Spotlight: Digital Wellbeing

Report

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Contents

The Diana Award has supported
the execution of the report.

ISTE has supported
the execution of the report.

Foreword from Supercell

At Supercell, our mission is to make games that are played by as many people as possible, enjoyed for years and remembered forever. As players ourselves, we know that games are enjoyed most when they are one part of a healthy life.

Games have been shown to improve how we learn, develop and interact with one another. They can improve the cognitive and lateral abilities of the brain, boost problem solving capacity, increase language abilities, and are a great way to build relationships with friends and family. However, we also recognise that offering a service that brings millions of people together can present challenges.

It's because of this belief in the positive power of games, and the understanding of the responsibility that comes with it, that we are so proud of our partnership with HundrED. We share their belief that a good education is one that allows children to grow up digitally literate and in control of their own wellbeing, equipped with the skills to be well-rounded, resilient and emotionally intelligent people. As a global partner, we have seen the impact HundrED has achieved so far in this space, and we're delighted that this latest project, Spotlight on Digital Wellbeing, can help drive the agenda even further forwards.

When delving into the findings of this report, what resonated the most is the finding that digital wellbeing is not a narrow technical fix, but rather a holistic issue that has many different elements. As a company that serves players all over the world, we know that there is no 'one size fits all' formula for creating games, but that there is plenty of common ground in what all our players enjoy and respond positively to. Finding that common ground in the wellbeing space means working with a wide range of stakeholders from not-for-profits, educational institutions, industry and parents.

In a similar vein, this report places emphasis on the shared challenges faced by teachers, children, educators and policy makers from around the world, and has found innovative solutions to address them. One of the teachers interviewed for the report put it well when they said "there is a need to root the teaching of digital wellbeing in core values of respect, safety, empathy and friendship." These are universal qualities that know no borders.

That is one of the reasons we're so delighted this work has backed projects from across the globe, that can be scaled so that all children can benefit from them, no matter where they come from. The innovations announced today range from "Inside Out" a video-based teaching platform from New Zealand which promotes LGBT+ acceptance, to the UK's "Digital Schoolhouse", offering computing workshops for primary children promoting the importance of using games to make computer skills accessible and enjoyable to children.

Now it is up to all of us to spread the word of these projects and this report, and collaborate even further with governments and institutions around the world to truly shine a Spotlight on Digital Wellbeing. Let's turn the findings of this report into action, and bring the benefits of better digital wellbeing to everyone.

Lesley Mansford

Global CSR at Supercell

> Let's turn the findings of this report into action.

Foreword from HundrED

HundrED.org is a Finnish not-for-profit organisation, which seeks and shares inspiring innovations in K–12 education. Our goal is to help school education through pedagogically sound practices and solutions. Annually, we select 100 education innovations for our Global Collection, as well as lead research Spotlights with partner organisations, which are based either on a theme (e.g. sustainability) or within a geographic region (e.g. Pittsburgh). For this Spotlight on Digital Wellbeing, we were delighted to collaborate with our main partner Supercell.

Many young people today have used smartphones and the internet from birth, where their online and offline environments are not commonly viewed as separate. However, the online world comes with its own set of unique challenges for educators and parents, which can significantly impact the mental and physical wellbeing of young people in the real world (both at home and in school). These challenges are difficult for adults to understand because children frequently have more up to date skills and knowledge than their parents and teachers. For this reason, current education in school around digital wellbeing lacks the rigour and relevance to be meaningful for most students' lives. This Spotlight aims to help promote solutions for these challenges by highlighting 10 already impactful and scalable innovations on various aspects of digital wellbeing.

What became clear through the research findings for this spotlight is that young people are largely left to work out for themselves how to use digital devices in

a healthy way. However, educators are wanting much more help; 100% of the teachers surveyed indicated that education around digital wellbeing is at-least moderately needed, and 100% said they will potentially use tools and resources they knew were effective. Therefore, along with a lack of teacher capability in this space, there is a paucity of education that is relevant to the online environments young people are engaging with. Thus, five of the selected innovations for this spotlight targeted the professional development of teachers, so they can better support and integrate aspects of digital wellbeing.

It is our hope that this report will increase the discussion and visibility of Digital Wellbeing education.

In this report, we have compiled solutions that are scaling or have the potential to scale for improving digital wellbeing in schools. There are innovations that promote the positive use of social media, cyberbullying, digital media literacy, and the teaching of skills to make their own games. We greatly admire the hard work that these selected innovations are doing in this space. It is our hope that this report will increase the discussion and visibility of Digital Wellbeing education on a global level, so we can more effectively promote the healthy use of all activities that involve digital devices.

Christopher Petrie

Head of Global Research at HundrED

Introduction

The digital world is a rapidly growing part of our lives today, and young people are spending more and more time with digital devices. In particular, the rise of access to mobile digital devices and the internet also bring huge benefits on a global scale for improving access to and quality of education amongst children. In sub-Saharan Africa, it has been reported that owning a mobile phone was more common than access to electricity (The Economist, 2017). Similar reports have been stated in places such as China and India (Kooistra, 2018). However, less developed countries still struggle for access to a reliable internet connection and up to date digital devices.

Despite accessibility issues in underdeveloped countries, the impact of technological innovation has seen many positive effects worldwide; for example, an increased scope in learning new knowledge and connecting with others. The online world, in particular, creates a space that connects a students life in and out of school. For the young people today who grow up with access to digital devices from birth (like smartphones), the difference between online and offline environments are often not distinguishable when compared with adults who remember growing up without them (Haddon and Livingstone, 2015).

This lack of separation has created challenges for schools and teachers, where they are much more often dealing with issues that emerged online, which affects learning and student wellbeing while in school. This is no surprise with the average time online more than doubling in the last 10 years (Zenith, 2019) and young people now spending an average of 23 hours a week on smartphones and other digital devices according to a study by Donnelly (2019). Therefore, it is becoming increasingly necessary for young people to adopt resilient and healthy habits when using digital devices so that they fully develop their mental, physical and social wellbeing in the modern world.

With HundrED.org's main partner Supercell, research partner The Diana Award and media partner ISTE, this Spotlight investigates the topic of digital wellbeing and showcases 10 leading innovations from around the world that both promote digital wellbeing and prevent known issues like online bullying, digital harassment and digital addictions (e.g. social media, gaming, content streaming etc.). These innovations were required to have an educational element that promoted an increased understanding of a range of aspects on the theme of digital wellbeing. This spotlight aimed to investigate the topic of digital wellbeing for K12 education on a global scale with practical examples on the following:

- How can we integrate digital wellbeing as an essential part of holistic wellbeing?
- What are the most effective innovations around the world that promote digital wellbeing, and are impactful and scalable?
- How can these innovations help to increase the digital wellbeing of young people on a global scale?

A review of the literature begins this report, which aims to provide an overview of the Digital Wellbeing education currently happening in schools and emerging needs. Following this, we present findings from a global student and teacher survey to better understand current perspectives from the main stakeholders in education on this topic. Next, an overview of the methodology and findings from the innovation search and selection process are presented. Finally, the selected innovations are showcased, followed by recommendations for implementation and concluding remarks.

SUPERCELL

Supercell (supercell.com) is a mobile game developer based in Helsinki, Finland, with offices in San Francisco, Tokyo, Seoul and Shanghai. Since its launch in 2010, Supercell has brought five games to the global market: Brawl Stars, Clash Royale, Boom Beach, Clash of Clans and Hay Day. Supercell's goal is to make the best games – games that are played by as many people as possible, enjoyed for years and remembered forever. To this end, Supercell considers it a priority to keep their online platforms safe for young people and recognises the important role that education plays in learning about digital wellbeing.

HUNDRED

Finnish based, not-for-profit, HundrED, discovers, researches and shares inspiring innovations in K12 education. Their goal is to help improve education and foster a movement through encouraging valuable, impactful and scalable innovations to spread, mindful of context, across the world. HundrED Spotlights create unique opportunities for both educational professionals and independent organisers of the Spotlight to gain a thorough insight into the education innovations taking place in either a specific area of education, like literacy or sustainability, or within a certain geographic location, for example, India or London. For each Spotlight, we select 10 of the brightest education innovations, which then undergo a deep study by our Research team and an expert advisory board. HundrED Spotlights are organised with partner organisations, who help to discover innovations in their area of expertise.

> For the young people today who grow up with access to digital devices from birth, the difference between online and offline environments are often not distinguishable when compared with adults who remember growing up without them.

HundrED's Mission

HUNDRED MANIFESTO

The purpose of education is to help every child flourish, no matter what happens in life.

In a fast changing world focusing on traditional academic skills will remain important, but that is not enough. To thrive as global citizens, children must be equipped with a *breadth of skills.*

While we are advocates of a child-centric approach and *personalised, passion-based learning,* the relationship between an *inspired teacher* and a motivated student will remain essential. *Assessment* has to be aligned with the core purpose of helping kids flourish and all of this should be reflected in the *learning environments* of the future.

To make this happen, we need *visionary leadership* at every level of our education system with ambitious, impactful and scalable education innovations that are globally effective.

The world of education is full of hardworking specialists who are making this happen every day.

Our mission at HundrED is to give them the recognition and visibility they deserve.

CHILD

- Everything we do starts with the child in mind. Our mission (in our manifesto) is to help every child flourish in life, no matter what happens.

GLOBAL: IDENTIFY (9–10 MONTHS)

- Annually select the top 100 innovations that are transforming education globally
- Examples: Hello Ruby, Speed Schools
- Funded by foundations, companies

SPOTLIGHT: CELEBRATE (9–12 MONTHS)

- Identify & celebrate innovations within a region or/and a theme
- Examples: Pittsburgh, Digital Wellbeing
- Funded by foundations, companies

FORERUNNERS: PROMOTE (9–12 MONTHS)

- Select innovative policies and practices that make change happen at scale in systems
- Examples: City of Helsinki, County of St. Louis
- Funded by education providers

TAILOR-MADE: SOLVE (2–12 MONTHS)

- Identify the best external solutions to a specific problem or focus in a region or theme
- Examples: Croatia Ministry of Ed.
- Funded by education providers, foundations, companies

CONNECT

- HundrED Connect gives innovators access to the network they need to help them scale their impact
- The platform is free of charge and connects innovators to funders, implementors, and advisors

AMBASSADORS

- Our global network of education professionals seek, share & review innovations to provide consistent yet diverse standards
- Youth Ambassadors keep us grounded. By listening to their critical opinions, we can understand what they need.

MEDIA

- HundrED Media is dedicated to spreading awareness about selected innovations through articles on our websites, frequent webinars and discussions across our social media platforms.
- Our global community further supports the distribution into local education networks.

EVENTS

- The annual HundrED Innovation Summit in Helsinki brings together our community to foster education collaboration
- GLocals allow community members to organize local Summit-style events

HundrED's Aim

Transform K12 education globally to help every child flourish in life, no matter what happens.

HundrED's Long Term Goal

Every child has access to the best possible education innovations by 2030.

HundrED's Short Term Goal

Help grow more than half of our selected innovations in their number of users by at-least 10% annually.

Literature Review

Definition and Scope

The concept of Digital Wellbeing is an underdeveloped area in school education and has yet to have a widely accepted definition (Lyngs, 2019; OECD, 2019). Digital Wellbeing overlaps with 'digital citizenship', which is commonly used to be inclusive of education around efforts to increase digital literacy, involving computing topics like coding and the use of software tools like excel (OECD, 2019). However, digital wellbeing is often targeted specifically as being part of the wider umbrella of wellbeing (INGSA, 2018). McCallum and Price (2016) suggest this wider concept of wellbeing in education is a holistic view of living life that is physically and emotionally healthy; for example, wellbeing can include aspects from social, mental, emotional, self-confidence, motivation, enjoyment and more. With this in mind, we suggest digital wellbeing adapts this definition to specifically target the healthy use of digital devices because of their unique nature. Thus, we consider Digital Wellbeing in connection to the wellbeing definition by McCallum and Price (2016) as: the ability to live holistically healthy lives considering all activities that involve the use of digital technologies; for example, the healthy use of social media, preventing cyberbullying and other abusive behaviour.

Digital wellbeing can involve an array of increasingly important issues that impact the lives of young people in and out of school. These topics can overlap and be taught alongside subjects already in school like: detecting unreliable sources in digital media (fake news) for social studies, and encryption and Artificial Intelligence (e.g. computer vision) in computer science for learning about online safety. However,

the majority of educators in schools today lack the skills and knowledge to teach these topics with pedagogically sound approaches (OECD, 2019). Additionally, many of the currently available resources are static and promote a passive pedagogical approach to learning. They also become quickly out of date by the time they are put to use and are most often in the form of poorly designed books (physical and digital), PDFs and hard to navigate repositories for educators. With an already overcrowded school timetable and a lack of teacher capability, education around skills and knowledge that involve digital devices are in danger of being implemented at a low quality and with a tick-box attitude. While many efforts have been made to increase teacher proficiency, they have largely fallen short of the impact needed (OECD, 2019). Thus, young people in school today more often have much more up to date knowledge and skills than the educators teaching them. This gap makes the education around the concept of digital wellbeing especially challenging for schools and educators to implement. Therefore, any solutions or innovations that aim to improve digital wellbeing for schools need to take these challenges into consideration.

> With an already overcrowded school timetable and a lack of teacher capability, education around skills and knowledge that involve digital devices are in danger of being implemented at a low quality and with a tick-box attitude.

Many students find the communities they engage with online to be much more relatable and aligned with their interests, instead of trying to become friends with the more limited pool of their peers at school.

Healthy use
and screen time

There are many perspectives on what constitutes as "healthy use" for school students at different ages. The view that digital-screen engagement decreases adolescent wellbeing has become a recurring feature in public, political, and scientific conversations. At the same time, curricula across the world have changed or modified to include the integration of computing skills and knowledge to be as important as reading, writing and mathematics. Moreover, the proliferation of learning skills and knowledge through screens has become much more common through Massive Online Open Courseware (MOOCs) (e.g. https://www.edx.org/) and new personalised learning platforms like the Kahn Academy (https://www.khanacademy.org/). While online courses and learning platforms make educators jobs easier to manage (for example, through automatic tracking of progress and grading), there is a danger that purely digital solutions will be relied upon too heavily in place of low student to teacher ratios. These more recent developments in education make it very difficult to reconcile the appropriate ratio of screen and non-screen time for educators.

However, young people vary significantly in the extent and how they use digital devices. For instance, many students find the communities they engage with online to be much more relatable and aligned with their interests, instead of trying to become friends with the more limited pool of other students at school (Denworth, 2019). With the increase of personal digital devices that are difficult to monitor,

the amount of screen time young people spend online has been arousing strong debates more recently. Academics like Andrew Przybylski from the University of Oxford question the validity and trustworthiness of much of the research into the impact of screen time (Orben & Przybylski, 2019) and related issues like gaming cited in the news (Przybylski & Weinstein, 2019), which makes finding reliable and robust sources on screen time and gaming challenging. However, excessive amounts of time spent online potentially disrupts children and young people's sleep patterns and their ability to get sufficient quality rest. Sleep deprivation is associated with a heightened risk of mental health problems such as depression, or a lack of focus at school (Roberts and Duong, 2014).

The American Academy of Pediatrics (as cited by CNN health, October 2016) have previously suggested a limit of two hours a day of TV for children and teens. This one size fits all guide is unrealistic for all ages and contexts. For example, the screen time required for a student who is passionate about a future in making games in high school would be different for another student who is passionate about a future as a professional athlete. The American Academy of Pediatrics guidelines are further complicated when considering the cognitive and physical development of young people at various ages throughout their schooling years. For example, the exposure to face to face verbal communication is especially important in the development of language skills from 5 to 10 years of age (Sakai, 2005).

Cyberbullying

A major issue relating to digital wellbeing is around online bullying. For example, 95% of teens in the United States are online (Hinduja, Sameer & Patchin, 2018) and 59% have reported that they have experienced cyber-bullying (Anderson, 2018). The rapid development of, and widespread access to, technology has provided a new medium for 'virtual' bullying, which can occur in or outside school. Technology based bullying, or 'cyberbullying' as it is commonly referred to, is different to other forms of bullying as it can happen at all times of the day, with a potentially bigger audience, who can forward on content at a click (Department for Education, 2017). The safety of the screen gives perpetrators the anonymity to send personal or widespread attacks on others online. Consequently, schools and teachers are much more often dealing with issues that emerge online and outside of school time that affects student wellbeing in school.

Cyberbullying at its worst, has the most serious consequences for wellbeing being at a much greater risk of self-harm and suicidal behaviours (John & Ann, 2019). In another study, 83% of young people think companies in social media need to take cyberbullying more seriously (The Children's Society, 2019). Surprisingly, 60% of young people in the United States have witnessed online bullying (The Children's Society, 2019), yet most do not intervene with only 1 in 10 trusting an adult to report the abuse (National Crime Prevention Council, 2019). However, 81% say they would likely report abuse if they could do it anonymously (Media Smarts, 2019). It is clear that cyberbullying is an alarming issue that needs better strategies to proactively support the wellbeing of young people.

> 60% of young people in the United States have witnessed online bullying (The Children's Society, 2019), yet most do not intervene with only 1 in 10 trusting an adult to report the abuse (National Crime Prevention Council, 2019).

Online communities

The internet can be used to consolidate connections with peers, which includes individuals the child already knows as well as those they share a common interest with but may not necessarily have met in person. Restricting technology use (e.g. banning phones in schools) may deprive young people of important social information that is exchanged beyond the school gates (Livingstone and Bober, 2006). Both social media and online gaming are cited as important channels through which social connections can be made around the world. University of Münster research (Kowert et al, 2014) has shown that, for shy people, online gaming has become an important way to socialise and make new friends. However, it is a common perception that computer games are often thought of as an antisocial and leisure activity (Parkin, 2019). The research, published in Cyberpsychology, Behaviour, and Social Networking, found that shy gamers used online games differently from their more outgoing counterparts.

Furthermore, the internet has been recognised by many mental health groups and campaigners as having the potential to benefit young people's access to support and a sense of community with people experiencing similar issues. When many young people face a challenging life experience, traumatic event or an episode of poor mental health, they frequently turn to social media platforms to share their experiences, look for information or advice, and make sense of what is happening to them (Young Minds, 2018). From this point of view, the online world can offer young people the support they may need and might not have available in their offline lives.

Even when talking about the potential benefits digital technology brings to children and young people, the enthusiasm and great promise of technology is often matched with the fear of its potential impact. Two interesting studies capture this uncertainty. Survey data from the Swedish Media Council (Statens Medieråd, 2013) show how parents in a developed country with near-ubiquitous access to digital technology consider online gaming a great asset in their children's lives, providing them with many opportunities to benefit, while at the same time they rate online gaming as one of their greatest sources of worry, fearing that children might spend too much time playing.

A similar narrative emerged from focus groups with parents of child internet users conducted in South Africa (Burton, Leoschut and Phyfer, 2016), where parents acknowledged the many benefits that the internet could offer to their children while simultaneously expressing concern over the time their children spend online and the many risks they may encounter in the process (UNICEF, 2017). These studies prove just how difficult it is to conclude whether digital technology is beneficial to our overall wellbeing. They show how we are at the same time excited about the potential of technology but also afraid of its impact and the relative unknown.

Gender and cultural diversity to computing subjects

There are also gender and diverse cultural underrepresentation issues pervading computing education and the computing industry (Brown, 2016; Google & Gallup, 2016; Margolis & Fisher, 2002). For example, many studies on the gender balance in computing subjects found high school girls do not consider enrolling in these subjects because of many associated negative stereotypes (Brown, 2016; Google & Gallup, 2016; Gough-Jones, 2008; Margolis & Fisher, 2002). Fewer perspectives of females and under-represented groups may be related to a sense of empowerment and self-confidence in being able to participate fully in an increasingly digital world. Consequently, Abbiss (2011) warns that as business and industries become software driven at an accelerating pace, a male-dominated and culturally skewed world view could be promulgated through the software we all use (for example, what websites are listed in the top 10 search results in Google or how information is filtered and personalised in a Facebook news feed). To help prevent these inequities, Abbiss (2008) has suggested that subjects should be broadened to help break down the perception that only "computer nerd['s]" (p. 11) are capable of pursuing knowledge in computing domains. This approach may save time and empower students to understand the digital world through thinking critically, which helps to foster digital wellbeing (Resnick, 2017).

Current approaches
to Promoting Digital Wellbeing

Given the extensive debate around what the problem is with regards to digital wellbeing, it's unsurprising then that there's also a lack of consensus around what the solutions may be. There is currently very little agreement on what is considered 'best practice' when it comes to promoting digital wellbeing. Below are three key themes that have emerged in the literature and which provide a framework for understanding how we can best promote digital wellbeing.

IMPROVING DIGITAL LITERACY

One of the most significant themes to emerge was the idea that young people are able to develop the social and emotional skills needed to fully benefit from digital technologies and safely navigate the online world. These skills are often referred to in the literature as a form of digital intelligence or 'digital literacy'. Digital literacy helps people navigate the differences and commonalities that extend their digital and real lives, and helps them to avoid mental health problems associated with abuses of digital technologies (OECD, 2019). These capacities, rather than just providing basic protections online, allow young people to safely and effectively use the Internet, and to use it for positive ends as citizens, from an empowered position of enhanced knowledge, skills and responsibility (Reynolds and Parker, 2018). It is thought that these provide effective tools for increasing the resilience of young people.

OPENING DIALOGUES BETWEEN PARENT AND CHILD

As an adult in today's connected world, it can prove a challenge to keep up to date with online trends and apps that children and young people are using. However, parents and teachers will play a crucial role in supporting young people build positive online experiences. Setting healthy habits and identifying boundaries should be done in collaboration with young people so they become aware of the potential problems and feel a sense of ownership over their online use. The idea is that in building these more open relationships from a young age, children grow up to be more informed and resilient users of digital technologies.

WELLBEING BY DESIGN

Tech companies will also play a key role in developing platforms that are designed with digital wellbeing in mind. For these companies, the focus will be on optimizing online platforms to provide 'joy, positive engagement, learning, and healthy communities for young people and families' (Ito, 2019). While this is a less developed area of research, with some apps only just starting to be tested, it is likely to be a key policy area for years to come, involving many societal actors from governments, to charities to tech companies to online users themselves.

Industry experts are calling for technology to be designed to provide a service that benefits young people's listed needs whilst avoiding the overlying issue of being addictive (Peters et al, 2018). They are also suggesting that platforms should encourage children and young people to have 'effective self-control' over the amount of time spent online, and that an awareness should be brought to whether one's digital device use is aligned to their personal values and long-term goals (Lyngs, 2019). Social media companies such as Facebook are now starting to focus on encouraging meaningful online interactions rather than the passive consumption of online content (Farr, 2018), a possible sign of things to come.

IN SUMMARY

This literature review provides a brief overview of the emerging major issues related to digital wellbeing for young people. In summary, digital wellbeing education is underdeveloped in schools and most students are receiving little guidance relevant to the digital activities they engage with on their devices. Parents, schools and educators predominantly have less capability and knowledge than young people. Meanwhile, the range of issues and problems associated with the healthy use of digital devices are becoming increasingly complex and are growing in importance everyday. Therefore, solutions and practices need to take these challenges into consideration to effectively promote digital wellbeing for young people. In particular, the strengthening of knowledge and skills with educators as well as the communication between adults and young people are needed.

Parents, schools and educators predominantly have less capability and knowledge than young people.

Digital Wellbeing Student and Teacher Survey

We conducted a global survey for teachers and students in order to better understand current perspectives on the topic of Digital Wellbeing. A volunteer based sampling strategy was used from all teachers who are also HundrED Ambassadors for the teacher survey. HundrED Youth Ambassadors and Diana Award Youth Holders were the participants for the student survey. Anyone in the world can apply for all these groups. HundrED and The Diana Award actively conducted outreach to get participants from as many countries as possible.

We recognise this survey's limitation in obtaining a statistically significant sample size for every country was not possible. Additionally, because the survey was voluntary, the data may have been likely skewed towards perspectives from particularly engaged and proactive students and teachers. Nevertheless, the results do give some indication of a variety of perspectives from teachers and students providing some valuable insight on this topic. Results for the student survey will be presented first, followed by the teacher survey.

Digital Wellbeing Survey for Student Participants

Students: n=109

The top two regions where participants came from were the United Kingdom (17.1%) and America (12.6%). The remaining student participants came from 16 other countries.

Which country are you from?

Country	%	Country	%	Country	%	Country	%
AUSTRALIA	2.7%	USA	0.9%	MEXICO	0.9%	SOUTH AFRICA	0.9%
BELGIUM	0.9%	FRANCE	1.8%	MOROCCO	0.9%	SOUTH KOREA	0.9%
BRAZIL	0.9%	GEORGIA	0.9%	NEW ZEALAND	0.9%	SPAIN	1.8%
BRITAIN	0.9%	GERMANY	3.6%	NIGERIA	0.9%	SRI LANKA	0.9%
CANADA	2.7%	ICELAND	0.9%	NORTHERN IRELAND	1.8%	SWITZERLAND	0.9%
CHINA	2.7%	INDIA	9.0%	PERU	0.9%	TAIWAN	0.9%
DUBAI	0.9%	ITALY	0.9%	PHILIPPINES	0.9%	UNITED ARAB EMIRATES	8.1%
EGYPT	0.9%	JAPAN	0.9%	RUSSIA	2.7%	UKRAINE	0.9%
UNITED KINGDOM	17.1%	KENYA	0.9%	SCOTLAND	0.9%	UNITED STATES OF AMERICA	13.5%
FIJI	0.9%	LITHUANIA	0.9%	SENEGAL	0.9%	VENEZUELA	0.9%
FINLAND	3.6%	MALAYSIA	0.9%	SINGAPORE	1.8%	VIETNAM	0.9%
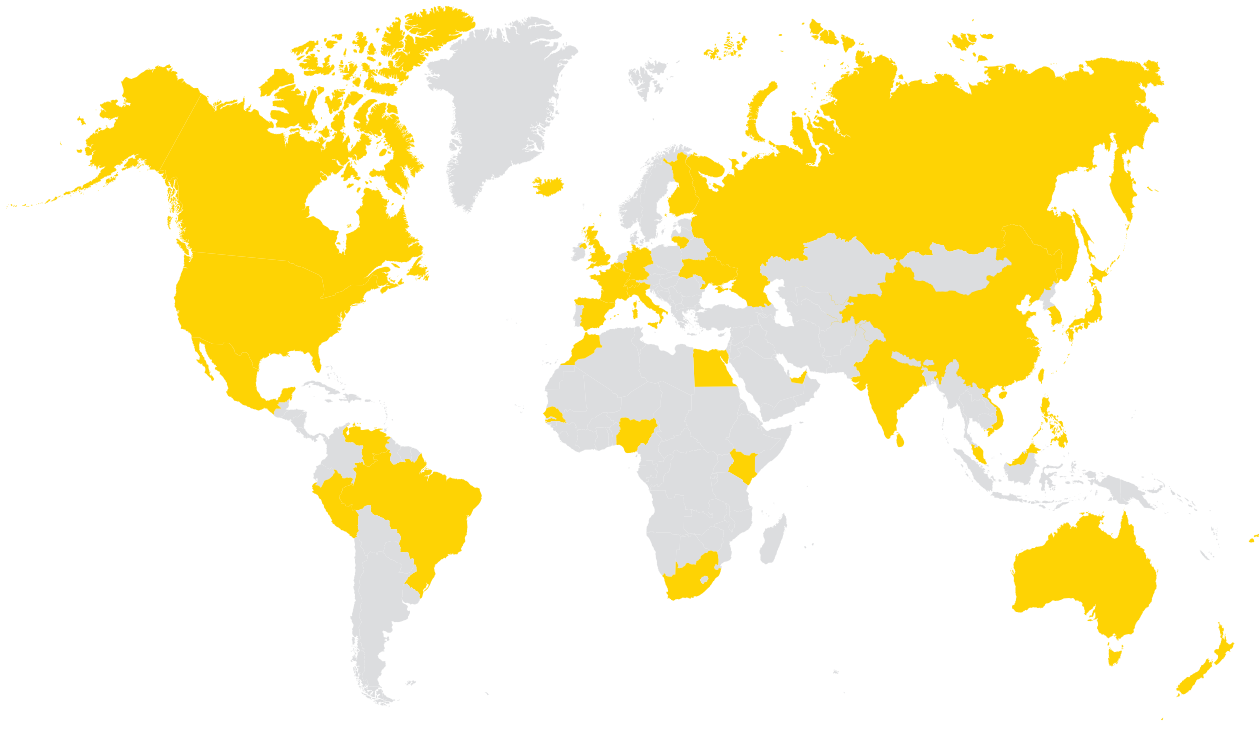
The average age of participants for this survey was 14.32, with both the median and mode being 16. Teenagers (aged 13 to 18) accounted for 54.9% of responses (45.1% aged 12 and below).

Percentage of participants vs. age

Median age 16
Mode 16
Average age 14.32

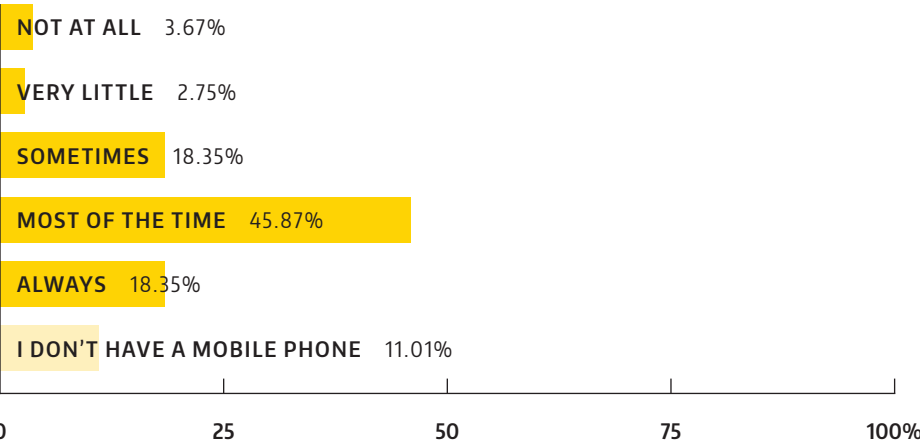| Age	%
6	1.9%
7	4.8%
8	1.9%
9	2.9%
10	4.8%
11	4.8%
12	3.8%
13	4.8%
14	8.7%
15	9.6%
16	21.2%
17	20.2%
18	10.6%

0   5   10   15   20   25%
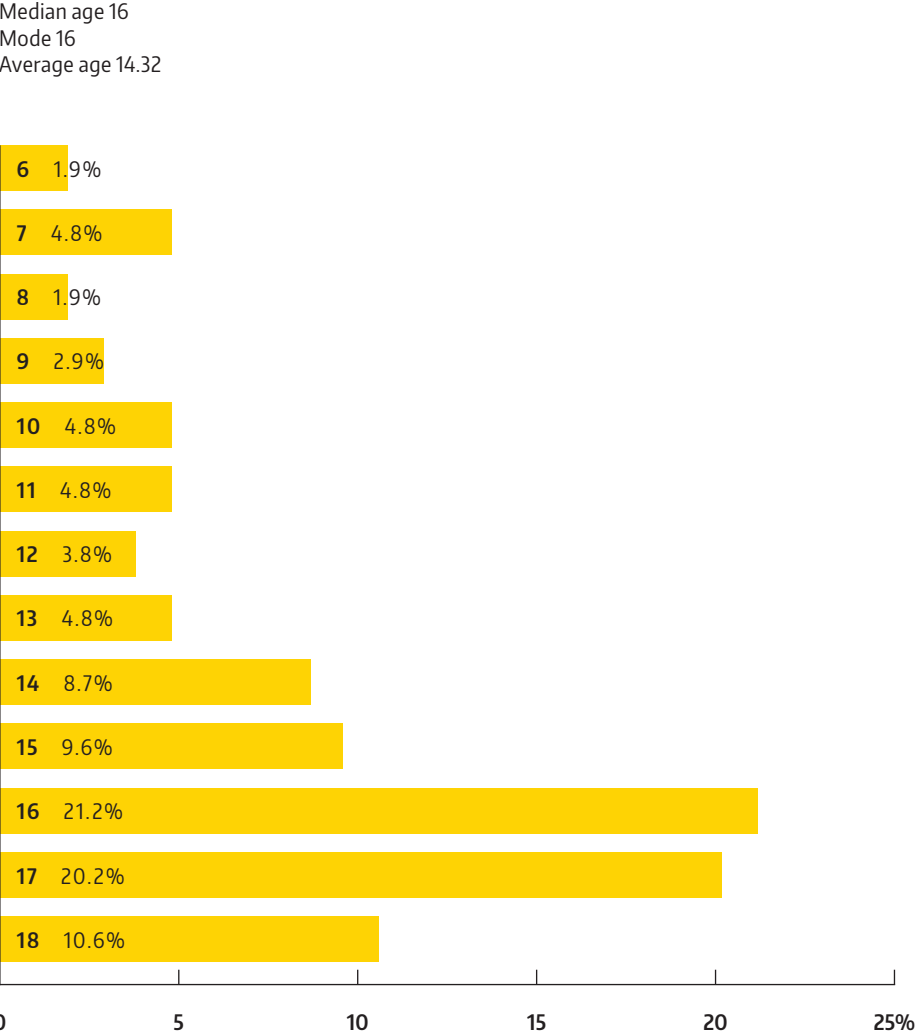
Surprisingly, almost 46% of students surveyed felt that they were using their mobile device in a healthy and responsible way "most of the time". Almost a quarter (24.77%) felt that they were not using their digital devices in a healthy and responsible way at-least "sometimes". 11.01% reported not having a mobile phone despite having access to a digital device to complete this survey.

"I guess now it comes down to accepting the fact that digital devices have become a huge part of our everyday life and are now even an extension of our brain. It terrifying, but we have to use it to our advantage and find the right ways to use it appropriately. It can be an excellent resource, but is beginning to consume our lives. So far, the only healthy use of digital devices I've seen today are for research and Microsoft. But nothing more. There have to be other productive ways to use these devices in classrooms and learn about its effects!"

– STUDENT AGED 18 FROM MEXICO

What extent are you using your mobile device in a healthy and responsible way?

NOT AT ALL	3.67%
VERY LITTLE	2.75%
SOMETIMES	18.35%
MOST OF THE TIME	45.87%
ALWAYS	18.35%
I DON'T HAVE A MOBILE PHONE	11.01%

0   25   50   75   100%

"In most schools in China, digital devices are not commonly used as learning tools in school. Teenagers tend to use them at home for leisure, and it may lead to unhealthy use of cell phone and computer."
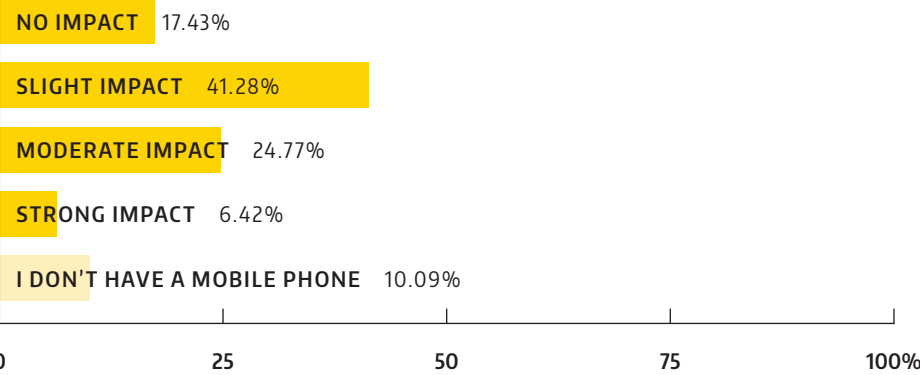
– STUDENT AGED 18 FROM CHINA

The highest number of students surveyed (41.28%) reported that their mobile phone only has a "slight" negative impact on their wellbeing. 31.19% said it has a "moderate" or "strong" negative impact. Only 17.43% felt that their mobile usage had no negative impact on their wellbeing.

"Digital devices are necessary evils of which most students are addicted to. Hence the need for awareness and healthy applications that can channel student's addiction into positivity and make them a contributor to the global village"

– STUDENT AGED 18 FROM NIGERIA

Do you think your mobile phone usage has any negative impact on your wellbeing?

NO IMPACT	17.43%
SLIGHT IMPACT	41.28%
MODERATE IMPACT	24.77%
STRONG IMPACT	6.42%
I DON'T HAVE A MOBILE PHONE	10.09%

0   25   50   75   100%

"In very extreme cases things like social media can lead to bullying or exclusion but in my personal experience there has never been an issue. Young people are a lot more responsible with social media than people give them credit for."

– STUDENT AGED 17 FROM THE UNITED KINGDOM

Collectively, 81.64% of students think adults do not model healthy habits with their digital devices all the time. This only leaves less than a fifth of students thinking adults do not have room to improve.

To what extent do you think adults model healthy habits with their use of computers and/or phones?
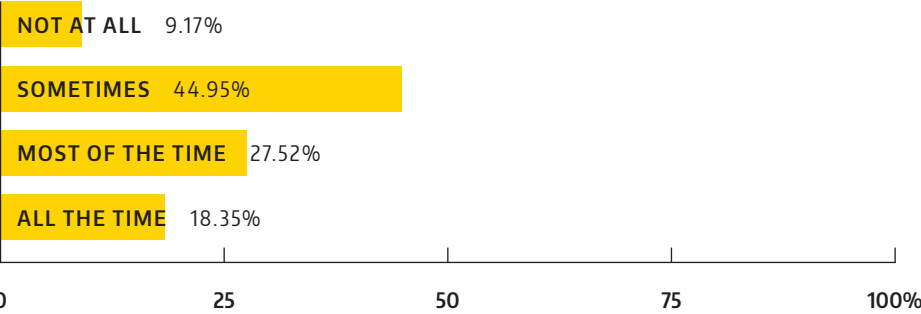
NOT AT ALL	9.17%
SOMETIMES	44.95%
MOST OF THE TIME	27.52%
ALL THE TIME	18.35%

0   25   50   75   100%

100% of students thought it is at-least slightly important for schools to teach healthy habits with digital devices. Almost two-thirds of students strongly indicated that it is important for schools to teach and one third thought is was moderately important.
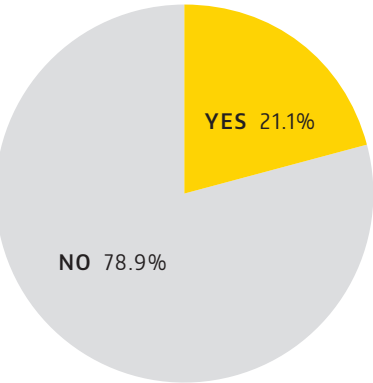
A little over one fifth of students had personally witnessed cyberbullying in the last three months.

Have you personally witnessed or experienced cyberbullying within the past 3 months?

YES 21.1%

NO 78.9%

To what extent do you think it is important for schools and teachers to teach healthy habits with digital devices today?

NOT AT ALL IMPORTANT	0.00%
SLIGHTLY IMPORTANT	4.59%
MODERATELY IMPORTANT	33.03%
STRONGLY IMPORTANT	62.39%

0   25   50   75   100%

To what extent do you think the prevalence of gaming and/or social media is currently a problem with school students today?

NOT AT ALL A PROBLEM	22.94%
A SLIGHT PROBLEM	18.35%
A MODERATE PROBLEM	33.94%
AN EXTREME PROBLEM	24.77%

0   25   50   75   100%

The students surveyed were somewhat evenly mixed in their opinions if gaming and/or social media is a problem. Almost 4/5ths thought it is at-least a slight problem and almost 60% think it is at-least a moderate problem. Almost a quarter consider it an extreme problem.

"Many of the digital devices come with platforms and apps that are inherently designed to be addictive and steal our focus. However using the internet effectively, responsibly and safely are important skills which should be developed by parents, educators and school counselors. Being able to use digital devices efficiently is an important part of education for students and there seems to be lots of good arguments for the benefits of these technologies to aid learning."

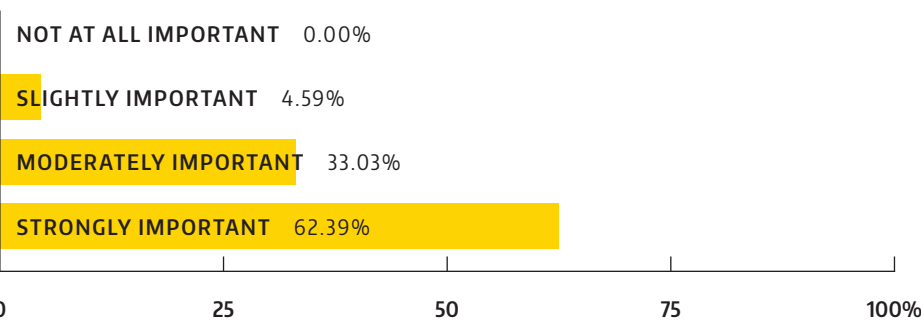– STUDENT AGED 16 FROM UNITED ARAB EMIRATES

"It is of vital importance to teach students at primary school level healthy use of technology."

– STUDENT AGED 17 FROM INDIA

"I think students should be educated on how to use their devices to make the best out of them. They must be aware of cyberbullying and the precautions they have to take while on their devices."

– STUDENT AGED 14 FROM UNITED ARAB EMIRATES

100% of students thought it is at-least slightly important for schools to teach healthy habits with digital devices. Almost two-thirds of students strongly indicated that it is important for schools to teach and one third thought it was moderately important.

Digital Wellbeing Survey for Teacher Participants

Students: n=86

Teachers from India participated in this survey the most, making up almost a quarter of responses. Not surprisingly, the two highest region of participants came from the United Kingdom (17.1%) and America (12.6%). Over two thirds came from 16 other countries.

Which country are you from?

Country	%	Country	%	Country	%	Country	%
ALBANIA	1.1%	ENGLAND	1.1%	MALAYSIA	1.1%	SOUTH AFRICA	1.1%
ARGENTINA	1.1%	FINLAND	3.3%	MEXICO	5.6%	SPAIN	1.1%
AUSTRALIA	3.3%	GHANA	1.1%	NETHERLANDS	1.1%	SWEDEN	1.1%
BELGIUM	1.1%	INDIA	23.3%	NICARAGUA	1.1%	TAIWAN	1.1%
BRAZIL	1.1%	BHUTAN	1.1%	NIGERIA	1.1%	THE NETHERLANDS	1.1%
CANADA	1.1%	UNITED KINGDOM	6.7%	NORWAY	1.1%	UGANDA	1.1%
CHINA	1.1%	JAPAN	1.1%	PAKISTAN	2.2%	UKRAINE	1.1%
COLOMBIA	4.4%	JORDAN	1.1%	PHILIPPINES	1.1%	UNITED STATES	15.6%
CYPRUS	1.1%	KUWAIT	1.1%	PORTUGAL	2.2%	URUGUAY	1.1%
EGYPT	1.1%	MACEDONIA	1.1%	SERBIA	1.1%		
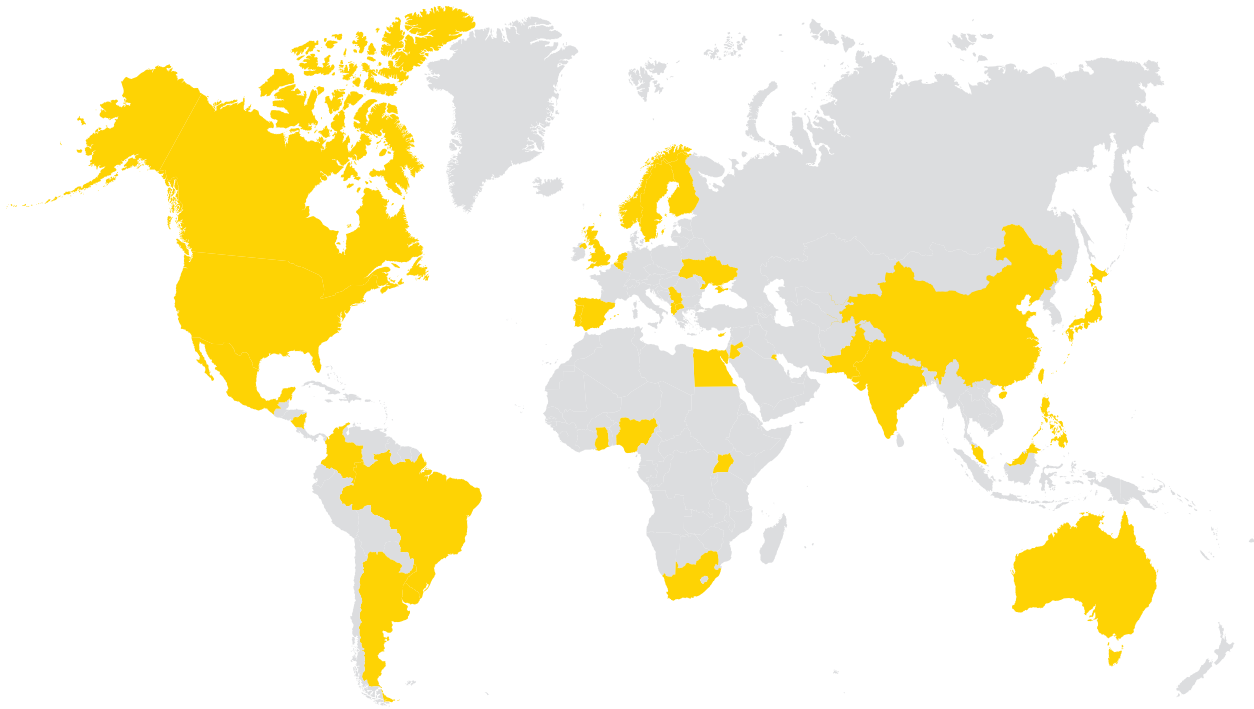
100% of teachers indicated that education around digital wellbeing is at-least moderately needed. Over half said selected the most extreme option and indicated that they're "Needed a great deal".

Over 15% of teachers surveyed indicated they do not have any tools on promoting healthy use of online safety for their context, and almost 7% said current education practises/technologies are "Not at all effective". A relatively even spread across thought they were slightly to very effective (20%) and 12.79% said they were extremely effective. These results suggest the participants came from a range of contexts and had varying perspectives on the effectiveness of digital wellbeing education.

The results for this survey item on online communities had relatively similar percentages to the previous question about online safety. However, only 3.49% indicated they were not at all effective and 2.33% said they did not know.

Many ideas came out of responses to the 5th question "Can you think of any other elements of Digital Wellbeing that should be taught to students at a school level?":
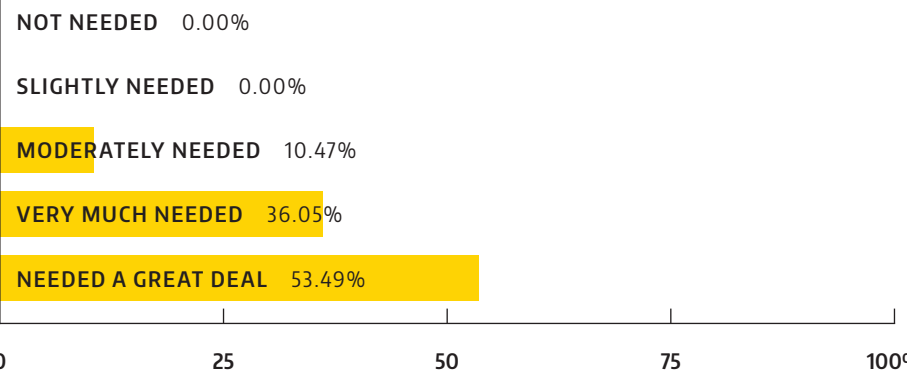
- Copyright education
- Digital Wellbeing needs to be a culture that is modelled
- Screen time guidance for a balance with non-digital activities
- Many aspects related to the effective use of social media
  - How to comment and react to negativity online
  - Cyberbullying
  - Authenticity/accuracy/fake news on content
  - Fear Of Missing Out (FOMO)
  - Understanding the difference between being connected versus an authentic connection
- Privacy education
- Benefits e.g. access to MOOCs, learning skills
- Ethical issues associated with digital platforms
- Connecting online and offline together more effectively
- Empathy
- Awareness
- Healthy smart phone use

"Digital Wellbeing is not limited to what happens online only – it is about the connections that exist or are purposefully created between the digital and real world. It is critical to find and foster the ways of bringing the two worlds together for a child's overall wellbeing."
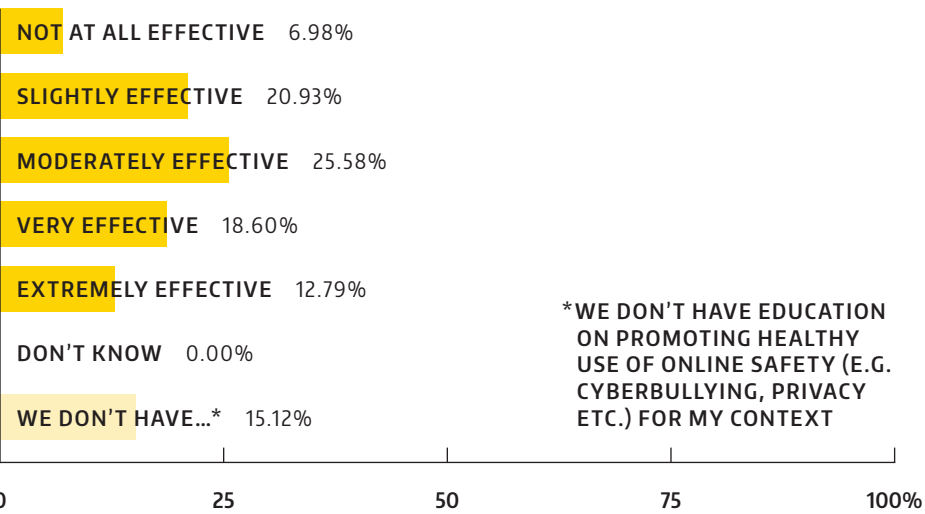
– TEACHER FROM FINLAND

Almost 100% of teacher participants said more solutions are needed, with 45.35% saying that more solutions are "very much needed" and 41.86% selecting the most extreme option of "Needed a great deal".
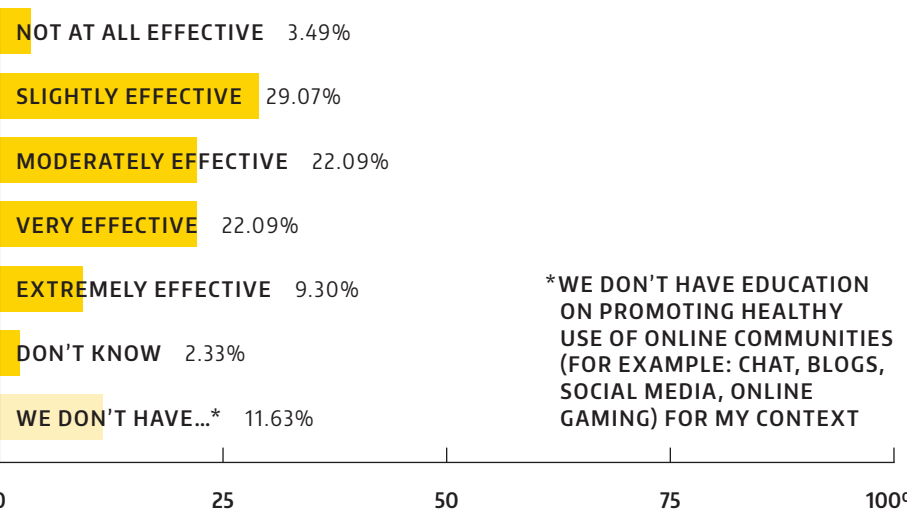
To what extent do you think education around digital wellbeing is needed for a school context?

NOT NEEDED   0.00%

SLIGHTLY NEEDED   0.00%

MODERATELY NEEDED   10.47%

VERY MUCH NEEDED   36.05%

NEEDED A GREAT DEAL   53.49%

0   25   50   75   100%

How effective do you think education on digital wellbeing is in promoting healthy use of online safety (e.g. cyberbullying, privacy etc.) for your context?

NOT AT ALL EFFECTIVE   6.98%

SLIGHTLY EFFECTIVE   20.93%

MODERATELY EFFECTIVE   25.58%

VERY EFFECTIVE   18.60%

EXTREMELY EFFECTIVE   12.79%

DON'T KNOW   0.00%

WE DON'T HAVE…*   15.12%

*WE DON'T HAVE EDUCATION ON PROMOTING HEALTHY USE OF ONLINE SAFETY (E.G. CYBERBULLYING, PRIVACY ETC.) FOR MY CONTEXT

0   25   50   75   100%

How effective do you think education on digital wellbeing is in promoting healthy use of online communities (for example: chat, blogs, social media, online gaming) for your context?

NOT AT ALL EFFECTIVE   3.49%

SLIGHTLY EFFECTIVE   29.07%

MODERATELY EFFECTIVE   22.09%

VERY EFFECTIVE   22.09%

EXTREMELY EFFECTIVE   9.30%

DON'T KNOW   2.33%

WE DON'T HAVE…*   11.63%

*WE DON'T HAVE EDUCATION ON PROMOTING HEALTHY USE OF ONLINE COMMUNITIES (FOR EXAMPLE: CHAT, BLOGS, SOCIAL MEDIA, ONLINE GAMING) FOR MY CONTEXT

0   25   50   75   100%

To what extent are more solutions needed in school on digital wellbeing?

NOT AT ALL NEEDED   0.00%

SLIGHTLY NEEDED   0.00%

MODERATELY NEEDED   11.63%

VERY MUCH NEEDED   45.35%

NEEDED A GREAT DEAL   41.86%

I DON'T KNOW WHAT SOLUTIONS ARE AVAILABLE   1.16%

0   25   50   75   100%
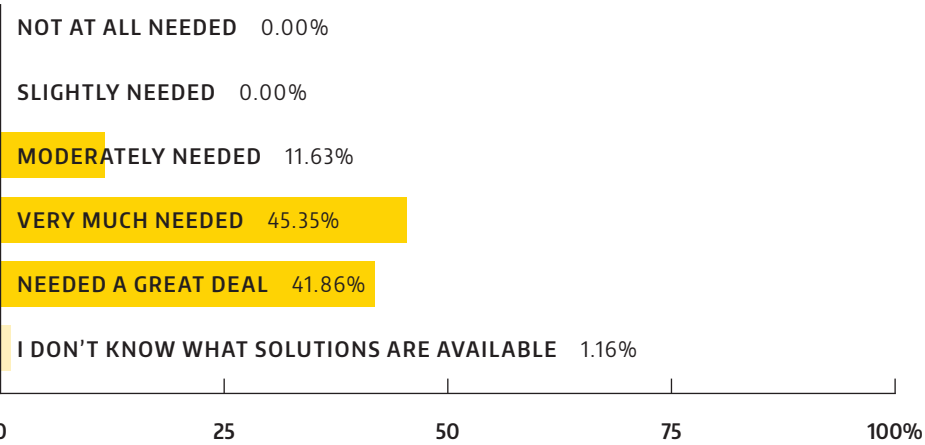
81.39% indicated that they have access to at-least a few resources to encourage school students to adopt healthy habits with digital devices. However, only 2.33% said they had all the tools/resources they need. 9.3% said they do not have any and almost 7% said they do not know what resources are available.

100% of respondents indicated that they may use tools and resources they knew were effective on digital wellbeing. Significantly, 90.7% selected they would either "likely" or "definitely" use them.

Many ideas came out of responses to the 9th related question "If you answered 'Maybe' or 'Not at all', what are your biggest roadblocks?":
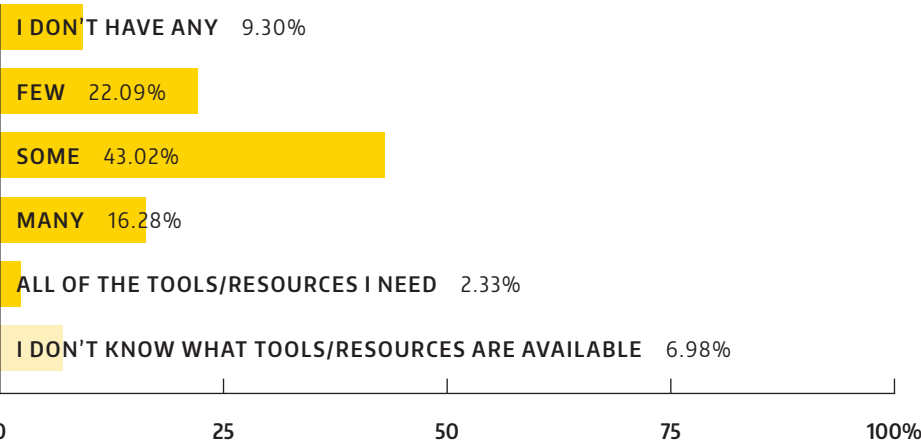
· time
· lack of visioning system level intervention
· cost/budget allocation
· access for under-resourced children
· support
· needs more exploration
· parental involvement
· more research needed
· mindset/attitude change

"Proposed tools need to be tested, certified, proved to work and doable in terms of implementation."

– TEACHER FROM FINLAND

Surprisingly, 83.7% think that adults do not model healthy habits with digital devices (only 16.3% said yes).

To what extent do you have the tools/resources to effectively encourage school students to adopt healthy habits with digital devices?

I DON'T HAVE ANY   9.30%
FEW   22.09%
SOME   43.02%
MANY   16.28%
ALL OF THE TOOLS/RESOURCES I NEED   2.33%
I DON'T KNOW WHAT TOOLS/RESOURCES ARE AVAILABLE   6.98%

0   25   50   75   100%

If you knew about and had access to effective tools in order to help students adopt healthy habits with digital devices – how likely would you use them?

NOT AT ALL   0.00%
MAYBE   9.30%
LIKELY   33.72%
DEFINITELY   56.98%

0   25   50   75   100%
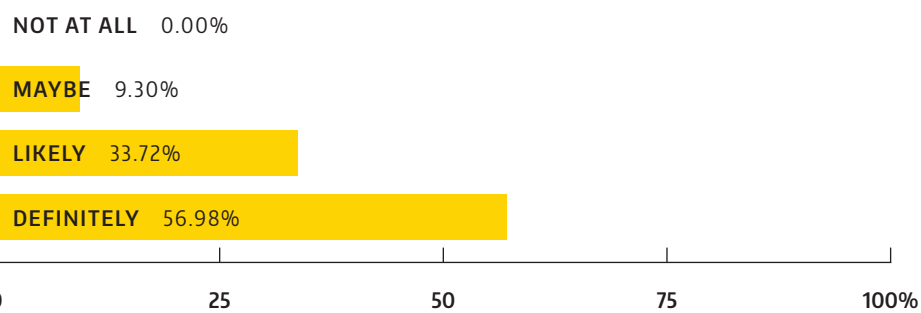
Do you think adults effectively model healthy habits with digital devices?
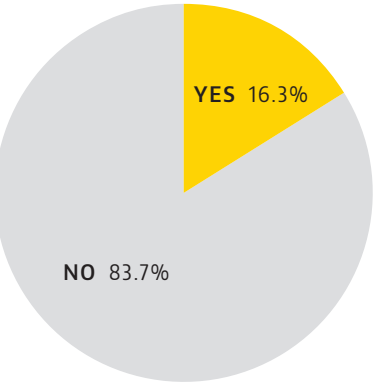
YES 16.3%
NO 83.7%

100% of teachers indicated that education around digital wellbeing is atleast moderately needed. Over half said selected the most extreme option and indicated that they're "Needed a great deal".

In the final open question, there were seven themes that emerged from the participant responses on their feelings towards the successes and/or challenges of digital wellbeing education in schools:

There is too much focus on digital tools in education

"I would like to say that teaching digital wellbeing should be rooted in values such as respect, empathy, and safety among others. Sometimes, digital wellbeing simply becomes how to avoid this and that digital threats. The core values of being a good person whether physical or digital are not usually shown."

– TEACHER FROM PHILIPPINES

Little access to digital wellbeing education for their context

"There is little evidence of digital wellbeing education in schools in Kuwait. This has led to problems with cyberbullying, rumor-mongering and obsession with social media, etc."

– TEACHER FROM KUWAIT

Time constraints

"In India especially because the students are already burdened with curriculum this is given least importance."

– TEACHER FROM INDIA

Educators and adults need professional development on digital wellbeing

"It is a fraught area. Perhaps because so many adults struggle with their own digital wellbeing, we don't know how to model, let alone teach positive habits and behaviours. Maybe we need to start with PD for educators on the effects of poor digital wellbeing and ways to increase one's own digital wellbeing, or addressing school wide cultural practices, before even focusing on our students."

– TEACHER FROM FINLAND/AUSTRALIA

"The greatest challenge is that the parents, teachers, school managements do not understand internet, data science or anything related to cyber security."

– TEACHER FROM INDIA

"I think that schools want to teach digital wellbeing but often they don't have the resources or don't fully understand how youth are using digital platforms in this day of age."

– TEACHER FROM THE UNITED STATES

Education around digital wellbeing is needed urgently for the modern world

"There is an urgent need to establish a protocol in schools to teach all students about digital wellbeing. At the moment it is not compulsory and teachers and schools act very independently. Besides, parents should be taught about digital wellbeing to be role models for their children. Teachers should be aware on what and which tools are more helpful. At the same time that they acquire good digital habits too."

– TEACHER FROM SPAIN

"Schools, like the rest of society, are both beneficiaries and victims of the increasing digitalization of life in general. As much as computers and the internet offers us the benefits of increased knowledge and connection with others globally, conscious intent must also be set on facilitating local connections and learning which is hands-on (not on the computer) and person-to-person (again, without the use of computers). I realize my comments goes outside of the scope of the question in some ways, but I believe digital wellbeing must take into the keyword "holistic", of which digital activities should only remain a part."

– TEACHER FROM BELGIUM

A multi-stakeholder effort needed

"To create a school community where all the stakeholders share the common values and goals, and respect each other."

– TEACHER FROM ARGENTINA

A mindset change on a societal and systemic level is needed in school education

"There needs to be a mindset change – in various countries/cultures, if a subject matter is non-examinable, then it is still regarded as unimportant."

– TEACHER FROM MALAYSIA

"Challenges include buy-in from classroom teachers who may not consider this part of their realm with all of the time constraints of curriculum demands."

– TEACHER FROM THE UNITED STATES

Methodology

At HundrED, we use the following definition of innovation in education: *Innovation in education can be defined as meaningful improvements in a new or modified practice and/or technology that supports any part of the educational ecosystem (for example: skills, teachers, assessment, environment and/or systems, and leadership).*

Definition of digital wellbeing

As mentioned in the literature review, the definition of digital wellbeing used for this spotlight adapted an education definition of the wider concept of wellbeing by McCallum and Price (2016) as follows:

Wellbeing refers to a holistic view of living a life that is physically and emotionally healthy. For example, wellbeing can include aspects from: social, emotional, self-confidence, self-regulation/monitoring, enjoyment, mental, and more (McCullum & Price, 2016).

Digital wellbeing adapts this definition by McCallum and Price (2016) as: the ability to live holistically healthy lives considering activities that involve the use of digital technologies.

The scope of this project will focus particularly on promoting positive online communities, which could include the prevention of digital harassment, online bullying, and addiction. Applications that just limit the usage (of a smart-phone for instance) were not considered as innovations for this spotlight as they lack an active educational element.

Reference: McCallum, F., & Price, D. (2016). Nurturing wellbeing development in education: From little things, big things grow. New York; Abingdon, Oxon: Routledge.

Our innovation selection process can be distilled into three distinct stages:

| Stage 1	Stage 2	Stage 3
involves discovering leading innovations with HundrED's global community of over 350+ ambassadors and 80+ youth ambassadors	is where we review each innovation for its impact and scalability	a shortlist of innovations that are worthy of being selected are reviewed by an elected advisory board, made of over 30 experts in education and young people including academics, education consultants, school leaders, teachers, students, and innovators from around the world.

To be selected, innovations must have demonstrated evidence for the following two main criteria:

Impact: Evaluated as a valuable improvement within the innovation's context. All innovations must have at-least 1-year of being implemented with its intended users.

Scalability: Either the innovation is actively scaling to other contexts or has a high potential to scale for others to adopt its practice/technology.

We believe that the diversity of experienced perspectives from a wide range of contexts is fundamentally important to our selection process. With help from our highly experienced advisory board, we can be more certain if an innovation is both highly impactful and scalable to other contexts.

The selection of the Advisory Board involved ensuring they support our mission to help every child flourish in life and a careful balance for a range of experienced stakeholders in education (particularly for gender and cultural diversity). In addition, they must have had some experience or expertise on the topic of digital wellbeing.
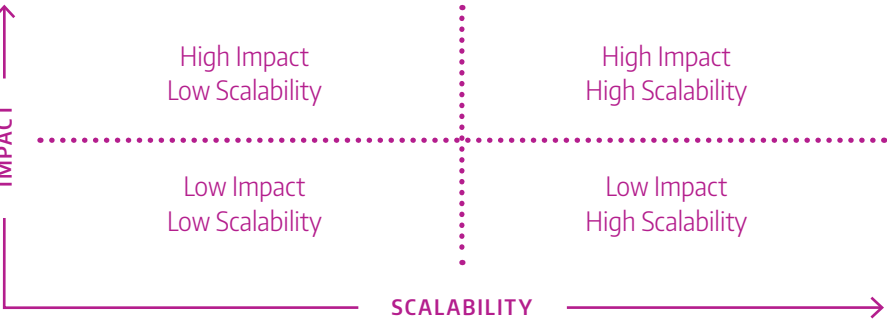
The factors of impact and scalability were plotted on a graph by each Advisory Board Member using HundrED's evaluation tool, which is divided into four quadrants. HundrED are looking for innovations that many stakeholders in education consider to be highly impactful and scalable in the top right quadrant.

Each plot on the graphs below represent a review for one of our shortlist of innovations.
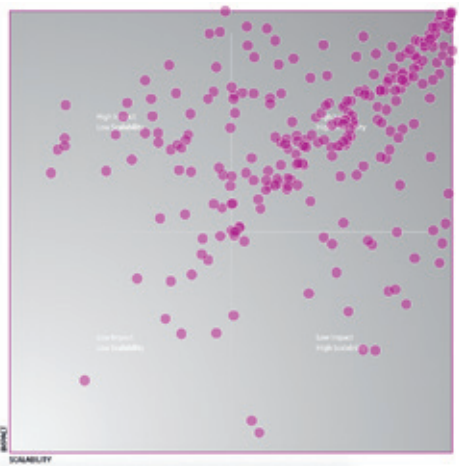
Each reviewer also provided specific comments about each innovation that explains their evaluation on our mapping tool. Finally, they recommended if the innovation should be selected.

All Advisory Board Member responses were considered to identify strengths and weaknesses from multiple perspectives about each innovation. These evaluations were discussed with the HundrED Research Team and Supercell to make the final selections.

Innovations

Submitted innovations

Throughout our innovation search, we found 102 innovations submitted for the digital wellbeing spotlight. The majority came from the United States or the United Kingdom and had been established in the last 6 years. In general, many of the innovations targeted students in middle and high school, and covered the topics of: digital media literacy, computer science, social media use, cybersecurity and cyberbullying. The innovations were selected to cover a balance of these different aspects of digital wellbeing. As teachers were found to be lacking the skills and knowledge to both model and teach the various aspects of digital wellbeing from our literature review and survey, 5 innovations were selected that specifically target educators.

Selected innovations

Of the selected innovations, they've:

· been established from 2012 to 2017
· spread to 1 to 108 countries
· a range from 798 to 430000 total users.

CHECKOLOGY® VIRTUAL CLASSROOM
WASHINGTON DC, UNITED STATES
Through the Checkology virtual classroom, middle school and high school students learn to separate fact from fiction, to understand the vital role of a free press in a democracy, and to become informed and engaged participants in civic life.

CYBER-SENIORS
UNITED STATES, CANADA
Cyber-Seniors' goal is to bridge the digital divide and connect generations through technology.

DIGITAL SCHOOLHOUSE
UNITED KINGDOM
Ukie's Digital Schoolhouse together with Nintendo UK, uses play-based learning to engage the next generation with Computing.

EMPOWERMENT AND DIGITAL WELLNESS
UNITED STATES
A proactive, peer to peer curriculum designed to educate and empower students to use social media positively.

INSIDE OUT – WE ALL BELONG
AUCKLAND, NEW ZEALAND
Learning resource to help increase understanding and support of sex, gender and sexuality diversity, so we can all belong.

LOVE LETTERS FOR COMPUTERS
FINLAND
Love Letters for Computers is free YouTube series with classroom materials to introduce computer science for primary school teachers.

MEDIAGIRLS
UNITED STATES
We launched a cultural revolution in which girls discover their self-worth, think critically about sexist media, and harness the power of media for positive change.

NEWSLITCAMP
UNITED STATES
NewsLitCamp connects educators with local journalists for a unique professional development experience.

PROJECT ROCKIT ONLINE
MELBOURNE, AUSTRALIA
Online Cyber-Bullying and Leadership Workshops for Year 7–9 Students.

THE ECONOMIST EDUCATIONAL FOUNDATION
UNITED KINGDOM
An independent charity that combines the journalistic expertise of The Economist newspaper with teaching know-how.

The platform's interactive multimedia lessons, hosted by leading journalists and experts in digital media and the First Amendment, help educators equip students in middle school and high school with the tools to evaluate and interpret what they read, watch and hear so they know what to trust, share and act on.

Through the Checkology virtual classroom, middle school and high school students learn to separate fact from fiction, to understand the vital role of a free press in a democracy, and to become informed and engaged participants in civic life.

Checkology®
Virtual Classroom

Washington DC, United States

Young people are dealing with the most challenging information ecosystem in human history, rife with misinformation, hoaxes and falsehoods that distort students' understanding of their world. To become critical thinkers who demand the truth, they must develop news literacy skills.

NLP believe that news literacy education — learning how to know what to believe — is the most effective approach to meeting this challenge. The Checkology virtual classroom teaches students to separate fact from fiction, to understand the vital role of a free press in a democracy, and to become informed and engaged participants in civic life.

The platform's interactive multimedia lessons, hosted by leading journalists and experts in digital media and the First Amendment, help educators equip students in middle school and high school with the tools to evaluate and interpret what they read, watch and hear so they know what to trust, share and act on.

The News Literacy Project (NLP), a U.S.-based nonpartisan education nonprofit, empowers educators to teach students the skills they need to become smart, active consumers of news and other information and engaged, informed participants in civic life. The Checkology virtual classroom is an enhanced e-learning platform where students in middle school and high school learn the critical-thinking skills they need to assess the torrent of information that they encounter every day.

News Literacy Project
info@newslit.org
https://newslit.org/
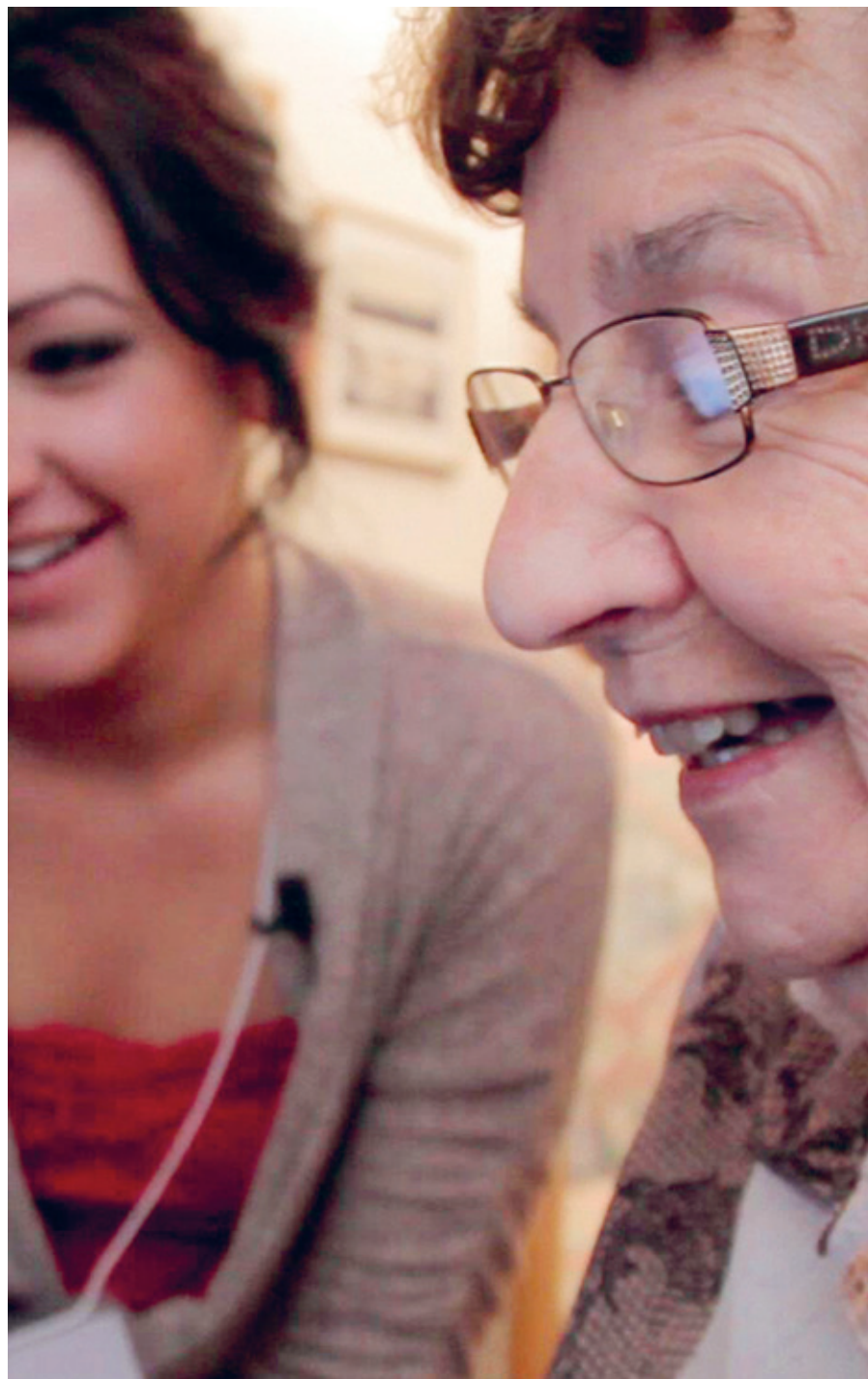
Teachers/Users	2016	108
TARGET GROUP	ESTABLISHED	COUNTRIES

Cyber-Seniors' goal is to bridge the digital divide and connect generations through technology.

Cyber-Seniors: Connecting Generations

United States, Canada

Cyber-Seniors trains students to become technology mentors for older adults and provides them with the opportunity to receive practical experience while earning service hours. Upon completion students are awarded a completion certificate and become eligible for awards and prizes. Through this experience students develop important job skills that enhance opportunities for future employment.

Building on the award-winning film and high school community service project, Cyber-Seniors is a non-profit organisation that encourages tech-savvy youth to put their knowledge to good use by mentoring older adults in technology.

The program is comprised of the following two phases.

PHASE 1: MENTOR TRAINING PROGRAM

Students watch 6 interactive video lessons on the Cyber-Seniors web portal, that cover the following themes:

1. Intro to Cyber-Seniors
2. Tips for Working with Older Adults
3. Teaching Technology to Older Adults
4. Why Measure?
5. Staying Safe Online
6. Troubleshooting Technology

After completing each lesson, students take a short online quiz which earns them a Cyber Seniors Mentor Training Certificate and digital badge.

Educators may also lead students through a number of learning activities (provided on the web portal) that help develop a variety of skills that further prepare them for their role as digital mentors.

PHASE 2: VOLUNTEER EXPERIENCE

In this Phase students apply their new skills by volunteering as digital mentors. Over 1200 resources are available on the Cyber-Seniors web portal to assist students in their mentoring role. The system automatically logs the students volunteer time and awards them a Cyber-Seniors Volunteer Service Certificate and digital badge after completing 16 hours.

After completing each lesson, students take a short online quiz which earns them a Cyber Seniors Mentor Training Certificate and digital badge.

info@cyberseniors.org
https://cyberseniors.org

All	2015	5
TARGET GROUP	ESTABLISHED	COUNTRIES

Digital Schoolhouse is a not-for-profit programme which enables primary schools to experience free creative computing workshops from their local Schoolhouse. Combined with ingenious computing, the programme also engages thousands of students with its pioneering and immersive careers education. Schoolhouses are not charged for their participation in the programme, nor for the support that they receive.

Digital Schoolhouse (DSH) is delivered by the UK games industry trade body Ukie and is supported by the Department of Digital, Culture, Media and Sport (DCMS).

THEN

In response to an outdated ICT education and with recommendations from the NextGen Skills Report, the new Computing curriculum was launched in 2014. This was a breakthrough. By aiming to equip pupils with relevant digital skills, it would enable the next generation to succeed in a digital economy, whilst encouraging homegrown talent. With such revolutionary news, reactions within the education sector were mixed. Whilst some teachers jumped for joy (like us!), others felt uncertain about implementing the new curriculum.

Digital Schoolhouse was ready to provide a solution. With seed funding from the Mayor of London's Schools Excellence Fund (LSEF) and expertise from Mark Dorling and Shahneila Saaed, the DSH programme was to be rolled out across the UK.

NOW

By helping teachers to explore and innovate ways to approach the new curriculum, as well as developing resources and CPD training, Ukie's Digital Schoolhouse was welcomed with open arms.

Starting with only 9 Schoolhouses in 2014, our network is now 56 strong and predicted to reach 32,000 pupils and 4000+ teachers over the next academic year.

WHAT WE DO

The programme has a wholistic approach to the improvement of computing education, everything from teacher CPD, to engaging classroom resources and innovative careers education.

Workshops – find your nearest Schoolhouse to book a workshop visit:
https://www.digitalschoolhouse.org.uk/book-a-workshop

Online Resource Library – free to download resources using play-based learning:
https://www.digitalschoolhouse.org.uk/resources

Esports in education – Together with Nintendo Switch, the Digital Schoolhouse Super Smash Bros. Ultimate Team Battle is expected to reach over 6000 pupils in schools & colleges across the UK this academic year. Read more:
https://www.digitalschoolhouse.org.uk/esports

Digital Schoolhouse
contact@digitalschoolhouse.org.uk
https://www.digitalschoolhouse.org.uk/

Ukie's Digital Schoolhouse together with Nintendo UK, uses play-based learning to engage the next generation with Computing.

Digital Schoolhouse

United Kingdom

Our ingenious computing workshops are aimed at local primary schools across the UK. Delivered by our expert network of Schoolhouses and lead teachers, you can experience our unique approach to play-based learning through innovative activities and free adaptable resources. Underpinned by evidence-based research and combined with groundbreaking careers education, the programme successfully bridges the gap between academia and industry, to ensure pupils are aptly equipped for the future digital economy.

"The level of training and sharing of good practice they have introduced me to is simply unrivalled by any other organisation I have encountered."

- JOHN STITT, LEAD TEACHER, DE LA SALLE COLLEGE

Teachers/Users	2014	1
TARGET GROUP	ESTABLISHED	COUNTRY

A proactive, peer to peer curriculum designed to educate and empower students to use social media positively.

Empowerment and Digital Wellness

United States

The #ICANHELP curriculum is a proactive curriculum specifically designed by teachers to prevent negativity and spread positivity and digital citizenship in schools. The lessons in the curriculum will connect offline behavior with online behavior, encouraging deep thought, reflection, and positive change.

"We experienced the rapid increase in social media use and the stress and anxiety that negative online behavior puts on school cultures. We wanted to empower teens with a common sense approach."

- MATTHEW SOETH, CO-FOUNDER EXECUTIVE DIRECTOR #ICANHELP

WHAT WE DO?

#ICANHELP educates and empowers students to use social media positively and celebrate their achievements through #Digital4Good, our nationally live-streamed award event hosted at the headquarters of well-known social media companies, including Twitter and Facebook.

WHY WE DO IT?

Nearly half of American children have been cyberbullied online. #ICANHELP's mission is to educate and empower students and adults to use social media positively.

Rather than tell students what not to do, we show them what they can do. We started in 2013 working with students to help them manage online drama through training on how to report and respond to negative content and build positive social media campaigns. Since then, we launched #Digital4good, our annual event celebrating student work. #Digital4Good celebrates and rewards students for their efforts. The #ICANHELP curriculum is in that same spirit as it provides a structure and framework for young people to talk about about bigger social issues as well as have a system to implement change on their campus or in their community.

Nearly half of American children have been cyberbullied online. #ICANHELP's mission is to educate and empower students and adults to use social media positively.

Empowerment and Digital Wellness
icanhelp@icanhelpdeletenegativity.org
https://www.icanhelpdeletenegativity.org/

All	2013	2
TARGET GROUP	ESTABLISHED	COUNTRIES

Learning resource to help increase understanding and support of sex, gender and sexuality diversity, so we can all belong.

Inside Out
– We All Belong

Auckland, New Zealand

Inside Out – We All Belong is a set of freely available video-based teaching resources which aim to decrease homo-, bi-, and trans-phobic bullying by using a norm-challenging pedagogical approach to cultivate critical thinking, perspective-taking and empathy. A pedagogy guide and lesson resources are included to support teachers.

"I realised like before we had the Inside Out videos lots of people were saying like you're so gay and things like that and that definitely dropped down after."

- STUDENT (AGED 12 YEARS). INSIDE OUT EVALUATION REPORT (2016).

As more students and educators come out as lesbian, gay, bisexual, transgender, queer/questioning, intersex, asexual and otherwise diverse in their sex, gender or sexuality (LGBTQIA+), schools and educators are seeking to foster more supportive environments. To do so, educators say they need high quality resources to support this work. Additionally they need guidance on effective approaches, lesson ideas and guides, and particular strategies to construct a conducive learning environment as well as guidance on pitfalls to avoid. Inside Out – We All Belong provide this support. Watch a trailer introducing the resources here.

The resources are the result of a collaboration between an LGBTQIA+ youth organisation, a teacher-professional development expert, and a communications agency specialising in non-profit work. Traditionally when schools wanted to address these areas they would ask an LGBTQIA+ youth organisation to visit classes and share stories and knowledge about sex, gender and sexuality diversity. However, this approach was limited to mainly metropolitan schools who had access to such organisations. These approaches also limited the narratives and stories of diversity that could be shared, as usually only one or two sex, gender or sexuality diverse people could attend each visit. Furthermore, a one-off hour-long visit limited the learning time and scope of such lessons. Concerns were also expressed that bringing external facilitators into a school for this topic could be seen as a tacit indication to students that this was an area external to the remit of their teachers.

The LGBTQIA+ youth organisation was very interested in an innovation that could support both their educators and teachers in schools to produce a more comprehensive learning experience that was more representative of the diverse sex, gender, and sexuality experiences. The teacher professional development expert was motivated to explore how pedagogical innovation and curriculum alignment could better support this work. The communications organisation was motivated to produce learning resources that were well designed and effective for a wide variety of young people. From this collaboration a co-design process was produced that involved more than 200 people at various stages to produce the resources. Co-designers included teachers from all year levels and a variety of curriculum areas, youth workers, social workers, teacher-union representatives, students and young people, and a range of relevant social-sector and government representatives who varied in ethnicity and social location.

The result is a set of short episodes that scaffold 13 diverse narratives together with foundational knowledge content and animation to facilitate discussion based learning. The pedagogy guide includes set-up guidance, lesson plans, and extension exercises. The critical pedagogy uses a norm-critical approach to deconstruct the oppressive norms that foster oppression rather than to blame individuals for

participating in harassment and discrimination. The aim of the resources is to foster critical thinking, perspective taking, and empathy, ultimately leading to school-wide interventions to produce an inclusive and warm environment that is not limited by a range of oppressive norms.

The video episodes and teaching/facilitator resources available for free and include seven short videos:

· Teacher/Facilitator Resource – a guide to using Inside Out
· Ep1) Gender, Sex & Sexuality
· Ep2) Transgender & Intersex
· Ep3) Diversity & Difference
· Ep4) Bullying & Homophobia/Transphobia
· Ep5) Respect & Responsibility
· Inside Out for students aged 10–12 years

Inside Out also comes with a Resource Pack, which includes:

· Episode Lesson Resources with class discussion ideas for each episode
· Glossary of Terms
· Pedagogy Guide to help a teacher/facilitator prepare before screening the episodes

The resources were launched in at the end of 2015 and won a prestigious award in the 2017 NZ Design Awards (social good category) as well as recording more than 20,000 website hits by 2018. The resources have been fully evaluated and recommended by the NZ Ministry of Education to schools in their LGBT+ Inclusive Education Guide.

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9–18	2016	18
AGE GROUP	ESTABLISHED	COUNTRIES

Love Letters for Computers is free YouTube series with classroom materials to introduce computer science for primary school teachers.

Love Letters for Computers

Finland

Love Letters for Computers is a free resource including a series of videos, resources, classroom materials and a teacher journal that will help you plan how to integrate computer science into your curriculum for children in kindergarten and first years of primary school. It's built around the philosophy of Hello Ruby: an unplugged, creative and playful approach to introducing computer science.

"We shouldn't teach computer science only because it's useful, but because it's interesting and intensely creative."

- LINDA LIUKAS

Love Letters for Computers is a free resource including a series of videos, resources, classroom materials and a teacher journal that will help you plan how to integrate computer science into your curriculum for children in kindergarten and first years of primary school. It's built around the philosophy of Hello Ruby: an unplugged, creative and playful approach to introducing computer science.

WHEN AND WITH WHO SHOULD I WATCH THE VIDEOS?

Take the videos at your own pace. After each video, take a few moments to write responses to the reflection journal. It's important to keep track of your progress. Consider also connecting with fellow educators while learning new materials – they'll be very valuable in brainstorming ideas for your classroom or pointing out existing resources.

WHAT SUPPLIES DO YOU NEED?

You can do most activities with just a ballpoint pen and a plain notebook, but you might also use watercolor, pencils, scissors or other crafting supplies. You'll need a computer that can access scratch.mit.edu in a few of the tasks. And for the student materials and reflection journal, you'll need a printer.

HOW DO YOU USE THESE RESOURCES?

Whether they are kindergarteners or third graders, it's up to you to decide whether if you want to do all the tasks in the passport or just select a few.

Pick learning activities that immerse students. These activities are small enough to be covered in 45 minutes, but you can spend weeks on them as well.

The prompts and tasks are designed to help students follow their curiosity. Try to think of a project around the topic the students can build and experiment with. The teacher's role is to guide the learners and to experience and explore along with them. Visit a museum, watch a film, or go to a park. Help with deepening student knowledge through text, vocabulary building and research.

Remember to leave time for reflection. There is an assessment sheet for each lesson, but allow students to also reflect through discussing, writing and drawing, for example.

You can do most activities with just a ballpoint pen and a plain notebook, but you might also use watercolor, pencils, scissors or other crafting supplies.

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Teachers/Users	2014	5
TARGET GROUP	ESTABLISHED	COUNTRIES

We launched a cultural revolution in which girls discover their self-worth, think critically about sexist media, and harness the power of media for positive change.

MEDIAGIRLS

United States

The average girl spends 8–10 hours a day consuming media, bombarding her with the message that being sexy and thin matters most. This is unacceptable. MEDIA-GIRLS is a program that teaches middle-school girls to critique how they're portrayed in mainstream media, re-envision new possibilities, and create empowering content.

MEDIAGIRLS is a non-profit organisation that boosts the self-worth of girls and young women by teaching them to critically analyze and reject sexist media messaging, know their true self worth, and harness the power of media for positive social change. In giving girls these tools, MEDIAGIRLS stands at the forefront of a girl-powered revolution to make over the media through challenging the status quo and creating empowering content for girls and young women everywhere.

Multi-week program in Greater Boston schools: MEDIAGIRLS provides 8- and 16-programming, once a week, in schools located mainly in underserved communities in Greater Boston, MA. We train female college volunteers to teach: Part 1, in which participants think critically about media's influence on girls, define their self-worth, and create empowering content using social media. In Part 2, participants create, launch and promote a social-media campaign that empowers girls.

Licensing 90-minute workshop: In our 90-minute #REALMEDIAGIRL workshop, participants learn how social media influences girls' well-being, and how to be critical consumers/users on apps like Instagram and Snapchat. Through our lesson plan and interactive activities, girls learn how to band together to make social media more empowering and positive for one another. After teaching this workshop to thousands of teens, MEDIAGIRLS is certifying educators this fall to license our curriculum to teach the workshop in their schools. Interested educators can sign up to license our curriculum in fall 2020.

WE MAKE A DIFFERENCE:

· 94% of our participants said that "based on the workshop, they believe girls have the power to work together to make social media more positive."
· 96% of our participants say "based on the workshop, they will change their own behavior" to make social media more positive and empowering and can site two specific ways they will do so.

Through our lesson plan and interactive activities, girls learn how to band together to make social media more empowering and positive for one another.

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11–15	2014	9
AGE GROUP	ESTABLISHED	COUNTRIES

NewsLitCamp connects educators with local journalists for a unique professional development experience.

NewsLitCamp®

United States

The News Literacy Project's NewsLitCamp offers educators a first-hand introduction to news literacy, along with tools and resources they can use in their classrooms and the opportunity to connect directly with journalists in their communities. In these day-long professional development sessions, teachers and librarians at middle schools and high schools visit a local news outlet for training with journalists from that newsroom and our staff.

> "Honestly, this was the best PD I've ever attended. I wanted to get right to school and start doing these lessons with students."

- KYLE PUCCIARELLO, NORTHBROOK JUNIOR HIGH SCHOOL, NORTHBROOK, ILLINOIS

These workshops combine elements from traditional professional development programming with the more flexible, teacher-directed "edcamp" model. Educators tell us what topics they are interested in and what they would like to take back to their schools from the training. We then work with journalists from the host news organisation to create sessions that fit their requests. The goal for each NewsLitCamp is to develop teachers' and librarians' news literacy education skills and introduce them to specialized resources for teaching news literacy.

We begin each NewsLitCamp with an explanation of the importance of news literacy for students — an opportunity for participants to learn the core skills and concepts of news literacy education. The educators then attend specialized hour-long breakout sessions, led by journalists and NLP staff, that are designed to demystify the newsgathering process and explain the standards of quality journalism. Topics may include specific coverage areas, such as education or crime, or more general issues, such as the role of social media in disseminating news.

After lunch, small groups of educators explore the ideas they are most interested in, such as building curriculum tools or creating lesson plans around news literacy. At the end of the day, everyone comes together for a "shareback" session where all participants — educators, journalists and NLP staff — talk about what they have learned.

Educators tell us what topics they are interested in and what they would like to take back to their schools from the training. We then work with journalists from the host news organisation to create sessions that fit their requests.

News Literacy Project
https://newslit.org/

Teachers/Users	2017	1
TARGET GROUP	ESTABLISHED	COUNTRY

Online Cyber-Bullying and Leadership
Workshops for Year 7–9 Students.

PROJECT ROCKIT Online

Melbourne, Australia

PROJECT ROCKIT Online is built BY young people FOR young people and encourages students to self-reflect on previous experiences while simultaneously equipping them with credible and risk-free ways to stand up to hate in the future. The program consists of three interactive online workshops that focus on the issues of bullying, online hate and social leadership.

"PROJECT ROCKIT believe every young person deserves engaging and inspiring cyber-bullying resources, no matter where they are located."

- CHLOE ECKERT, ONLINE LEARNING MANAGER

PROJECT ROCKIT is Australia's first and biggest youth-driven movement against bullying, hate and prejudice and, for the last 12 years, we've been running high impact, evidence-based workshops in schools that help young people stand up to (cyber)bullying instead of standing by. We've now worked with over 250,000 young people, sit on the Government's eSafety committee and are the go-to-youth cyber safety partner of Facebook, Instagram, Twitter and Google.

Bullying (online and offline) remains a massive issue affecting young people in Australian schools. Experiences of school bullying have been linked with increased risks of criminal behaviour, suicidal ideation, poorer physical health and early school leaving. Bullying robs young people of potential and opportunities at school. Now, as technology continues to leap ahead, schools are falling behind. With the rapid growth of social media, online issues such as cyber safety and sexting are traditionally hard for teachers to discuss with students. What's really missing from the equation is a youth perspective, which brings credibility and a genuine understanding of what it means to be a young person in an ever-changing digital world. PROJECT ROCKIT Online fills this gap in education and comes with an extensive teacher resource guide packed full of follow up questions, a lesson plan to unpack the workshops with students, classroom activities and take home resources/tips for parents and students.

PROJECT ROCKIT believes that ALL young people should have access to impactful and inspiring anti-bullying resources no matter their location. The online program was externally evaluated by the University of New South Wales and provides educators with livetime data reporting. Before completing the program, only 49% of young people felt confident enough to challenge (cyber)bullying, but after the program, 96% of young people felt confident enough to stand up.

What's really missing from the equation is a youth perspective, which brings credibility and a genuine understanding of what it means to be a young person in an ever-changing digital world.

Project ROCKIT
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https://www.projectrockit.com.au/

12–16	2017	2
AGE GROUP	ESTABLISHED	COUNTRIES

An independent charity that combines
the journalistic expertise of The Economist
newspaper with teaching know-how.

The Economist Educational Foundation

United Kingdom

We enable inspiring discussions about the news in schools by providing educational news content, teacher training and resources. We also bring together schools from different communities and countries for global conversations.

"It has never been so important to ensure that all young people have opportunities to build news literacy skills and join inquisitive discussions about current affairs."

- EMILY EVANS, FOUNDER AND CEO

We enable inspiring discussions about the news in schools. We provide educational news content, teacher training and resources. We also bring together schools from different communities and countries for global conversations.

By taking part in these discussions, young people learn to think for themselves about the news. They become able to see fake news, one-sided debates and unsound arguments for what they are. They practice having their say about issues affecting their lives.

In uncertain times, the ability to think critically and communicate confidently about real-world issues is a hugely valuable asset. It not only gives young people a voice, it helps them to succeed in school, the workplace and beyond.

They become able to see fake news, one-sided debates and unsound arguments for what they are. They practice having their say about issues affecting their lives.

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Teachers/Users	2012	8
TARGET GROUP	ESTABLISHED	COUNTRIES

Concluding remarks

Recommendations

From our survey findings and literature review, we recognise that young people and teachers are badly wanting more and better education on digital wellbeing. Thus, we have 8 recommendations from our findings to support the implementation of the selected innovations as follows:

Parents and educators are most often behind young people on the various digital wellbeing issues that impact them. Therefore, adults should be a priority to improve the culture around digital wellbeing.

1. ADULTS SHOULD BE A PRIORITY TO IMPROVE EDUCATION AROUND DIGITAL WELLBEING

Parents and educators are most often behind young people on the various digital wellbeing issues that impact them. Therefore, adults should be a priority to improve the culture around digital wellbeing. For this reason, half of the selected innovations for this spotlight target adults.

> "It is a fraught area. Perhaps because so many adults struggle with their own digital wellbeing, we don't know how to model, let alone teach positive habits and behaviours. Maybe we need to start with PD for educators on the effects of poor digital wellbeing and ways to increase one's own digital wellbeing, or addressing school wide cultural practices, before even focusing on our students."
>
> – TEACHER FROM FINLAND/AUSTRALIA

2. ADULTS SHOULD OCCASIONALLY PARTICIPATE IN THE ACTIVITIES THEIR STUDENTS ARE ENGAGING WITH TO BUILD UNDERSTANDING BETWEEN GENERATION GAPS

Adults think of their online activities as separate whereas young people do not distinguish between the two environments. To bridge this generation gap, adults should occasionally participate in the activities their students are engaging in to build understanding and a shared dialogue.

> "Young people are a lot more responsible with social media than people give them credit for."
>
> – STUDENT AGED 17 FROM THE UNITED KINGDOM

3. THERE NEEDS TO BE MUCH MORE VISIBLE DISCUSSION AND CRITICAL THINKING AT ALL LEVELS IN AND OUT OF SCHOOLS

In general, there needs to be much more visible discussion and critical thinking on all aspects of digital wellbeing in and out of schools.

> "To create a school community where all the stakeholders share the common values and goals, and respect each other."
>
> – TEACHER FROM ARGENTINA

> "... [There is a] need for awareness and healthy applications that can channel student's addiction into positivity and make them a contributor to the global village."
>
> – STUDENT AGED 18 FROM NIGERIA

4. DIGITAL WELLBEING NEEDS TO BE MODELED IN A HEALTHY WAY BY ADULTS

Digital wellbeing needs to be a culture in and out of school that is modeled in a healthy way by adults.

5. MORE ACTIVE, HANDS-ON AND COLLABORATIVE ACTIVITIES ARE NEEDED

Education on digital wellbeing should include activities that are active and hands-on with others.

"I think that schools want to teach digital wellbeing but often they don't have the resources or don't fully understand how youth are using digital platforms in this day of age."

– TEACHER FROM THE UNITED STATES

6. MORE RESEARCH AND DEVELOPMENT ON DIGITAL WELLBEING IS NEEDED

A clearer vision of digital wellbeing needs to be established on an international level so we can share common values and goals across continents.

"I would like to say that teaching digital wellbeing should be rooted in values such as respect, empathy, and safety among others. Sometimes, digital wellbeing simply becomes how to avoid this and that digital threats. The core values of being a good person whether physical or digital are not usually shown."

– TEACHER FROM PHILIPPINES

Adults should be a priority to improve the culture around digital wellbeing.

7. DIGITAL WELLBEING IS NOT SEPARATE, BUT CONNECTED TO HOLISTIC MENTAL AND PHYSICAL WELLBEING

Related to recommendation number 6, digital wellbeing should be presented in a holistic way that is connected to part of holistic wellbeing.

"Digital Wellbeing is not limited to what happens online only – it is about the connections that exist or are purposefully created between the digital and real world. It is critical to find and foster the ways of bringing the two worlds together for a child's overall wellbeing."

– TEACHER FROM FINLAND

8. RESOURCES SHOULD BE DESIGNED WELL, ATTRACTIVE, AND EASILY ACCESSIBLE FOR EDUCATORS TO IMPLEMENT

Resources for educators need to be designed and presented in an attractive and easily accessible way. They should aim to be 'plug and play' and require minimal preparation work.

"Proposed tools need to be tested, certified, proved to work and doable in terms of implementation."

– TEACHER FROM FINLAND

This spotlight showcases 10 already proven to be impactful solutions that have scaled or have a high potential to scale. We greatly admire the hard work that the selected innovators are doing on aspects of digital wellbeing and see the potential for them to be adopted and adapted to a greater extent. However, we recognise this is just a start, and that there is much room for more tools and solutions to be developed that cover a range of increasingly complex digital wellbeing topics; in particular:

· Solutions that strengthen communication on aspects of digital wellbeing between parents, educators, and young people
· More hybrid learning environments where learning happens in and out of schools
· Practices and solutions founded outside the United Kingdom and the United States and are able to be easily adapted to be contextualised
· Innovation aimed at primary aged children and teachers
· More opportunities to connect and learn from new people around the world on digital wellbeing
· Unplugged innovations
· Innovation that strengthen networks between schools and regions
· Innovations that integrate learning on digital wellbeing with professionals outside of school

Collaboration at all levels, including governments and institutions, is needed to bring about effective and widespread change. This Spotlight report intends to help kick-start and inspire more action and development on this topic. Let's all do more to help the education of digital wellbeing for young people today and in the future to become much more relevant and effective.

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HundrED.org
is a not-for-profit organisation
that discovers and shares inspiring
innovations in K12 education.
HundrED.org's goal is to improve
education through pedagogically
sound education innovations.

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