Digital Citizenship

Research findings and recommendations 2017

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What are the major issues in the digital citizenship space? Are there issues attracting major attention even though they are not critical, and/or are there critical issues being overlooked?

What are the major gaps in the current approaches to building digital citizenship? Are certain approaches particularly effective, and/or others particularly ineffective?

What could be done better if we wanted to enhance the quality of our impact?

This paper set out to answer three research questions:
## Key findings

The research uncovered many interesting and insightful answers to the above questions, as well as many areas worthy of further exploration. This paper presents six key findings:

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## Research Approach

A combination of primary and secondary research was conducted to investigate the above questions. Insights were gathered from:

1. Undertaking a review of published data relating to digital citizenship issues from various community and government organisations, as well as peer-reviewed academic articles.
2. Undertaking an investigation of digital citizenship activities, including a review of available materials and phone conversations with program representatives.
3. Conducting structured interviews with subject-matter experts in the area, including policy makers, researchers, internal Optus subject-matter experts, and practitioners in the not-for-profit space.
4. Conducting primary research with parents (n = 200) and students (n = 100) via online surveys delivered by our quantitative research partner, PureProfile.
5. Conducting focus groups with young students 10-18 years old (n = 32) in partnership with our qualitative research partners at Ekas Marketing Research Services.
Chapter 1
Why Digital Citizenship?

How might we structure our behavior in the digital world to harness its potential while minimizing its harms?

Digital citizenship refers to the attitudes, skills, knowledge and behaviours that enable people to make the best use of digital devices whilst minimizing danger to themselves and others.

Just as citizenship describes being part of a society, digital citizenship describes being part of a digital society.

As such, digital citizenship is a broad concept. It encompasses the opportunities that the digital world has created, as well as the potential pitfalls this world entails. In doing so, it proves a comprehensive and balanced construct through which to view the online world.

There is much to be celebrated and embraced about the online world. The combination of mobile devices, the internet, and social media create unprecedented opportunities for individuals to create content, engage in creativity, build connections, and access news and information, learn about the world and each other, and participate in the great project of humanity in new and interesting ways.

Despite this, researchers, program designers and policy makers in the space frequently focus solely on the issues faced by people online, such as cyberbullying, ‘sexting’, gaming addiction and information security.

While these are all genuine problems (and discussed in this paper), considering only the negatives of the digital world ignores the bigger discussion about how we should behave in the online space to safely harness its full potential.

What makes a good Digital Citizen?

Just as a good citizen can be thought of as someone whose participation in society enhances the wellbeing of themselves and others, a good digital citizen is someone whose participation in the online space enhances the wellbeing of themselves and others.

There is potential for an exciting project to create a precise and shared understanding of what makes a good digital citizen, and we suggest this as an area for further consideration.

What is Digital Citizenship?

Digital citizenship describes being part of a digital society.

A good digital citizen is someone whose participation in the online space enhances the wellbeing of themselves and others.
Are we sure there is not just ‘Citizenship’? Why do we need the ‘Digital’ part?

Most programs would not self-identify as a ‘digital citizenship program’. For the purposes of this paper, a ‘digital citizenship program’ encompasses any program designed to enhance the safety, security, and productivity of people in the digital space. They may include programs focused on just one issue such as cyber safety, or programs that encompass a broad array of digital skills and behaviours.

Young people don’t really ‘go online’, they’re just always there

The line between ‘digital’ and the ‘real world’ is increasingly blurred, particularly for young people.

A core theme identified in our research is that students don’t think in terms of ‘life’ and ‘life online’, or ‘citizenship’ and ‘digital citizenship’; for them there’s just life, which seamlessly incorporates both the ‘real’ and ‘digital’ world.

Because young people don’t really ‘go online’ (they’re always there), one might conclude we don’t need cyberbullying education, just bullying education; we don’t need to talk about online ethics, just ethics.

This is an intuitive claim, but one not supported by the research.

Whether or not students conceptualise distinctions between life online and life in general, the reality is that the behaviours of people behind a screen, or on a phone, are different from their behaviours face-to-face. People act differently online.

This disconnect occurs for a variety of reasons: the feeling (true or otherwise) of anonymity; the absence of immediate feedback on the impact of their actions; and the amplification of peer pressure, to name just a few.

Thus, when talking to people about the various opportunities and dangers present in the digital space, the distinction between real and digital is of practical utility.

What is a Digital Citizenship Program?

A digital citizenship program encompasses programs designed to enhance safety, security, and productivity.

For students, ‘life’ and ‘life online’ are the same.
The Issues

To understand the issues surrounding digital citizenship, one must understand the remarkable degree to which digital devices have become core to the lived experience of young people.

We present a snapshot of the ubiquity of digital device usage by young people.

It is worth noting that these numbers are changing at lightning speeds. As illustrated above, the change over a few years in some of the figures is profound, suggesting that even since publication these numbers would have likely continued to rise.

Smartphones
In June 2011, smartphones were used by less than a quarter of teens. By 2015, usage had risen to 80%.2

Internet
83% of teens access the internet three or more times every day, 86% go online more than once a day. In 2011, 75% of young Australians who use the internet used it every day. Usage levels significantly increased between 2011 and 2015. Amongst 8-11 year olds, the number nearly doubled.3

Multitasking
Multitasking is the new norm; only 13% of 14-25 year olds say they “always” or “almost always” do nothing else while watching TV.6 Instead, young people multitask while they watch: 49% of 14-25 year-old Australians use social media; 39% text; 24% play video games; and 47% surf the web while watching television.6

Multitasking in the new norm: only 13% of 14-25 year olds say they “always” or “almost always” do nothing else while watching TV. Instead, young people multitask while they watch: 49% of 14-25 year-old Australians use social media; 39% text; 24% play video games; and 47% surf the web while watching television.6

Internet access
Digital citizenship is becoming core to education, with almost two-thirds of students accessing the internet during a regular school day in 2015.2

Communication
Digital devices are a key means of communication. By age 11, more than 90% of conversations are online.15 The increase is 95%. Asking young people to turn their device off is not as simple as turning them off.15 It is seeing them in the flesh, 15% seeing them to lift circumstances, 15% seeing them to lift themselves, 15% seeing them to lift circumstances, 15% seeing them to lift themselves, 15% seeing them to lift themselves.
Bullying and harassment are among the most common problems faced by young people in the digital space. While bullying in the physical world is a serious issue, online harassment and bullying are also prevalent. Research has shown that the problem of bullying and harassment has moved to the digital space, and many kids are victims of cyberbullying.

Researchers have found that the prevalence of bullying and harassment online is significantly higher than in the physical world. More than one in three young people report that they have been bullied online, and the number of kids who are bullied is 1.5 times higher in the digital world. This makes a significant difference in terms of the impact and challenges faced by kids online. The rise in cyberbullying is a major concern for parents and educators alike.

A study conducted by ACMA revealed that around 40% of kids say they've seen their friends behave badly online. Moreover, there is evidence that almost 10 years ago – which is out of date in the world of technology – bullying and harassment were not as significant as they are today. In today's digital age, the line between cyberbullying and real-world bullying is often blurred, so much so that some researchers question the need to distinguish between the two. People who are bullied frequently experience sleepless nights and even physical ailments.

The establishment of the digital world has brought many novel challenges. Cyberbullying can happen anywhere, anytime, and can follow kids home, park in their backyard, or continue for 24 hours a day. Most teens are vulnerable to this level of harassment: one in four reporting being connected to social media.

To avoid a cyber bully, students must disconnect from their entire digital social group. The establishment of the digital domain as a major social space is making cyberbullying even harder to escape. Research by Müller and colleagues has found that kids must disconnect from social media to avoid being connected to social media.

As alarming as these numbers are, it is possible that the actual prevalence of cyberbullying is much higher. Accurate and reliable data on the actual experience of young people is hard to come by. High-quality research is conducted only occasionally, and many well-known government and community organizations cite data from almost 10 years ago – which is out of date in the world of technology.

Research suggests that roughly one in five Australians – an estimated 463,000 – are victims of cyberbullying. Moreover, there is evidence that kids are, in fact, under-reporting their experiences with cyberbullying. Over half of 12-17-year-olds experience (according to ACMA, 2022) cyberbullying online, and 22% report having felt unsafe online. Research suggests that this is not always the case. According to one study, although 60% of young people report having defended a victim of online cruelty, only 1 in 4 do so frequently. Conversely, 90% of young people report having ignored an incident of online cruelty, with more than one in three doing so frequently.11

Similarly, researchers have documented an array of roles that people may play in cyberbullying: entitlement bullies; targets of retaliation; bystanders who are part of the problem; and, bullying victims.25-34% of young people report that they've been cyberbullied.14

How is cyberbullying different?
The line between cyberbullying and regular bullying is somewhat blurred, so much so that some researchers need to distinguish between the two. People who are bullied are often more vulnerable to this kind of harassment: one in four reporting being connected to social media. According to one study, over 80% of teens have a smartphone.

The establishment of the digital world has brought many novel challenges. Cyberbullying can happen anywhere, anytime, and can follow kids home, park in their backyard, or continue for 24 hours a day. Most teens are vulnerable to this level of harassment: one in four reporting being connected to social media. Students who are connected to social media are more likely to be cyberbullied.3

However, there is a critical distinction between cyberbullying and more traditional forms of schoolyard harassment. Cyberbullying is more difficult to escape. Research by Müller and colleagues has found that kids must disconnect from social media to avoid being connected to social media. To avoid a cyber bully, students must disconnect from their entire digital social group.
Issue 2: Sexualisation of content and behaviour

The sexualisation of young people is a charged and emotionally loaded topic, about which many people feel deeply. Its consequences, as illustrated by individuals’ beliefs, morals and value systems.

As both, discussion about the sexualisation of young people, particularly in the popular media, is often sensationalised and hyped. Consider, for instance, the rise in sexual assaults committed by individuals' beliefs, morals and value systems.

Importantly, however, this would suggest that the majority of people responding do not necessarily turn into sex offenders. "Kids who watch porn won’t necessarily turn into sex offenders," experts warn. Easy access to hardcore pornography is behind the saturation point.21

The high prevalence of behaviours such as sexting presents a digital threat to personal security. While it would be tempting to think that the younger the user, the more likely they are to have addresses of teenagers have been spied on by phishing and other methods.25

Privacy research conducted for this report also highlights the perceived sexualisation of behaviour amongst young people. In some cases, consent, and more types of data stored online across their various accounts24, increasing their data online. Young people also typically have more social media accounts, and more types of data stored online across their various accounts, and more types of personal information isn't just costly, it can also lead to a loss of privacy. The world is rapidly becoming aware of issues of privacy and personal information security that can be costly. Last year, in Australia alone, over $83 million was lost in over 155,000 cases of scams related to fraud, identity theft, hacking, phishing and other methods.25

The data is clear from a behavioural perspective: young people are creating, accessing and sharing more sexual content now than ever before, and at younger ages.

Content and behaviour

13-18 year olds have sent sexually explicit images to another person

45% of 13-18 year olds have sent sexually explicit images to another person

Percentage of adult internet users in each age cohort who say these details about them are available online

Issue 3: Privacy and personal security

The world is rapidly becoming aware of issues of privacy and personal information security that have arisen in the 21st century. Breaches in information security can be costly. Last year, in Australia alone, over $83 million was lost in over 155,000 cases of scams related to fraud, identity theft, hacking, phishing and other methods.25

Privacy and personal security

Young adults are the most likely to have some key personal information about them available online.
The internet and mobile phone has driven an explosion in data that is accessible at our fingertips

There has perhaps never been a more important time for people to be able to tell fact from fiction – or ‘facts’ from ‘alternative facts’.

With the increase in accessible information (and misinformation) that has come with the digital world, individuals must be increasingly critical and discerning of the content they consume. To truly understand this issue, it is important to appreciate the huge amounts of content people are now exposed to, daily.

Information Overload

The internet and mobile phones have driven an explosion in data that is accessible at our fingertips, near-instantaneously, and on-demand. In 1986, humans were exposed to roughly 40 full ‘newspaper-worth’ of information every day, when considering all their media access. By 2007 (ten years ago!) that number had leapt to 175 newspapers.

Today, a combination of digital versions of traditional newspapers, online-only news sites, content aggregators, blogs, social networking sites and other sources combine to create a veritable sea of ‘stuff’ that alone exposes us to more content in a day than our recent ancestors were exposed to in an entire lifetime.

But of course, it is not only what we access that creates the flood of information, it is what we create.

For instance, according to the data and analytics firm, DOMO in every minute of every day:

Facebook

Users ‘like’ over 4 million pieces of content (up from 2.5 million in 2013).

YouTube

Users upload 400 hours of new content (up from just 75 hours in 2013).

Snapchat

Users watch nearly 7 million videos.
“It must be true, I saw it on…”

Easy access to information and content is one of the biggest benefits of the digital age, demonstrating access to knowledge and providing new avenues for learning and development. However, research suggests that the rise in exposure to information is not being met with a corresponding rise in the higher order evaluative and critical thinking skills required to make sense of it, and tell fact from fiction. This is particularly true for young people.

Research on how children consume information online has revealed that most lack the critical skills to discern quality from non-quality information. For instance, 31% of children believe that if a search engine lists a result then it must be true, and 15% don’t consider the veracity of the sites that they are on but will simply visit the sites that they like the look of.30 Consistent with this trust of digital sources is the finding that internet users rate the accuracy and reliability of content they find on the internet ahead of that from TV, radio and newspapers.31 One 2016 Stanford experiment found that 80% of middle school students could not reliably tell the difference between a native advertisement (an advertisement in the form of a news story) and factual content.32 Further, 87% of 12-15 year olds believe that information on news sites is mostly true.30 This is particularly concerning given the recent rise of the fake news industry. This industry is so lucrative that last year, separate investigations by Buzzfeed and The Guardian identified more than 100 fake news sites run by teenagers in the small Macedonian town of Veles, which in some cases earned their makers tens of thousands of dollars.33

We should not be too quick to judge people for their inability to critically analyse the information to which they are exposed. Miller and Bartlett have described seven factors that make assessing information online particularly difficult (see left).

Seven factors that make assessing information online difficult

1. Anonymity and pedigree
   The identity of people on the internet is often hidden or easily faked, making it hard for users to identify true experts in the field.

2. Absence of gatekeepers
   Content on the internet is often published without the checks and quality control of more traditional media (such as peer review and editors).

3. Generational divide
   Parents are typically the main guardians of information for their children, but their supervision is often absent from content accessed on internet.

4. Pseudo-sites and propaganda
   Biased and agenda-driven content is often disguised as trustworthy and credible.

5. Use of imagery
   Images can be manipulated, and decisions about information quality are often based on site design.

6. Echo chambers
   Internet content is increasingly mediated by algorithms that calculate the content users most want to see. This leads to customised news environments where users are exposed only to sources and content that agree with their views.

7. Skittering and bouncing
   Users typically engage with content on a superficial level, reading only a few sources and skimming content.
People’s ability to accurately evaluate the veracity of digital information is important for individuals and society.

The real-world need for critical thinking

The abilities of people to accurately evaluate the veracity of digital information is important for individuals and society.

At an individual level, an engaged and discerning population is more likely to make good decisions about important issues than one influenced by misinformation.

Uncontrolled consumption of information has led to serious consequences. For example, increased media spending $2.4 billion on books and again to a series of individuals who claimed (allegedly) to have cured brain cancer. In extreme cases, individuals have targeted and attacked others using their digital presence with an automatic rifle and shot. The movement is further exacerbated by the presence of a television in a child’s bedroom being associated with later rise in bedtimes, and the presence of either a television or computer in the bedroom was correlated with a reduction in sleep quality of 0.2 hours and 0.2 percent in sleep duration.

The increased use of screens in the bedroom and late at night may contribute to the finding that school-aged children and adolescents don’t meet sleep duration guidelines.

It is likely that the part of the increase in digital device usage stems from a fear of missing out (FOMO), a fear that someone else has something that you do not. The Psychology Stress Society’s Stress and Wellbeing report found that 69% of teenagers believe worried about their image and 65% believe that they would experience anxiety if they did not access social media accounts.

Issue 5: Managing access

Digital inclusion

Internet access is now as important to the United Nations has identified as a human right.

With the rapid proliferation of digital devices and internet use amongst young people, it is increasingly important that people who do not have access to the internet or the risk of being left behind, with extreme consequences. The digital divide (the terms used to define the gap between those who have access to technology, and those who do not) is a significant problem, albeit smaller in Australia.

There is a pervasive side effect of the gap that children and adolescents do not meet health, business and governments may increase their investment in digital inclusion.

Given that the benefits of being digitally engaged are rapidly moving from ‘nice to have’ to ‘must have’, it has never been more important for people to have access to the internet and mobile technologies.

Part of the usage glut stems from a fear of missing out or people’s overuse of digital devices as the percentage of the population excluded grow larger. For instance, the evidence suggests that while the internet is a tool, the median time Australian users spend on screen-based media is 4.8 hours per day.41 Australian children accessed the internet between 10pm and midnight. The number of people excluded grows narrower, it also gets deeper.39 The increased use of screens in the bedroom and late at night may contribute to the finding that school-aged children and adolescents don’t meet sleep duration guidelines.

Blue light emitted by digital devices has been shown to disrupt sleep patterns, and there are concerns that studies that demonstrated increased screen time decreases quality of sleep is school-aged children and adolescents. For instance, the increased use of screens in the bedroom and late at night may contribute to the finding that school-aged children and adolescents don’t meet sleep duration guidelines.
Chapter 3
Opportunities for improvement

Opportunity 1: There is potential to improve the rigour of evaluation

The issues of digital citizenship (especially cyberbullying and sexting) have prompted an explosion of programs and activities in the space. Many have been created out of a desire to offset positive change.

Our review of 54 Australian domestic and international digital citizenship activities found most of these programs are united by the quality of their intent: well-intentioned (and often well-funded) groups representing government, community and corporate interest have created interventions designed to improve digital outcomes and reduce harm.

Unfortunately, these programs are also united by shared deficits in the quality of evaluation and research (see right).

The main gaps in program evaluation are twofold. Firstly, there is a lack of well-designed studies with proper controls that measure program impact. Secondly, there is a lack of evaluation of program methodology.

In other words, the current evaluations do not rigorously answer the questions: ‘did this program have an impact?’ and ‘what is the best way to have an impact?’

This does not mean that existing evaluations have no use. On the contrary, many provide valuable insight about the quality of delivery, relevance of content, and student engagement. It is important to be realistic about what evaluation will and will not achieve.

Nevertheless, improving the evaluation of program impact and methodology represents the area of reform with the greatest potential to offset positive change in the space. The professionalisation of intervention design and delivery has been applied with great success in other sectors.

Limitations in current program evaluation

Some programs also invite independent third-party evaluators to review their impact, which can lead to more robust findings. For instance, the large government program in Australia, CyberSmart (run by ACMA), was evaluated by Griffith Institute for Educational Research in 2011.

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Limitations in current program evaluation

Our review of Digital Citizenship programs found:

- No randomized control trials have been used on any program intended to increase knowledge.
- Program evaluations tend to focus only on immediate outcomes rather than the effects of the program over time.
- Few groups published their theories of change or logic models, and so are not clear about what success looks like.
- Few studies evaluated the impact of different types of program delivery (for example, comparing face-to-face and digital delivery).
Opportunity 2: Move beyond ‘giving information’ to focus on things that create change

If you build it, will they come?

The quality of your program can never exceed your ability to get people to adopt it.

Research undertaken by Optus suggests that a core problem with existing digital citizenship programs is that almost no one uses them. Optus surveyed 200 parents and found that whilst 80% of parent respondents consider digital citizenship to be important, 46% acknowledge that it is important for their kids to be online, less than 15% access any interventions that greater emphasis needs to be placed on designing programs that actively build targeted skills and knowledge, building skills, changing attitudes and promoting behaviors that change the way people act in the online space. This is the difference between telling a student “cyberbullying is bad” and actively building their ability to respond appropriately when they see or are the victims of cyberbullying.

The research demonstrated that an increase in ethical media competence, the likelihood of being a victim or perpetrating cyberbullying, was smaller in students with higher levels of digital media use. For instance, there is emerging evidence that it is possible to break, or even reverse, this relationship by giving students a specific skillset and knowledge about legal rules, professional competence (currently the majority). Research suggests that knowledge-only programs are relatively unlikely to change online behaviour, and once the cost of creating digital content and feedback is accounted for, the cost of creating digital content generally low – websites are cheap, apps are expensive.

Knowledge-only interventions provide students primarily with knowledge and force people to adopt it. Knowledge-only interventions focus on, in addition to knowledge, building skills, aligning attitudes and promoting behaviors that change the way people act in the online space. The relationship by giving students a specific skillset and knowledge about legal rules, professional competence (currently the majority). Research suggests that knowledge-only programs are relatively unlikely to change online behaviour, and once the cost of creating digital content and feedback is accounted for, the cost of creating digital content generally low – websites are cheap, apps are expensive.

Research has begun to identify specific attitudes, skills and behaviours that behaviour change programs can target. For instance, there is increasing evidence that it is possible to reduce the likelihood of perpetrating, and being a victim of, cyberbullying. Typically, the more you use digital media, the more likely you are to be cyberbullied. Moreover, a 2014 experiment by Müller and colleagues has demonstrated that it might be possible to break this relationship by giving students a specific skillset and knowledge about legal rules.

Research demonstrated that an increase in ethical media competence, the likelihood of being a victim or perpetrating cyberbullying, was smaller in students with high levels of digital media use.

The research also found that on high levels of digital media use, the likelihood of being a victim or perpetrating cyberbullying was smaller in students with high levels of digital media use. The effect was similar to students with high levels of ethical media competence.

This construct is closely related to media consumption of digital citizenship, digital literacy and digital media use. Amongst students, the greater the media usage of the subject, the greater the effect of ethical media competence on the likelihood of bullying (Figure 2). The research also found that on high levels of digital media use, the likelihood of being a victim or perpetrating cyberbullying was smaller in students with high levels of digital media use. The effect was similar to students with high levels of ethical media competence.

This is an exciting frontier of investigation as there is emerging evidence that it is possible to break, or even reverse, this relationship by giving students a specific skillset and knowledge about legal rules, professional competence (currently the majority). Research suggests that knowledge-only programs are relatively unlikely to change online behaviour, and once the cost of creating digital content and feedback is accounted for, the cost of creating digital content generally low – websites are cheap, apps are expensive.

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Opportunity 3: Reduce the reliance on fear-based strategies

Fear-based strategies inform many programs

Fear is not the best strategy. Fear-based education programs – that is, programs designed to change people’s behavior by scaring them straight – have been repeatedly shown to have little or no impact. In a comprehensive review of social-marketing campaigns, Maguire and colleagues found only limited evidence that fear-based programs have much effect on changing behavior.55 These findings have been replicated across many fields.

In driver safety programs, for example, there is little evidence that fear-based strategies have much effect beyond grabbing attention, and have at best only marginally effective, there is ample evidence to suggest that they sometimes that fear-factor is the overriding design principle of the program (see right).55

Fear-based strategies have been repeatedly shown to have at best, limited effectiveness.55 This is in contrast to highly relevant changing behaviour.55 This is also drive negative consequences.54 In driver safety programs, for example, there is little evidence that fear-based strategies have much effect beyond grabbing attention, and have at best only marginally effective, there is ample evidence to suggest that they sometimes that fear-factor is the overriding design principle of the program (see right).55

Fear-based strategies have been repeatedly shown to have at best, limited effectiveness.55 This is also drive negative consequences.54

Fear is not the best strategy. Fear-based education in cyber safety is “less likely to resonate with young people”.

Similarly, a 2000 meta-analysis of 44 studies of social marketing campaigns showed that fear has essentially no effect on sales or consumption behavior.56

In 2010, researchers argued that fear-based education in cyber safety is “less likely to resonate with young people.”

Even if fear-based programs are magnificently effective at achieving their aims of changing behavior, they also drive negative consequences. Sometimes stated overtly, sometimes stated in more negative consequences.

Fear-based strategies inform the design and delivery of many existing digital citizenship programs.

The following story details an early example of a fear-based educative public health campaign intended to promote cyber safety awareness of a fly-in- the-oil rich emirate. The study summarised key factors that contribute to the subject-matter expert interspersed context (Figure 4).

While we have not included the name of the program or presenter in this report, we refer to the study as a case study of a cyber safety program designed to integrate fear-based strategies inform the design and delivery of many existing digital citizenship programs.

In the following case study, we explore the extent to which fear-based strategies inform the design and delivery of many existing digital citizenship programs.

The program is being delivered by the local constable.

The 11-year-old student looks guiltily at the officer, probably wishing he hadn't come to the seminar about cyber safety. The program is being delivered by the local constable.

The stern, angry-looking media habits, but I reckon a few kids would need to change…

So you're a liar and you broke the law. "You had to say you were thirteen when you signed up to Facebook, and you lied about the age you are. You're not thirteen!"

The officer retorts: "You're a liar! Almost before the reply has left the student’s mouth, the officer added: “It is not too late, you can turn your life around and you're not too late!”

The presenter in this report, we refer to the study as a case study of a cyber safety program designed to integrate fear-based strategies inform the design and delivery of many existing digital citizenship programs.

The 11-year-old student looks guiltily at the officer, probably wishing he hadn't come to the seminar about cyber safety. The program is being delivered by the local constable.

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Opportunity 4: Minimise the gaps in parents’ digital understanding

A whole new world...

Digital citizenship programs are different to other social impact programs because the digital world is so new. In most areas where youth face pressing issues (for example, drug use and mental wellness), there exist generations of people who have come before and who can guide the creation of programs using first-hand experience, personal insight and, of course, research. That is, the people creating and teaching the content have a lived experience of the issues that they are talking about.

Digital citizenship is different. No other generation has had to deal with the unique issues inherent to the digital world on such large scale. There simply is no adequate analogy older generations can use to understand the experience of having your entire social network available 24/7, and permanently in your pocket.

Further, many (but not all) older generations don’t understand how to use relevant technology as well as children do. It is not uncommon, for example, for parents to ask for guidance on operating and setting up their technology and accounts.

This knowledge and experience gap is so stark that as early as 2001, researchers in the digital education space were using the terms ‘digital native’ and ‘digital immigrant’ to illustrate the profound difference in understanding between people who have grown up exposed to the digital world, and those who have only come to it later in life.

This has created a counterintuitive situation: the people most familiar with digital tools (youth) are often those most vulnerable to digital issues; the people who would normally be relied on for guidance (parents, teachers, and older peers) often lack experience, understanding and good advice. The result is that much of the advice that children are given does not align with their lived experience of the digital world.

For example, in student focus groups it was common to hear individuals lament their parents’ ‘solution’ to being bullied or harassed online: “Just turn it off.” For parents, this might seem like a reasonable response. For students, where the line between real-life and life online is increasingly blurred, who do most of their socialising online and who are effectively permanently online, the thought of disconnecting from the digital world is unrealistic and out-of-touch.

Even researchers are struggling with the extent to which technology has become central to students’ experience of the world. Constructs and definitions that were valid just a few years ago now fail to adequately capture the reality of students’ experiences.

Consider, for example, one research question that ACMA poses in their research: “How many times do you go online each day?” Today most young people don’t think about ‘going’ online. They simply are online, connected, via their device(s), all the time. They use their phones, tablets and computers, all the time. Taking a break, or even using one at the same time, is seen as a sign that they are disconnected. Young people have a clear sense of when they are online and when they are not.

This disconnect can be thought of as a new ‘digital divide’, a divide not between the ‘haves’ and ‘have-nots’, but between those that ‘get it’ and those that ‘don’t’.

Advice given to children does not align with their lived experience of the digital world

Many (but not all) older generations don’t understand how to use technology as well as children do.
Foreword

Gaps in parent understanding of digital issues

Some parents don’t understand their children’s digital world:

- 84% of parents say their children understand the technology better than they do.
- 79% of parents say they are aware of their children’s activity online.
- 31% of 9-16 year olds have received unwanted sexual solicitations over the past year, but only 10% of parents think they know about it.
- 36% say it is “very true” that they know more about the internet than their children.
- 11% say it is “a bit true”.

Many parents want more information, but don’t know where to get it:

- 35% of parents say they need more information on how to help their children navigate the internet.
- 53% of parents say they need more information on how to ensure their children are safe online.
- 15% of parents surveyed access information about online safety.

As a society, we need to do more to help and support parents as they navigate this challenging new digital environment with their children.

Opportunities for Improvement

Some parents don’t understand their children’s digital world:

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83% of surveyed parents say adults need more education about online safety, etiquette and bullying.

Parents and children are on opposite sides of this digital divide, but do not know how to bridge the gap.

Many but not all parents lack the skills and knowledge to effectively help their children navigate the digital world.

Clearly, as a society, we need to do more to help and support parents as they navigate this challenging new digital environment with their children.

Research conducted by Optus and others has highlighted that while some parents are highly engaged and knowledgeable about the issues and challenges their children face online, many are not.

- 35% of parents surveyed by Optus said they don’t know where to go to search for information about their children’s activity online.
- 83% of parents surveyed access information about online safety.
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- 83% of surveyed parents say adults need more education about online safety, etiquette and bullying.
In 2005, a report by Livingstone & Bober noted that 20% of 8-19 year olds in the UK had received no lessons at all on using the internet.\textsuperscript{62} Over a decade on, this statistic has taken on an ominous significance: the very same group of people that did not receive digital citizenship education when they were young, may now be finding themselves as parents and trying to help young people deal with complex issues of digital citizenship.

The people that design and deliver digital citizenship programs often lack knowledge, experience and understanding of the lived experience of young people online. An opportunity exists to more proactively engage young people in the design of programs and interventions. This opportunity follows directly from the discussion above, but given its importance, warrants consideration in its own right.

“Working with young people in defining the problems and issues that they have faced can lead to new understandings about the source of such problems as well as potential solutions. Young people’s involvement also helps to build credibility and rapport for the project and ensure that their values and attitudes are accounted for.” – Young and Well Cooperative Research Centre. Participatory Design of evidence-based online youth mental health promotion, intervention and treatment.\textsuperscript{61}

Young and Well have also published a useable process for engaging young people in the design of social interventions that is available to groups who are in the program design process (Figure 5).\textsuperscript{61} Optus believes that there is an exciting opportunity to improve the relevance and impact of digital citizenship programs by directly engaging the target audience in their creation. This could take many forms, but at the very least, designers of programs aimed at young people should be engaging young people in the role of advisors, contributors, consultants and ambassadors. Even more ideally, programs of the future should be co-created and regularly reviewed by their end-users to ensure that they remain relevant and engaging.

Opportunity 5: Give young people a place at the table

Digital citizenship programs, resources and interventions should be created in consultation with young people. In other words, young people should be engaged in the design and delivery of digital citizenship programs and be provided with opportunities to participate in the planning and development of programs and activities password to their needs, experiences and understanding of the lived experience of young people online.

Figure 5. Co-creation of ReachOut.com by experts and young people. Evidence-based program design steps are shown in purple. Youth participation steps are shown in pink.

- National User Profiling Survey
- Focus Groups
- Friendship Interviews
- Facebook Poll
- Co-design - Workshop
- Co-design Workshops
- Brand Testing
- Epidemiological data analysis
- Literature Review
- Interviews
- Developing of program logics
- Market and Environmental Analysis
- Evaluation of programs & behaviour change theories
- Identification of appropriate tools and strategies

1. IDENTIFY

- Described who these young people were.

2. DEFINE

- Captured the aim of the new service.

3. POSITION

- Captured the look and feel of the new service.

4. CONCEPT

- Captured young people’s motivations for using the service.
- Described how the services might be used.
- Captured how help seeking strategies would be delivered in ways relevant to different users.

Opportunities for Improvement

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Chapter 4

Conclusion and Vision for the Future

This research and position paper has identified the most pressing issues that exist in the digital citizenship space, and evaluated the opportunities to improve the quality of our response.

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Summing up Digital Citizenship

1. Go deeper with evaluation

There is increasing evidence that digital citizenship education, when delivered well, can have a real impact on behaviour and young people’s digital outcomes. When digital citizenship education is delivered well, it can have a real impact on behaviour and young people’s digital outcomes.

There is an opportunity to enhance the quality of digital citizenship programs by more scientifically measuring impact. Evaluation has been a cornerstone of Optus’ own Digital Thumbprint program, and an evaluation report of the program was released at the beginning of this year. However, it is clear from both analysis of our own sector, and comparison to other sectors, that there is still work to be done.

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The research suggests that a more sophisticated approach to evaluation could be used not only by organisations to get a deeper sense of what works and what doesn’t, but also to enable investigators to better understand and progress the field of digital citizenship research.

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The research suggests that a more sophisticated approach to evaluation could be used not only by organisations to get a deeper sense of what works and what doesn’t, but also to enable investigators to better understand and progress the field of digital citizenship research.
2. Move away from fear-based strategies towards more balanced, positively-framed content

Despite the relative ineffectiveness of fear-based strategies, they remain a common approach to affecting change. Digital Thumbprint was deliberately designed to take a positive approach to the field of digital citizenship within an Optus ecosystem. Unlike fear-based strategies, a positive approach has been identified as a great tool for social good. Given that the research supports this approach, there is the potential to highlight and discuss the benefits provided by Digital Thumbprint in future iterations of the program. This applies not only to Digital Thumbprint, but to other programs too.

In a world of ‘alternative facts’ digital citizenship education has an important role to play in both protecting individuals from the personal perils of making ill-informed choices, and protecting society from the dangers of an ill-informed population. Novel evidence suggests that building ‘ethical media competence’ can act as a form of ‘vaccination’ against problems like cyberbullying. This is not to claim that one single piece of content will ever be a panacea for all the issues facing students in the digital world. Rather, it highlights the promising possibilities of digital citizenship education beginning to make a meaningful impact through specific and teachable skills that create a real, measurable difference to young people’s behaviour and experiences online. Looking forward, Optus is excited to explore how Digital Thumbprint can move away from fear-based strategies and embrace ethical media competence and messaging that builds these skills.

3. Include content on critical thinking and ethical media competence

There is potential to highlight and discuss the benefits of technology even further in future programs. Digital citizenship education plays an important role in protecting society from the dangers of an ill-informed population.
Foreword

The disconnect between children and their parents on issues of digital citizenship is clear. Whilst certainly not universal, parental knowledge gaps in this space are common.

We need to bridge this digital divide. The most common ‘tip app’ or resource sheet is the go-to answer for most groups. The evidence suggests that parents are unlikely to engage with passively provided resources. Instead, a creative approach must be taken to facilitate meaningful conversations between parents and children to create understanding of the issues and real change.

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Conclusion and Vision for the Future

Although young people are the target of most digital citizenship interventions, they are rarely involved as contributors to the design and development of those programs. Despite this, young people typically have the most real-world experience of the issues that they are facing.

Whilst young people have been given a voice in Optus’ Digital Thumbprint program through feedback, the opportunity exists to do more to engage them in the design of the program itself. The digital citizenship community must develop new ways to give a greater voice to digital natives.

4. Find ways to creatively engage and provide support for parents in the conversation

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5. Engage end-users in program ideation, design and build

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