "racism, violence and bullying".

According to Parentzone, online protection for children is also a mental health issue. Related to this, the Children's Code was introduced in 2020, including 15 'standards' that online services that are likely to be accessed by children need to follow, so standards need to ensure that the best interests of the child is a primary consideration when designing an online service, detrimental use of data and data sharing must be prevented for children's wellbeing, parental controls must be accompanied by age appropriate guidance for children and transparency around parental monitoring. Profiling should be set to off by default and online tools must be provided to enable children to exercise their data protection rights.

However, it is important to understand that, as children get older and spend more time online, they experience more of the positive *and* the negative impacts on their wellbeing as those who spend less time online have less opportunity to be impacted by the good and the bad of digital technology. This is especially increased in girls aged 11-15 years old using social media and boys when involved with greater time gaming. The aforementioned wellbeing index showed that parental engagement can influence children's digital literacy activities. Some of the key findings from this study were: the children who spend the least time using digital devices had lower scores across the board for negative and positive dimensions being looked at, however the children who spent more time on devices scored *significantly* higher scores in all negative dimensions being explored. Another finding is that those who are more vulnerable (for example have been registered in having a disability or have special education needs) score higher on negative impacts on social, emotional and developmental wellbeing than those who are less vulnerable. Finally, findings from the wellbeing index also suggest that parental awareness is a indicator for a range of in-home behaviours that might be enabling children to make the most of digital technology.

Concurrent with our study was the publication of Ofcom's research into mental health and media literacy (Ofcom, 2023), which identified four core principles which resonate with our approach: that we now live online; that online spaces can contribute to good mental health; the most positive online experiences are those shaped by user needs and that "the rapid pace of change means we are learning as we go."

These four core findings are congruent with two core aspects of our new practice model. Firstly, the needs of users shaping positive experiences in the digital world is in keeping with our hypothesis that more agentive digital literacy improves the health of the ecosystem for everyone. Secondly, that this 'learning as we go' requires reciprocal knowledge exchange in (digital) literacy third spaces, as opposed to a transmission model whereby (digital) literacy is taught by those who have it to those who lack it.

The Uses of Digital Literacy for Agentive Resilience

In our previous and other current research, we work with a theory of change for media / digital literacy which moves beyond solutionism to understand how changing access in and

to the digital environment and developing critical awareness in the media / digital ecosystem can develop capabilities which can then have positive consequences for young people and make the ecosystem healthier for everyone through positive digital behaviour changes by individuals. Using Sen's capability approach (2008), instead of adopting either a purely protectionist and regulatory approach to children's digital experiences or simply measuring their levels of digital literacy, we can instead start to understand this complex situation in terms of the degree of success digital literacy can have in developing children's human capability from digital resources to various forms of functioning in digital contexts (see McDougall and Rega, 2022). Capability, in Sen's terms, emphasises human diversity, the significance of choice-making and possibilities for social praxis. As many children now 'grow up digital' then it is this more agentive, dynamic digital capability we need to help them to develop, as a key aspect, along with regulation and protection, digital resilience for safeguarding and care, with regard to mental health.

Access is enabled as people first gain the means to be included as an individual in the full digital ecosystem and then increase and / or change their access through changing media behaviours; *Awareness* develops as people come to understand, at the micro level, how media and digital information re-present the world from particular points of view with particular intentions and at the macro-level, the relative health of their digital environment. The *Capability* stage involves people *using* their digital literacy for particular purposes in their lives. This can include civic engagement, employability or community actions but also improvements to their own mental health and behaviours that have a positive impact on the mental health of their peers and others. However, there is no reason why this capability *will* lead to the *positive* uses of digital literacy unless this is combined with *Consequences* in particular ways, through the conversion of capability into *positive* change, requiring an active desire for our media to promote equality, fairness, good mental health and social justice. Far from being the inevitable outcome of digital literacy, the evidence suggests the opposite is often the case.

With regard to digital literacy for not only resilience to online harm but also the more 'dynamic' media / digital literacies which can enable more agency, a range of studies have identified the link between educational forms of digital engagement and civic intentionality for example:

Youth who were exposed to digital-engagement learning opportunities were far more likely to be politically engaged online – even controlling for prior levels of online political engagement, prior digital-engagement learning opportunities, and relevant demographic variables. Specifically, youth became much more likely to circulate, create, or comment on political content and they became at least three times as likely to participate in a political pressure campaign – one in which they contacted a government agency, nonprofit, or business to express their views. (Kahne and Bowyer, 2019: 223)

The theory of change posited above attempts to make the indirect link between digital literacy, civic agency and improved mental health.

Digital Literacy in the Third Space

Articulating the value of digital literacy in the way this theory of change seeks to measure requires the design and sustainable operationalising of a conducive 'third space', which "involves a simultaneous coming and going in a borderland zone between different modes of action... The third space is thus a place of invention and transformational encounters, a dynamic in-between space that is imbued with the traces, relays, ambivalences, ambiguities and contradictions, with the feelings and practices of both sites, to fashion something different, unexpected." (Bhabha, 1994, p406).

The Third Space is not necessarily a physical space, but it is a coming together of people to exchange experiences and expertise (or, in the literacy research discourse, 'funds of knowledge') from their everyday lives (the first space) with more educational or institutional kinds of knowledge, for example, in a school (the second space). The school library, despite being located within the second space (the school), by virtue of being in between the formal school curriculum and the informal learning we associate with digital literacy and the use of information in the broadest sense is a potential third space, both physically and as a space for thinking differently about knowledge. Digital literacy activities in the school library can bring students' funds of knowledge (first space) together with critical thinking skills from information professional and teachers (second space). However, a third space is also defined by the extent to which the learning that takes place within it makes an impact on the spaces it converges. This means that the digital literacy learning that takes place in the school library would make a difference to the way that digital literacy with regard to mental health is understood in the school (second space) as well as generating positive consequences in the everyday digital lives of students (first space).

Recent research into digital / media literacy work in third spaces developed a way of thinking about literacy of all kinds as dynamic rather than static (Potter and McDougall, 2016) and generated a set of transferable design thinking and working principles for this kind of activity (Rega and McDougall, 2021), which include negotiating objectives, nuanced for specific contexts; working with values for capacity and resilience, paying attention to individuals in the collective – understanding participants as differentiated through meso-level observation; noticing and hearing, adjusting and responding, embedding principles of human-centred learning design; respecting difference as a first principle; and developing the mindset to adjust and respond, embracing uncertainty and imperfection in the pursuit of positive change.

Libraries as third spaces

Libraries function in a range of ways, reflecting their community and its needs, as spaces where people meet, socialise and connect to their community (Aab, and Audunson 2012; Buschman and Leckie 2007). Oldenburg (1989) refers to them as 'third places'. Their capacity to facilitate and foster broader, more creative interaction makes them valuable for the health, well-being, and liveability of urban environments. There are eight characteristics that Oldenburg outlines that make a third place:

- They are neutral ground and there is no obligation to stay or go.
- They are levellers; that is, there is a sense that social status does not matter in this space.
- The main activity in the space is conversation.
- These spaces are accessible and accommodating.
- They have regulars who set the mood of the place.
- Third places have a low profile; they are not pretentious or ostentatious.
- They are rather playful in nature.
- They provide a level of belonging that feels like a home away from home.

Libraries have a growing role in providing access, education, and literacy training to prepare the community to navigate and negotiate the digital age, thus reducing the digital divide and ensuring adequate community access as a key motivator. As well as ensuring lifelong learning for digital literacy, libraries assist the community in their navigation of the new information environment, acting as both community centres and technological hubs serving their users in multiple ways beyond their traditional purposes (Raffaele D 2021). This research can also be transferred into the idea that a school library can also be a third space for digital literacy.

The positive impact of third space school libraries on mental health

Gray (2017) argues that the role of the teacher librarian is to encourage social and learning opportunities by reflecting the needs of the school community and the students who come to use the space, as if students know the library is welcoming and open to them, then they will come in to work or unwind. Ultimately, the school library is not merely a resource but a centre hub of the school (Clark and Teravainen-Goff 2018; Morehart, 2016) where teacher librarians adapt to change and foster student wellbeing by instilling a sense of belonging, community, relaxation and personal space characteristic of the 'Third Place'. Beyond day-today service provision, the teaching of information and digital literacy skills and resource transactions, the school library is often a 'safe space' for the students and even the staff (Korodai 2019). Where information literacy meets guided inguiry, this 'third space' allows the student to explore concepts between what they already know and the curriculum they are taught. School libraries are about the relationships between members of the school community. For some students, the school library may be the only space where they can come and speak to like-minded peers and/or a trusted adult that isn't their classroom teacher or a parent (Korodai 2019). Returning to Oldenburg (1997), third places such as coffee shops, libraries and restaurants improve one's quality of life by providing spaces where one can rest, escape from the mundane, socialize, and emotionally discharge. Advocates suggest that the library is a good location for mental health support as it is commonly perceived as a 'safe space' (Benedetti et al., 2020) and although there is little research on school libraries becoming a third space for improving young people's mental health especially within digital literacy the literature shows the evidence that in fact, these third spaces have a big potential to make positive impacts on young people's wellbeing (Merga 2021, Ramsey and Aagard, 2018) and supporting those with mental health issues was brought into focus during the COVID-19 pandemic where there was a focus on loneliness (Holmes et al., 2020) and school aged children's anxieties around their education and quality of learning (Office for National Statistics, 2020).

However, this is not a given, as whilst the library can be assumed to be a 'safe space', it is also important to understand that library design can be a factor for negative feelings. The stress on the potential of the academic library as a place to support wellness contrasts with an extensive body of previous literature on "library anxiety". The library is often claimed to be a safe neutral space, but the library anxiety literature points to the way that many find using it stressful (Cox and Brewster, 2020).

On the other side of this, research suggests that the school library, as a distinct category, is generally a positive place for young people's mental health. Harper (2017) and Merga (2020, 2022) argue school libraries play a significant role in helping schools foster wellbeing through the active role of the librarian by identifying and implementing initiatives to support the mental health of young people. As suggested, the library itself can be a 'safe place' for young people and used as a third space to socialise, communicate, and emotionally discharge. Merga (2022:101) notes that "when we think about school libraries fostering young people's wellbeing we should take into account the fact that library professionals... are passionate about connecting their clients to current and important information." She goes on to highlight the impact of information literacy skills in enabling young people to build specific 'health literacy' skills, including the capacity "to make good decisions about their own course of care" and cites Elmer et al (2021) in observing that "schools provide a critical

nexus between the teacher (as service provider), the student (as learner) and their family (carers and wider community) to support the development of children's health literacy".

The provision of the school library as a safe space is a strong theme in current investigations into school library services. A 2021 report from the Great School Libraries campaign quoted a member of school library staff as saying: "I'm not as intimidating... you find yourself talking to the pupils and they invest a lot more into you than maybe they would necessarily talk to a teacher about." There is an awareness about the importance of the school library as a safe and welcoming space, in addition to its role as developing reading and learning. One participant in the same study is quoted as saying: "The reason that we run lots of different types of activities and events is to make sure that students who might not associate reading as a really positive thing will still associate the library with something really positive." The positive impact of the school library on young people is supported by the 2018 report from the National Literacy Trust which found that: "children and young people who use the school library have, on average, higher mental wellbeing scores. Those who don't use the school library are nearly twice as likely to have low mental wellbeing than they are to have high mental wellbeing". (Clark and Teravainen-Goff, 2018: 3) Barr-Walker (2016:200) noted that "school libraries have a unique opportunity to improve the health literacy of children and teachers, but these libraries are underrepresented in the literature". However, it can also be a space where young people learn digital skills to help them cope with the online community. While technical, informational, and communicative are important, Livingstone et al (2022) found that young people with mental health difficulties prefer to describe their digital skills in relational terms, they stated that digital literacy skills are related to being able to avoid triggers, unmask potential abusers, recognise safe spaces and determine reliable advice (Livingstone et al., 2022). The 'Reimagining learning spaces' (2013) research, recent work published by Willis, Hughes & Bland (2019) has uncovered a direct correlation between the importance of school library design and wellbeing for students, reporting on "the interactive, learner centered, inclusive and flexible spaces that were identified by students as extending their learning opportunities, and contributing to their sense of wellbeing." (2019: 121).

At the same time, we must be mindful of how placing expectations on school librarians to facilitate third spaces (which are in themselves demanding, pedagogically, as professionals operating within them need to both teach new critical skills and learn from students' own 'funds of knowledge', in such a way that both happen at once); develop complex digital literacies in a constantly changing technological and socio-material contexts *and* conduct this kind of work in order to improve the mental health of young people arguably facing more challenges in this regard than ever, and with decreasing support and resource from health and social services, is asking a lot. As Merga also observes, in another study:

As the role expands over time to be responsive to changing technologies and educational expectations, contexts and resources, it raises questions about whether it is becoming potentially untenable. It also raises questions about how, without sub-stantial staffing and resourcing support, teacher librarians can perform each aspect of the role to maximize student learning, and which aspects are ultimately prioritized if staffing and resourcing are insufficient to meet the demands of the role. (2020: 902)

Summary

This field review has mapped the intersecting research fields speaking to digital literacy, youth mental health and the role of the school library with regard to student wellbeing.

It can be suggested, from the research evidence reviewed here, that (1) digital literacy can improve young people's resilience to the digital world with related mental health improvements and (2) school libraries can facilitate conducive 'third spaces' in which to develop digital literacy, with the combined effect of generating positive outcomes for young people.

By locating the school library as a third space for this research, our approach was informed by the work cited in this framing review and sought to both provide new empirical evidence of the impact of improving digital literacies on children's mental health and a new practice model for the role of the school library in the dynamic *digital* intersection of school, family and peers.

(2) CEMP / SLA Intervention Programme – The Third Space School Library, Digital Literacy & Improving Mental Health

Following a profiling exercise focussed on online behaviours and digital wellbeing provided by BounceTogether, a sample of 14-15 year old students who self-disclosed as having experienced challenges in the digital environment were recruited. The participants gave informed consent, and Bournemouth University ethical approval was granted.

The intervention then consisted of the school librarian (SL) working with the students and a group of teachers from a range of subjects and pastoral roles on a set of activities using resources produced for the project and facilitating a set of workshops with the students.

The third space in which the intervention took place was both physical (the school library, being in between the formal school curriculum and the informal learning we associate with literacy and the use of information in the broadest sense) and a way of thinking differently about knowledge. In this case, the resources, activities and workshops sought to connect the students' 'funds of knowledge together with the critical thinking skills from the information professional (SL) and teachers.

This convergence of valuing the situated digital literacy practices of students (from the first space) and providing a new, more critical and reflective 'mindfulness' for future digital experiences (from the second space) was at the heart of the theory of change the intervention used to both trial and measure the new practice model. The workshop programme had two core objectives:

- Identify transferable principles of enabling a 'third space' new practice model in school libraries for digital literacy;
- Provide evidence of the positive impact of digital literacy development in school libraries on the mental health, capabilities and resilience of students to improve their interactions with family, school and peers in and with regard to the digital environment.

Programme Outline

*Activities combine workshops in the school library and independent work.

	ToC Element	Workshop	Activities*	Outcomes: Participants are able to
1	Access	Digital Me	Digital Wellbeing Reflections	Be reflexive about their digital habits, positive and challenging, and how their digital environment relates to their wellbeing.
			Burst Your Information Bubble	Understand why a healthy digital ecosystem is good for everyone & what they can do to be more resilient within it.
2	Awareness	Digital Mindfulness	Algo-Literacy Lateral Reading	Pause, reflect and take a more critical approach to digital life, data visualization, how algorithms influence our behaviour and how this impacts our mental health. Understand triggers in the digital environment which impact on wellbeing and start to think about how to
				respond differently.
3	Capability	Digital Action	'Hack for Good'	Put digital literacy skills into action for personal mental health benefits.

			Family and Friends in Digital Life	Plan for relationship changes in the digital environment.
4	Consequences	Digital Change	Digital Pushback Being a Digital Influencer	Put digital literacy skills into action to improve the digital ecosystem.

Theory of Change (project level)

	Needs	Inputs	Outputs	Outcomes	Impacts
ACCESS	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health need to develop digital literacy so they can make different decisions about what to access and how within their digital lives.	'Digital Me' workshop and independent activities: Digital Wellbeing Surgery Burst Your Informatio n Bubble	1 workshop delivered, 1 independent activity completed by 8-12 participants. Learning demonstrated through the independent activities and the workshops.	Participants use increased digital literacy to plan different access choices in their digital lives to improve their mental health. <u>Measured by</u> • Work produced • Reflective exercise / survey • Focus group	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health are more reflexive about their digital habits, how the digital environment relates to their wellbeing, why a healthy digital ecosystem is good for everyone & what they can do to be more resilient within it.
AWARENESS	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health need to be more critical in their digital lives through digital literacy.	 ⁽Digital Mindfulness' workshop and independent activities: Lateral Reading Digital Triggers 	1 workshop delivered, 1 independent activity completed by 8-12 participants. Learning demonstrated through the independent activities and the workshops.	Participants use increased digital literacy to use media and information more critically and mindfully. <u>Measured by</u> • Work produced • Reflective exercise / survey • Focus group	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health are able to pause, reflect and take a more critical approach to digital life, data visualization, how algorithms influence their behaviour and how this impacts on their mental health, understand triggers in the digital environment which impact on their wellbeing and think about how to respond differently.

CAPABILITY	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health need to be helped to put digital literacy skills into action to improve their mental health.	 'Digital Action; workshop and independent activities: 'Hack for Good' Family & Friends in Digital Life 	1 workshop delivered, 1 independent activity completed by 8-12 participants. Learning demonstrated through the independent activities and the workshops.	Participants use increased digital literacy to articulate understanding of how they might put their DL into practice beyond the project to be more resilient through agency in the digital environment. <u>Measured by</u> • Reflective exercise / survey • Focus group	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health put digital literacy skills into action for personal mental health benefits and take actions for relationship changes in the digital environment.
CONSEQUENCES	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health need to be helped to put digital literacy skills into action to improve the digital ecosystem.	 'Digital Change' workshop and independent activities: Digital Pushback Being a Digital Influencer 	1 workshop delivered, 1 independent activity completed by 8-12 participants. Learning demonstrated through the independent activities and the workshops.	Participants use increased digital literacy to articulate understanding of how they could play a role as positive peers in the digital environment to improve the ecosystem for everyone. <u>Measured by</u> • Focus group	14-15 year old students who have disclosed experiencing challenges in the digital environment impacting on their mental health put digital literacy skills into action to improve the digital ecosystem.

<u>Change Objectives</u> – highlighted = within scope

What impact do we want to have on participants?					
	Knowledge	Skills	Dialogue	Attitudes and No	rms Behaviour
ACCESS	People are more	People have the	People can discuss	People are more	People feel
	aware of the range of	skills to make use of	their media access,	reflective about the	motivated to make
	media and	and make sense of	online safety and	access choices they	better and in some
	information sources	the media and digital	skills needs with their	are making for	cases safer access
	available to them in	environment and to	family and / or peers.	themselves.	choices
	the ecosystem.	be more safe and			
	Deemle ave means	resilient.	Deenle nerticinete in	Deeple abaaaa ta	Diverse sublice
	People are more	People nave the	dialogue about	People choose to	Diverse publics
	aware of fisks and	ovaluate the		to more diverse	thomsolvos taking
	potential namis,	credibility fairness	safety and media	media and	opportunities
		and diversity of their	literacy skills with	information	provided by media
		access to media and	stakeholders	information.	literacy projects and
		information.	otanonoraoro.		programmes which
					include them.
	People are aware of	People have the	People engage with	People expect to	People engage more
	the skills they need	skills of reflection	advocacy media and	have access to	with public interest
	to access the full	and personal	more diverse	media which acts in	media.
	digital media	judgement to	representations and	the public interest	
	environment.	evaluate their digital	this generates	and an online	
		literacy and assess	dialogue between	environment which is	
		their media	groups and reduces	safe and protects	
		engagement habits.	polarisation of	digital rights.	
			discourse.		
	Impact Measures for	Access (actions by peo	ople, enabled / support	ed by media literacy in	terventions):
	People upskill Decente correcte	i their media engagemer	IT. A al vaiva na adia na angara ang	tetter	
	People care n Deeple care n	nore about diverse and il	nciusive media represen	tation	
	People acces Deeple make	s public interest media m	fore and access proader	iniormation sources.	
		t to bo live in a boalthy n	a and online access dec	1510115.	
AWARENESS	People know what	People make	People can articulate	General accentance	People are more
AWARENEOU	nublic interest media	informed risk	online safety risks	of online risks harms	mindful in their
	is and why it is	calculations with	and which media and	and unverified	engagement with
	important	regard to online	information they	information reduces	and / or their sharing
		behaviour, media	trust, and why.	in communities and	of media and
		engagement and		societies.	information.
		information			
		circulation.			
	People develop	People use critical	People have a space	Media literacy leads	People challenge
	understanding of	thinking skills to	for dialogue with	to a reduction in	one another when
	how to assess if	assess how media	family and / or peers	tolerance towards	negative media
	information credible.	texts and information	about risk, harmful	others who share	and information
		sources are	consequences or	information	norms are evident in
		constructed and to	offecting individuale	information.	their everyday lives.
		intentionality	social groups and		
		internionality.	communities		
	People understand	People use critical	Representation gaps	People expect media	People feel
	better the	thinking skills to	and media bias can	to act in the public	empowered to
	representational	evaluate the diversity	be safely discussed	interest and to	challenge unhealthy
	practices of all media	and equality of their	by people.	represent diverse	media ecosystems.
		media ecosystem as		publics inclusively as	-
		a whole.		norms.	
	People are more	People use critical	Stakeholders listen	Media literate publics	Stakeholders are
	aware of how to be	thinking skills to	and respond to more	demand more equal	motivated to respond
	safe and resilient	develop	media literate people	and diverse	to more resilient and
	online and in the	understanding of	when they discuss	ecosystems and	media literate
	media ecosystem.	media ownership	representation gaps	safer online	audiences and users
		and regulation.	and media bias.	environments.	in their professional
	Import Measures for	Awaranaaa (actionalis	nooplo openied / own	norted by media literat	practice.
	People think r	more critically about med	lia representations	ported by media interac	y interventions):

	 People observe representation gaps and media bias and want to do something about them. People are more aware of unsafe or harmful online experiences and want to play a part in reducing them. People care more about misinformation and want to play a part in reducing the spread of it. People are aware of how media ecosystems or more or less healthy and understand their rights to live in a healthy media and information environment. 				
CAPABILITY				People think of themselves as media makers / information providers.	People assess and deal with resilience to online risks and media content abundance and act with self- efficacy in response to media and information.
				People see the connection between their media literacy and educational and / or economic opportunities.	Media literacy enables people to engage in civil society and / or to campaign in digital media contexts as activists.
				resilient attitudes circulate among people towards media and information, enabled by digitally literate people	People value safe online experiences, public interest and trustworthy media.
				Stakeholders are motivated to produce and provide media, information and online experiences for more resilient media literate publics.	Stakeholders expect to engage with and / or employ or educate more media literate citizens.
	Impact Measures for Ca People use their People use their More resilient ar audiences more People become media literacy	media literacy to improve media literacy to improve media literacy for civic e ad media literate publics r balanced and healthier more resilient to online ri	ople, enabled / supported e their lives, ngagement, nakes the relationship onlin sk and harms and misinfor	by media literacy in ne platforms, media, u mation over time, thro	i terventions): users and ough preventative
CONSEQUENCE S	People are more aware of the consequences of online actions and of sharing media content and information			More positive behavioural norms are established in the media and information environment.	People make activist media for positive change.
	People understand better the consequences of media representations			People are motivated to act as positive peers in the media and info ecosystem, to be safe online and help to keep others safe.	People challenge the negative or harmful uses of media literacy by others.
	People know the consequences of a lack of diversity or bias			People stop sharing unverified content and information and	People who are themselves negatively impacted online

in ed	n the media cosystem			encourage others to be more mindful.	harms, misinformation or exploitative media representations are capable of speaking out.
to pu re co di	takeholders respond o more media literate ublics by taking more esponsibility for the onsequences of iversity or bias.			Stakeholders respond to more media literate audiences and users in their practices with a focus on positive change.	Stakeholders' obligations to more resilient and media literate publics reduces negative media impacts.
In	 Impact Measures for Consequences (actions by people, enabled / supported by media literacy interventions): Online harms reduce through a change in mindset in more resilient users with higher expectations Misinformation and harmful content sharing reduces Positive, activist media production increases Stakeholders respond to media literate publics by changing their practices for positive change Media ecosystems are more diverse and inclusive 				acy interventions): ectations ange

PREPARATORY ACTIVITY FOR THE WHOLE PROGRAMME

Before the first workshop, give participants this link and ask them to watch this video and 'self-audit' their media literacy, as follows:

Renee Hobbs: Media Literacy in Action: 14 Questions to Explore.

https://www.youtube.com/watch?v=Kc440t6sqbQ

Guidance for participants:

It is not about the answers, but whether you think you know the answers. Sometimes, knowing what you don't know is very important, so you can evaluate your own digital literacy and identify where there are gaps – we can call these your 'known unknowns'.

So, for each question, note whether it's a known or known unknown. Then simply count the amount in each category, note them as two percentages and, most importantly of all, plan to find out the answers to your known unknowns by the end of this project.

WORKSHOP PLANS

	ToC Element	Workshop	Activities*	Outcomes: Participants are able to
1	Access	Digital Me	Digital Wellbeing	Be reflexive about their digital habits, positive and
			Surgery	challenging, and how their digital environment relates to
				their wellbeing.
			Burst Your	
			Information Bubble	Understand why a healthy digital ecosystem is good for
				everyone & what they can do to be more resilient within it.

Workshop Activity: DIGITAL WELLBEING SURGERY

School librarian (SL) facilitates a reflective discussion about the survey results. SL uses the baseline survey data to frame the discussion as collective, not personal or individual – eg 'a high number of people who took the survey said...... can we share some examples from our own experiences', choosing 3 aspects of digital wellbeing challenges that the survey brought to light. *For the research, we need either the raw data survey results, or a report.*

Using the discussion as the basis for this, divide into 2 or 3 groups (depending on numbers) and ask them to produce a definition of digital wellbeing. Then jigsaw the groups (if 3) or create two new groups with 50% of each of the first groups in both, and ask them to share their definitions and then agree a final version together.

Depending on time, resources and school preference, students either play this game individually and then come together to discuss, watch one student play it on a large screen / projected, or just watch the walk-through (NB just watching the walk through is not ideal, as we want them to experience it). <u>https://www.cygambit.co.uk/</u>

Rationale – this game is designed for 8-12 year olds. It is usually easier for young people to talk openly about digital environment challenges if they talk about what younger children might need to be safe / for their digital wellbeing. It is a good distancing technique and allows for some projection. They might have younger siblings or just think back to when they were 8-12.

Discussion / reflection prompts:

- When you were the age, this game is designed for, how effective do you think this would this have been if you had played it together with your family, as it is intended to be played?
- How well do the 5 key elements cyber-bullying and trolling, managing information online, privacy and security, relationships and reputation, self-identity and wellbeing – match up to the things you identified as challenging when you took the survey, and also the discussion at the start of this workshop? Does the game capture the same issues?
- Look back at the class definition of digital wellbeing does the game seem to be working with the same kind of definition or are there differences? Does this make the group think differently about digital wellbeing, or does it validate the definition, or is the game missing something?

Finally, just for the students' own reflections, after the workshop, <u>give them this link</u> and ask them to look at these resources, which ARE intended for their age group and their parents / carers, and to think about how their own challenges in the digital environment are understood by Internet Matters. How well does this resource match up to the concerns they raised in the survey and the workshop, how useful do these resources look in terms of helping them with these challenges? No need for them to provide any answers, this is option and just for reflection, but please strongly encourage them to take a look.

Independent Task: BURST YOUR INFORMATION BUBBLE

Credit – adapted from Burkhardt, J (2022) *Media Smart: Lessons, Tips and Strategies for Librarians, Classroom Instructors and Other Information Professionals.* London: Facet Publishing.

Students will learn to compare information from different points of view to get a more complete picture of a topic.

Preparatory guidance (if required, depending on nature of the cohort and their political literacy) – explanation of what is commonly understood in politics by left wing, centre and right wing. Or they can research this for themselves as part of the task.

The task

- 1. Go to https://www.allsides.com/unbiased-balanced-news
- 2. Go to the story allocated for the task and review the reporting 'from the left', 'from the center' and 'from the right' *NB they all need to use the same story, to be selected by SL to be the best one for the cohort and if possible to align with what they are studying.*

Note the main arguments or points reported in each category.

- Were important details part of all reporting?
- What did the left leave out that the right included?
- What did the right leave out that the left included?
- Was there contradictory evidence presented?
- How could you fact check the contradictory evidence?
- 3. Prepare a short powerpoint presentation answering the above 5 questions and upload it to ... (the school's platform or cloud storage).

	ToC Element	Workshop	Activities*	Outcomes: Participants are able to
2	Awareness	Digital Mindfulness	Algo-Literacy Lateral Reading	Pause, reflect and take a more critical approach to digital life, data visualization, how algorithms influence our behaviour and how this impacts our mental health. Understand triggers in the digital environment which impact on wellbeing and start to think about how to respond differently.

WORKSHOP ACTIVITY: ALGO-LITERACY

Students will learn how personalized internet content contributes to an increasingly polarized digital information landscape. Students will learn how algorithms work and how their programming provides different information for different people.

Ask students to answer the following question: 'One of your friends posts a story to her social media. The post is set to be visible to all her friends. Will her story appear in your News Feed?' Yes, no or maybe? Why or why not? (I scroll too quickly through my News Feed; I do not check social media often enough; the app does not show me all the stories that my friends post; other reason.)

Show students adjustments in the Preferences / Privacy settings.

Discussion to gauge participants' awareness about preferences settings for social media platforms where they get news / information from.

Discuss: • When you search for information, how does the internet decide what results to show you first? • How does the internet know what you have been shopping for? • How does the internet figure out what products to recommend to you? • How does the internet limit what products you see online?

Show this video about algorithms. <u>https://www.youtube.com/watch?v=ZnBF2GeAKbo</u>

- Each student searches for information on a topic using the same search engine and the same search words. *Ali as above, better if you choose this based on your knowledge of the group and also perhaps what they are studying elsewhere in school.*
- Compare results from one student to the next. (This will work better if students use their own devices.)
- Have students do the same search using a different search engine.
- Compare results from the second search with those previously received.
- Students then search for a product online e. g. a specific type of clothing, appliance or branded merchandise. Then they log into their social media sites. They report back on *Do they now find ads for the product they were previously searching for in the social media news or at the side?*

INDEPENDENT ACTIVITY: LATERAL READING

Warm up:

Watch these two videos about environmental activists protesting. One is a news feature on Sky News, the other is a campaign video by Extinction Rebellion.

https://www.youtube.com/watch?v=I_-wSckXbfc (Sky News)

https://www.youtube.com/watch?v=FGZJTYIGdEI (Extinction Rebellion)

Watch them twice, in a different order the second time. Think about what difference it makes, which one you watch first.

Think about how the two videos represent the same protests in very different ways.

Think about the elements of each video which are persuasive – camera positions, editing, sound, voice over, the order of things you see.

Think about which is closer to your own feelings about these protests.

But think also about how they are both persuasive, how they both use media techniques to represent things in particular ways.

Perhaps is it less obvious how people are trying to persuade you when you are looking at articles on the internet, where the persuasive elements are less obvious. But the same thing is happening, the way information is sequenced, edited, presented and arranged, is representing the topic in particular ways for particular purposes.

THE INDEPENDENT TASK

Watch this guide to a digital literacy technique called LATERAL READING: https://www.youtube.com/watch?v=GoQG6Tin-1E

Now, you are going to put the digital literacy skills explained in the video into practice.

You will be provided with links to two articles. *Ali – this works much better if you choose them, as you know the students, and maybe it can link to something they are studying for one of their subjects already? You need to choose two articles on the same topic, one much more trustworthy than the other, but not completely obvious so the task is too easy.*

Use your usual search engine to look for more information about the topic. Try to find information from experts.

Decide, based on this research, which of the two articles do you trust more?

Next, use the internet to find out information about the two organizations that published the original articles by visiting other websites.

Reflect - now you have found out about the sources of the articles as well as more background knowledge about the topic, is your answer the same, about which article you trust the most? Or has it changed?

Make notes so you can report back in the next workshop.

This kind of lateral reading, where you look into the topic to compare information from different sources and do a background check on the sources of the information, is mindful digital literacy awareness.

	ToC Element	Workshop	Activities*	Outcomes: Participants are able to
3	Capability	Digital Action	'Hack for Good'	Put digital literacy skills into action for personal mental health benefits.
			Family and Friends in Digital Life	Plan for relationship changes in the digital environment.

Digital Literacy For Good: HACKATHON

Hackathons can be internal (to a workplace, organisation, or a school) or external (only to a wider audience). An internal hackathon is only for employees or students, internal hackathons give participants the freedom to forget about everyday responsibilities and restrictions and build something innovative. Teams collaborate to develop a proposal, build a prototype, and pitch ideas to senior management (or teachers) to secure funding or win recognition. These events promote a *maker culture* that's important in today's tech companies or educational settings. Companies such as Google and <u>Facebook hold internal hackathons</u> to encourage new product innovation by their employees. For example, the Like button, chat button, and timeline of Facebook were created during its internal hackathons.

Purpose: pitch ideas for using digital technology for good to help young people make positive decisions in their digital lives with family and friends.

Challenge: 3 teams (if viable, with numbers) are set this task a week in advance of the workshop: **Create an idea for a new mobile app which will help young people (your age) make more positive decisions in their digital lives with family and friends.**

Workshop – 5- minute pitches, judged by Ali and other teachers / staff, ideally this should be a panel of 3.

Wrap-up: subject to the school's preferences and policies, the idea is usually - after the hackathon is over, showcase your work to the world. Share pictures and videos on your website; do a blog post with the winners; and share on social media.

	ToC Element	Workshop	Activities*	Outcomes: Participants are able to
4	Consequences	Digital Change	Digital Pushback	Put digital literacy skills into action to improve the digital ecosystem.
			Being a Digital Influencer	

SESSION (4): CONSEQUENCES: DIGITAL CHANGE

NB – this activity is for the whole group to collaborate on together.

Completing this session will enable you to: Act as a positive peer in the media ecosystem.

In this session we are going to put everything we have learned together so we can start work as people who will use our digital literacy as agents of change in society.

Combining digital literacy capability with consequences builds on the work we did in the Hackaton. In that activity, we were focused on family and friends. This time, we are thinking about taking our digital literacy capability out into the world to make things better for society, to improve the digital media *ecosystem*.

ACTIVITY: 'PUSHBACK'

This activity is adapted from **Pushback: Engaging in Online Activism**, produced by MediaSmarts and the e-Quality Project, Canada.

When we decide to use our digital literacy to respond to issues we feel strongly about, to make things better, or to 'call out' things which are wrong, then we can use the digital tools we have access to and our digital literacy skills to PUSH BACK against them.

Despite the issues surrounding the collection of your data and information – which are substantial – the online world can be harnessed for a large number of positive activities. While the networked world allows for cyberbullying, on the other hand, it allows youth a great opportunity to affect positive change not only in their local communities, but internationally.

Recent years have proven the increasing power of online campaigns on social media platforms to translate that online support to real change on the ground. Online campaigns for social justice, political change, race and gender equality, and efforts to end homophobia and other sexual orientation discrimination are just some of the issues that today's youth are becoming engaged in, and going on to promote positive change in their communities.

Use the interactive Timeline below to explore moments of Human Rights Online. These include moments of pushback against societal and corporate advertising campaigns, intolerance based on race, sexual orientation, gender, and more. These campaigns highlight the ability of youth to use the online environment for positive change, as well as to support other youth and marginalized communities throughout the world.

https://www.equalityproject.ca/resources/pushback/

Scroll the timeline and choose, for your group, an example of a "Pushback" which was led by people your age.

Use the internet to find out the following information about the pushback. It might be a good idea to split the questions up so each group member has one or two, to save time:

- Where and when did the movement start?
- Who started the movement?
- What inspired the movement to start?
- What was the impact of the movement?
- What were the strengths and weaknesses of the movement?
- Why did the movement succeed or fail?
- Why is the movement a form of activism?

When you have completed the Pushback exercise, your final task is to think about how you can use your digital literacy capabilities for positive consequences in society, by planning your own Pushback.

Taking inspiration from the example you have just looked at, your group will action plan for a social media Pushback campaign of your own.

How can you push back against something you think needs to change, in society, among your age group? Work together in your group to decide:

What is the name of your Pushback?

What media content will you use?

What platform?

In your group, how can you put your digital literacy skills together most effectively?

How will you reach your audience?

In the debrief, you will need to share:

- The name of your pushback,
- The misinformation issue you are pushing back against,
- Your target audience,
- How you will use your own digital literacy skills to make the pushback effective.

Data Collection

The following forms of data were collected:

- Baseline survey data
- Work produced by students
- Focus group with participants audio recorded and transcribed
- Interview with school librarian
- Interviews with participants (in Zoom, 2 x individual, 1 paired, with SL attending for safeguarding purposes).

Data Analysis

The **baseline survey** was provided by Bounce Together, and was sent to 83 year 10 students, of whom 34 responded, with a 60/40 gender response (F/M), which is representative of the year group and school demographic as a whole.

For the purpose of identifying students whose responses indicated their suitability for the intervention, 2 survey questions were identified as the most significant disclosure. These were related to feeling uncomfortable or worried when finding content on the internet and being sent messages or pictures that made respondents feel upset or bullied. Responses to these were then cross referenced to mood indicator questions, about respondents' outlook and how cared for they were feeling. These were used as filters to identify respondents to invite to take part in the project.

12 students met this selection criteria (answers to the two filter questions and their mood responses) and were invited to participate, with a provisional participant information and safeguarding document provided. 8 students accepted and took part, after providing informed consent from both themselves and parents / carers / an in loco responsible adult.

Whilst this study is focussed on an intervention in a school library, and therefore this benchmarking data is only used here as a recruitment filter, some notable outcomes from the 34 responses to the survey are to do with the relatively high levels of lower wellbeing but the lack of correlation, as perceived by the respondents, to digital / online experiences. 42% responded 'never' or 'not much of the time' when asked about feeling relaxed. 46% stated that they think good things will happen in their lives either not much or only some of the time. 38% said they think lots of people care about them not much or some of the time. However, whilst 70% had encountered worrying or uncomfortable material online, only 30% reported directly negative impacts on wellbeing, such as feeling upset or bullied, and 78% disclosed that they had sent unkind messages or content to others through the internet or social media. Therefore, as we also found in the dialogue generated during the intervention, there was a sense of our participants being 'well defended' and projecting digital wellbeing challenges onto others. This was validated by our interview with the school librarian, who was equally surprised by this lack of correlated disclosure, which was at odds with anecdotal evidence from everyday interactions with the cohort.

The **intervention programme** was refined and updated from previous delivery by CEMP and adapted for the cohort by the SL, embedded within a theory of change for the agentive and consequential uses of digital literacy, which had been used for a range of projects before this study and was the subject of a large evaluation design for the UK Government at the same time as this project was running.

The SL's experience of delivering the programme was that it foregrounded the pastoral and relational role and the skills required for such work, meaning that the SL was equally

important to the (third) space. In other words, whilst the 'in between' (school subjects and informal learning) nature of, and experiences in the school library as a setting - for the in person workshop and virtually extended to the independent activities - was a key element of the new practice model, the ways in which the SL can support wellbeing through the existing relationships with students and distinct interpersonal practices was equally, and perhaps more important. This was raised as an issue with regard to the lack of professional development for the role, as the SL is often not included in training due to contractual restrictions. As we account for later, with regard to this study's 'untypical' context this 'imbalance of opportunities' (GSL, 2023) cannot be sidestepped when advocating for the new practice model we are testing in this project. "in those secondaries with library staff, a third receive no training" and "40% indicated that they spend less than three quarters of their time carrying out their core library duties due to the range of other roles and responsibilities held by the member of staff" (Great School Libraries 2023:13).

The programme had been planned to run for a longer period, with more time in between workshops for independent activities, but, as is so often the case, pressures on the school timetable and the demands on the time of the SL and the students necessitated a pivot to a more compressed schedule. However, this actually had benefits, since the intense focus on the work was more positive for students. As the capability to consequences conversion involves a Hackathon followed by a digital activism exercise, it was reported back that the relationship between the two was better captured by running them in immediate succession. Another, perhaps more predictable observation was that, had the students had longer for the independent activities between workshops, it was actually less likely that they would have completed them, as continuity and 'in the moment' focus for learning is at such a high premium for this age group.

A recurrent theme was that, in the short space of time we had for the intervention, it was difficult to get to the deeper issues beneath the surface of 'resilience', since, in many ways the cohort were very 'savvy' with digital literacy. For example, lateral reading was something they were already doing, so they were able to reflect on this in positive ways but risks related to misinformation seemed less of a concern. Indirectly related to having relatively high levels of digital literacy, they did not consider themselves to be marginalised or subject to macro inequalities and this made the 'Pushback' element more localised. The SL reflected that this might take longer to galvanise and could be moved to take place before the Hackathon, raising useful learnings for us to consider with regard to the inter-related aspects of the theory of change.

In terms of the new practice model, comparisons were made with other school activities related to health and wellbeing and online safety, and it was a shared view among both participants and staff that the combination of the 'third space' and the active learning design had led to much higher levels of engagement for this kind of intervention than other experiences which had been more 'one way' and singular.

Student work produced for the programme offered us another data set. This included powerpoint slides produced in response to the 'Information Bubble' and lateral reading activities (for example, on different media representations of a UN climate report) and the outcomes of the Hackathon and Pushback activities (for example, *Aware: The App*, designed to "protect, engage and learn."). The work generated demonstrated engagement with the project and evidence of the core learning outcomes for each activity being met, in general terms.

A **focus group** was held with the participants and **interviews** were held with the school librarian, two individual students and two other participants in a pair. All were audio recorded and transcribed. The focus group asked participants more about their experiences in the

project, whilst the interviews were related more to experiences in the digital world, to add a more discursive and qualitative layer to the baseline data. From the transcription analysis, the following significant experiences and perceptions were presented:

"Driving into the Skid"

The role of the school librarian is a misunderstood role, and is crucial for digital literacy, but the mindset of being a school librarian who is enabling this kind of 'third space' education for both information literacy and digital wellbeing, is not typical. Whilst a school librarian may often run workshops in PSHE, related to misinformation or online safety, a programme such as this is dependent on both a confident and forward-thinking school librarian (in this case, the Chair of the School Library Association) and a conducive school setting. The latter was also atypical, being a relatively very well-resourced school where the desire to take a proactive approach to digital literacy to '*drive into the skid*', as opposed to trying to swerve away, could be supported. This resonated with the findings of the *Parenting For a Digital Future* research (Livingstone and Blum-Ross, 2020), with regard to the discourse of screen time and risk reduction reducing voice for parents to articulate more nuanced and complex concerns about parenting in the digital age in broader terms. School librarians, being at the vanguard of digital literacy work with young people, also find their remit being more about research skills for the curriculum and reducing 'screen time' than "changing your own digital sphere."

Our participants commented positively on the school library environment as helping them feel '*socially comfortable*' and on their relationship with the librarian meaning they felt more able to share personal experiences than in a subject class. Furthermore, during the intervention and in the focus group, the SL was able to repeatedly share her own digital experiences and very comfortably perform the role of being in a reciprocal learning space, which was more from her professional way of working, over time, than something 'required' in our project design. It was strikingly clear that these environmental and relational aspects had been cultivated over time, prior to this project:

In this library, I have never been asked a question to which there was a right answer, nor has there been an obligation to answer. It's a very relaxed environment where there is nothing to achieve unless you personally want to.

"I want to get back to a normal feed"

Instagram and TikTok were frequently cited as the two social media spaces where significant mental challenges are presented (in general, for the age group, these were not attributed to personal experience by our participants):

It's important to realise how much we rely on technology, I definitely rely on TikTok too much. You never know what to actually trust.

Instagram has less restrictions so it can cause more problems.

With TikTok you don't know what you are going to see so you have to keep scrolling. And often the comments on videos are so horrendous, you wouldn't ever see that in the real world, but the fact that people think they can see it, it's like what they really think, unfiltered, then that's very scary. I end up spending even more time (on TikTok), even when I am really bored with it, or I skip through and skip through but don't interact with it, even if I am interested in it, because I want to get back to a normal feed.

There was a shared view that, particularly with Tik Tok, the apparently 'random' nature of the video feed leads to 'desensitization'. But very interestingly, in relation to media effects and cultivation theories, this is not due to being constantly exposed to similar, violent or 'mean world' content, but more about the constant juxtaposition:

It's, like, such a stark contrast, between 'My Mum has cancer, please interact so she doesn't die' and then 'oh, here's my friend, I am going to smash her face with a cake. That kind of desensitizes you, and I don't think that's a great thing.

For these participants, the main challenges shared as being significant in their lives were not so much to do with specific content as a failure to moderate time spent online. Individual participants shared examples of having to spend time recalibrating the algorithm so that their video feed would be more in keeping with their interests and preferences and we heard a lot of examples of being concerned about social media posts but then being able to 'move on'. When we heard about challenges experienced, these were either in the past or about others:

When I was a bit younger, I didn't really know what was OK and not OK to post online, so I would hurt people's feelings and only feel bad about it later when I realised the effect on people.

Some of my friends have had bad experiences online due to their mental health, but for me, I am quite resilient.

The statements above are indicative of general articulations by and between the cohort and this means that, as a research team, we need to consider the efficacy of the survey questions asking about experiencing difficult situations online and views on mental health and the digital world in general, with regard to how well they filter recent and personal experiences.

With regard to previous experiences of **education**, online safety, usually in PSHE, had been much more commonly experienced than the more holistic digital (or media) literacy education this study was modelling, with many examples cited of 'scare tactics' but a general feeling that even these interventions (albeit like our own) did not usually make any difference to online behaviours, these were only impactful in the moment, during the school day.

With regard to the more holistic approach to digital literacy we were advocating, with our theory of change, there was consistent evidence of an unhelpful prior framing of educational activities being more focussed on online safety or information literacy for school work than the more positive uses of digital media in everyday life.

"Some people our age have problems."

The lack of correspondence between the survey data and participants' reflections during the focus groups and interviews was striking, with high levels of confidence in their own resilience and this being largely from their own, self-directed experiential learning, rather than being attributed to either first space support (eg from parents or carers) or second space (school):

It comes with experience, I now know what I want to avoid and what I want to actively seek out.

The main concern my parents have is that technology makes me lazy, that they see that I can do things that I shouldn't be able to do so easily, it's so easy to find things, like, to cheat. But I don't actually think it's too much of a problem.

Another interesting 'critical incident' was presented by the 'information bubble' activity NOT yielding as different search outcome results as anticipated, perhaps due to school firewall settings or due to the demographic similarity between participants. However, in the focus group, this was raised and then a rich discussion followed about why this was the case, and how this might have been different, which in some ways presented itself as a clear example of 'third space learning' and, with this cohort, perhaps more useful than the 'scales from eyes' outcome typically associated with that activity.

"Swept Up by the Algorithm."

From all of the data sets, we observed a degree of 'masking', which meant that the data generated with us through the gualitative methods during and post-intervention did not match up fully with the baseline data. Digital challenges were described more as uncomfortable than problematic for mental health. In our previous research, we have found that spending more time and using more creative methods is often a way to get through this reticence, or projection to others - 'some people our age have big problems with...'. But there was also the sense that the framing of the project might have been out of synch with aspects of our intentions, and our theory of change, with researcher bias being not only unintended but actually counter to our aims, since our participants seemed to be of the view that the desired change was more about reducing screen time than taking more positive action. As a research team, our speculative explanation for this is that discourses around online risk and mental health mean that for this age group, there is such a pervading and normative language around over exposure that the hypothesis that being more literate in the digital space means not doing less but doing things differently, and in some cases, doing more, is contradictory to the participants, and would take lot longer to work through. However, we did find evidence of manifest change in more critical thinking about the validity of online information (albeit building on relatively high levels for the age group) and also the latent potential for a shift in behaviour through increased 'algo literacy':

At the very least, I am more aware when I start getting swept up by the algorithm, and I have started making an effort to stop that, and I assume I will more in the future.

Towards the end of the focus group, participants asked the researcher questions about digital presence / online footprints, with regard to concerns about being vetted when applying for jobs in the future. This was due to the timing of an online safety session in PSHE, two weeks prior to our intervention, which was so often referred to as a comparison point that it emerged as a key factor in the study. On the one hand, the pedagogic / relational approach we had taken in our third space was generally understood to be a more positive and nurturing way of working than the 'shock into action' presentation about online risks and future job prospects - "whatever you post online, it always stays there, your digital footprint will follow you everywhere.". But at the same time, when we asked questions about taking action to change behaviour in the digital world (consequences, from new or increased capability), this comparison worked against us. The longer term, more sustainable aims of our model, the idea that students are more likely to be resilient and safe, and their wellbeing will subsequently improve, if they are more agentive and change-oriented, in an active way, in the digital ecosystem, did not 'cut through' the sense that 'taking action' must be more about doing less on the internet, reducing risks by spending less time online, sharing less, being more risk averse in social media. This meant that our, perhaps too subtle, shift in thinking from reducing screen time to taking more positive action, just as we hope young people will with regard to the natural environment, was probably lost in the more immediate resonance of the 'shock tactics' employed in the PSHE talk on risky behaviours.

Participants also felt that our intervention would generally have far more impact on their critical reflections (awareness, and also awareness about access) than on digital skills or the application of them (capability), since these were already high, and least likely to change their actions (consequences). But this was not due to any design fault in the intervention, but simply because we came too late, with them having lived their whole lives online, they were already immersed in a kind of 'digital habitus' which would be very difficult to change – "*this is stuff we have grown up with.*' They generally felt that this would work better with a younger age group, to 'get there earlier', before such habits become entrenched, but they also reflected on how, in the UK at least, the combination of parental, educational and regulatory attitudes to digital technology would make the idea of working on such material with younger children very difficult if not impossible. This presents us with a compelling paradox for this kind of work, along with the other, perennial challenge related to recruitment and engagement for digital literacy projects such as this:

If you were to give this programme to every single student in every single school, a good part of them, because they had to do it, would not listen and would not take anything away. We all actively chose to be here.

Following completion of the programme and during the data analysis phase, a training webinar was delivered to School Library Association members, sharing the interim findings from the project and training the attendees for the delivery of the new practice model.

As part of a concurrent project, funded by the UK Government, the project in progress was evaluated using the CEMP theory of change and evaluation methodology, with the following results:

	Potential for ML leading to change	Nature of evidence of change or potential for change (latent or manifest)
ACCESS	In encouraging students to be reflexive about their digital habits, project may lead to positive change. and challenging, Understand why a healthy digital ecosystem is good for everyone should	Survey and focus groups Potential concerns that library is not a neutral or familiar space in the way Oldenburg intended.
	increase participation Targets children who self-identify issues with access Intervention in a neutral space opens up access	
AWARENESS	Encourage a more critical approach to digital life, data viz, algorithms and impact on mental health. Understand and identify triggers that influence wellbeing – consider how to respond.	Work produced Reflective exercise / survey Focus group
CAPABILITY	Develops digital literacy skills in support of positive mental health.	Reflective exercise / survey / Focus group
CONSEQUENCES	Applied digital literacy skills	Focus Group

(3) Findings: New Practice Model

Using an action research approach combined with our theory of change to assess the potential of this way of working as a new practice model to lead to positive consequences, our pilot intervention has generated the following key findings:

For a school library to be a third space and facilitate the conversion of digital literacy into capability for young people, the school librarian must be an advocate for digital literacy in combination with pastoral experience and the setting must be adequately resourced.

The third space school library enabled young people to be reflective about their digital habits, but there was less evidence of them being reflexive with regard to behaviour changes for their digital wellbeing.

Young people in the study demonstrated existing awareness of the nature of the digital ecosystem and the need for their peers to take a more critical and mindful approach to digital life, data and algorithms, for better mental health, but this was generally projected onto others, since they considered themselves to be generally resilient.

Through the work produced in the third space school library, young people showed an advanced understanding of the need for changes in the digital lifeworld for their age group but felt that they had engaged with our project too late to make these changes in their own lives.

The young people in this specific setting met the learning outcomes from the activities designed to convert capabilities into consequences via digital media activism, but there was little if any evidence of either existing activism or new intentionality.

These findings validate the new practice model but mean we were unable to evidence the change we hoped to see in participants' digital relations with their peer group, family and school (first and second space impacts), due to the balance being more towards reflection that reflexivity and the relative confidence articulated in their own digital resilience. This did not correspond to the survey data and presents a conundrum which is familiar in the research field.

This study's small sample size and short duration restricted the approach to an exploratory pilot study. Our findings have shown that, if the requisite conditions are in place, the third space school library model is more effective for doing more agentive digital literacy work than online safety workshops in PSHE, for example. However, the following extensions to our approach are required, by way of further research:

- Comparison of the outcomes of this intervention across a range of school library settings;
- Profiling and follow to track digital behaviours, pre and post intervention;
- A reflective / reflexive element to run throughout the intervention, requiring more time in between workshops;

• Triangulation of data sets to move beyond self-reporting of both wellbeing challenges (and resilience) and of digital behaviours.

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