Empowering Primary School Students as Digital Change Agents: Exploring the Impact of the *STOP, BLOCK & TALK for Digital Wellbeing and Safety Programme*

Abstract

When students are empowered and provided with opportunities to make a positive impact, they become influential catalysts for change in their learning environment. This case study explores the STOP, BLOCK & TALK for Digital Wellbeing and Safety (SBTDWS) programme's ability to empower students to be digital change agents. It assesses the effectiveness of the SBTDWS programme in managing students' online safety and wellbeing. The study also explores the impact of parental empowerment on children's digital safety. The SBTDWS programme uses a learner-centric approach to engage students in discussions and activities related to digital safety and wellbeing. The study gathers qualitative data through a case study methodology, drawing on existing literature on digital wellbeing and safety strategies, barriers to implementing these strategies, and students' potential as change agents. The findings underscore the significance of student leadership, peer-to-peer learning, and parental involvement in promoting digital safety and wellbeing. Based on these findings, schools should adopt the SBTDWS programme or similar learner-centric approaches to empower students as digital change agents who actively manage their digital safety and wellbeing. Collaboration among policymakers, school leaders, teachers, and parents should be prioritised to implement digital wellbeing and safety curricula and ensure sustained impact.

Keywords

Introduction

While there is existing literature and research on digital safety and wellbeing, most of these studies primarily focus on policymakers, organisational leaders, school culture, and teachers, leaving a significant research gap in understanding the role of students in promoting digital safety and wellbeing.

This case study aims to investigate students' potential as digital change agents through peer-to-peer learning within the STOP, BLOCK & TALK for Digital Wellbeing and Safety (SBTDWS) programme. It also examines the effectiveness of the SBTDWS programme in assisting students in managing their digital safety and wellbeing online and the impact of parental empowerment on children's digital safety.

As Hammond (2020) recommends, an ecological approach has been employed to structure the research by looking at the macro-level, such as policies and government, to the micro-level, where learning occurs. This approach facilitates a holistic understanding of the broader context and its effects on digital safety and wellbeing, including the perspectives and actions of students.

The structure of the case study encompasses various sections to provide a comprehensive analysis of the research topic. The literature review establishes the theoretical foundation by reviewing relevant literature and providing context and background information. This section is followed by a description of the SBTDWS programme, highlighting its importance and relevance. A detailed methodology section outlines the research approach and describes the data collection methods used in the study. The findings and discussion section presents and analyses the research findings, addressing the key research questions and exploring their implications. Finally, the conclusion summarises the main results, discusses their significance, and provides recommendations for future research in the field.

This study aims to contribute to the existing knowledge base, informing policy and practice regarding digital safety and wellbeing in New Zealand schools.

Literature review

Digital safety is essential for fostering digital citizenship and achieving digital wellbeing (UNESCO, 2017). In New Zealand, schools are responsible for developing strategies to promote digital citizenship and online safety, which requires collaboration among the home, school, and community (Melhuish et al., 2018). Furthermore, schools are legally obligated to mitigate risks, provide a secure environment, and promote responsible technology use for students and staff (Teschers & Brown, 2019).

Digital Safety and Wellbeing Strategy Implementation

Research on implementing digital safety and wellbeing strategies in educational settings is limited. However, studies have shown promise in teaching these strategies as part of a Digital Citizenship (DC) curriculum. The effectiveness of the Common Sense Education DC curriculum and the Screenshots DC curriculum has been examined among intermediate-age students and demonstrated potential benefits (Magis-Weinberg et al., 2023; Brandau et al., 2022). It is important to note that a one-time DC intervention is insufficient for meaningful and lasting changes, highlighting the need for long-term interventions and programs (Bickham et al., 2021).

Existing literature recognises the importance of teachers, schools and parents. Teachers play a crucial role in implementing digital wellbeing and safety strategies by developing their professional knowledge and modelling best practices (Martin et al., 2022). School measures, such as monitoring student activities and applying content filters, also contribute to a secure learning environment. In addition, parents adopt various strategies to support their children's

digital safety and wellbeing, such as monitoring their online behaviour, issuing warnings, providing examples, and conducting visual inspections of social media interactions (Buchanan et al., 2017; Wang & Xing, 2018). However, there is a notable gap in the research regarding students' role in implementing digital wellbeing and safety strategies.

Various methods, such as podcasts, hands-on activities, and role-playing, have been employed successfully to teach digital safety and wellbeing strategies in the classroom (Bickham et al., 2021). Parents also adopt strategies like monitoring online behaviour and providing guidance, although there is variability in parental involvement (Buchanan et al., 2017; Wang & Xing, 2018). Integrating DC into the curriculum can facilitate implementation and provide better support for teachers (Bickham et al., 2021). Despite the need to integrate DC into the curriculum and school practices, limited research is available on this topic.

Hammond (2020) suggests that interventions such as a digital safety and wellbeing programme would benefit from aligning culture, policy, and practice.

Barriers to Implementation

Obstacles to implementing digital safety and wellbeing strategies include incorrect assumptions about students' capabilities, insufficient support and training for educators, and differing opinions on responsibility (Martin et al., 2022). Students are not naturally adept at using technology responsibly, and changing their beliefs through direct education can be challenging as they get older and are more influenced by their peers (Buchanan et al., 2017; Bickham et al., 2021). Therefore, researchers have emphasised the need to have digital safety and wellbeing interventions for young students (Magis‑Weinberg et al.,2023; Martin et al., 2022) while adults are still the primary influencers and before negative behaviours are established (Bickham et al., 2021). Educators require more support and confidence in integrating these skills into their teaching practice, while clear boundaries and responsibilities between home and school need to be established (Martin et al., 2022).

Parent involvement and support are crucial, as parents play a significant role in children's digital safety (Wang & Xing, 2018).

<u>Students as Change Agents</u>

Although research on students as change agents in the digital safety and wellbeing domain is limited, it is evident that when students are provided with opportunities and empowered to make a positive impact, they can affect transformation and introduce new possibilities in their surroundings (Vaughn, 2020). These actions can yield significant outcomes as students emerge as influential catalysts for change. By actively engaging and taking the initiative, students can become formidable agents of transformation.

Context and Background

Case studies are a qualitative research method that focuses on analysing a single unit of analysis (Erickson, 2018; Gerring, 2004). Qualitative research techniques such as observations and discussions are utilised in case studies to provide a comprehensive perspective on the investigated context (Erickson, 2018). This case study focused on how the SBTDWS programme was delivered to a primary school and its impact on empowering students to become digital change agents who actively manage their digital wellbeing and safety.

<u>The SBTDWS Programme</u>

As a digital safety facilitator at Digital Waitaha Charitable Trust, I engage with young students beginning with new entrants. My primary objective is to address online safety concerns and teach proactive strategies for maintaining digital wellbeing and safety through the SBTDWS programme. This programme was designed to minimise the burden on teachers and education leaders while meeting the digital wellbeing and safety requirements outlined in the New Zealand digital citizenship curriculum.

Given the time constraints that schools face and the understanding that there may be only one opportunity to introduce preventative digital safety strategies to students, it was crucial to create a programme that is highly engaging, learner-centric, empowering, and incorporates an easily memorable strategy that students can employ whenever they are online. The programme adhered to the following principles:

- Learner-centric approach: Students are placed at the heart of the learning process. Short activities encourage students to discuss their previous experiences, foster collaborative and cooperative learning, and facilitate swift and practical learning (Prince, 2004).

- Easy-to-remember strategy: The proactive digital safety strategy had to be easily memorable, particularly in cases where students only had a single session with the facilitator.

- Promotion of student agency: Students are encouraged to become knowledge generators through group activities and discussions. They are motivated to exert a positive influence by providing suggestions and assistance based on their experiences or knowledge. They are also urged to recognise and challenge the absence of existing digital safety and wellbeing practices and broaden opportunities within their environment to reinforce preventative digital safety strategies. The ability of students to exert influence, transform, and expand opportunities in their environment promotes learner agency (Vaughn, 2020).

- Increased parental involvement: Simple digital parenting strategies are introduced to enhance parental engagement in their child's digital interactions. By actively participating in their children's online activities and understanding their thoughts and motivations for engaging with others on the internet, parents can assist their children in building a digital identity, developing

appropriate behaviours, and extending social connections with family and friends (Wang & Xing, 2018).

Programme content

The programme includes pre-session surveys for parents, teachers, and students, in-class sessions to introduce a preventive digital safety strategy, a session for student leaders to learn how they can reinforce the digital safety strategy, and a whānau workshop to educate and inform parents and caregivers about current digital safety and wellbeing issues, best practices, and reinforce the digital safety strategy learned by students in school. Students are empowered to be the primary drivers of change as they identify the issues they consider most relevant to address, and student leaders become digital leaders by reinforcing the STOP, BLOCK & TALK (SBT) strategy through peer-to-peer learning.

Parent and teacher surveys assess current digital parenting strategies, such as implementing filters, parental controls, or other strategies, through yes/no and open-ended questions. They also identify parental concerns through open-ended questions. Teacher surveys gather information on their concerns in their environments through multiple-choice and open-ended questions. Student surveys are used to understand students' current strategies, if any, for mitigating online risks.

In-class sessions for students in years 0-9 focus on teaching the SBT preventive strategy using age-appropriate examples. For years 0-3, the facilitator gathers age-appropriate examples after a group discussion on watching habits on YouTube, Netflix, or other streaming services. Below is an example SBT strategy for this age group:

> *If you are watching a YouTube video that makes you feel scared, unsafe, or uncomfortable: STOP watching, BLOCK yourself from watching more, and then TALK to your trusted adult.*

From year 4 and onwards, or in combined year 3 and 4 classes, students participate in a Pluses, Minuses, and Improvement (PMI) activity. Depending on the class size, this can be conducted as a group discussion or activity followed by a class discussion. Here is an example for this context:

> *If you encounter someone being mean or asking inappropriate questions: STOP what you are doing, BLOCK yourself from engaging with that person, if necessary, take a screenshot, BLOCK and report the user, then TALK to your trusted adult or support network.*

Following the introduction of the safety strategy, a group discussion is conducted to identify trusted adults. Typically, students identify parents, other whānau members, teachers, and other school support adults. If necessary, older students are reminded of additional options, including local mental health services. A discussion about their support network is included for intermediate-age and older students. In my context, students seek support from their peers to discuss various situations around intermediate school age.

After all the in-class sessions, digital ambassadors are chosen to participate in a one-hour session with the facilitator. This session aims to provide them with the necessary skills to reinforce the SBT strategy within their learning environment to students of all ages. Through group activities, they collaboratively decide on various initiatives they can implement within their classrooms, school and school community to consistently reinforce the SBT strategy throughout the year. Furthermore, a specific group of students is selected to become the digital ambassadors' leaders. They are responsible for reminding the teacher in charge to allot time for them to continue working on their SBT strategy reinforcement initiatives.

Finally, an evening whānau workshop gives parents valuable information on digital parenting strategies. During this workshop, parents are educated about general online issues that students may encounter. Additionally, the workshop covers the specific concerns and topics students raised during their in-class discussions and PMI activities. The workshop also

emphasises the importance of the SBT strategy and illustrates how parents can reinforce it at home.

The *Youth Workbook: Digital Wellbeing and Safety* (Huber-Koizumi, 2023) is a comprehensive compilation of highly relevant topics for year 5 and 6 students and older. This workbook is designed to be a valuable resource for parents and schools, reinforcing the knowledge and skills acquired through the SBTDWS programme. The topics covered in the workbook encompass essential topics such as the SBT strategy, data protection, digital footprint, addressing online bullying, body image concerns, managing social media and gaming addiction, understanding consent for photo-taking, recognising scams, and developing skills for fact-checking and combating misinformation. While research on the specific skills required for students to mitigate their online harm risk is limited, the workbook aims to empower students by providing them with the necessary knowledge and tools to navigate the digital world safely and responsibly. By addressing these topics, the workbook seeks to enhance students' digital literacy and equip them with the skills to make informed decisions and protect themselves online.

Methodology

In early 2022, a rural primary school with approximately 95 students aged 5 to 11 from a high decile school participated in the SBTDWS programme. This school was selected for the case study as I had the opportunity to observe subsequent in-class sessions led by the digital ambassadors and engage in conversations with students and parents. No data was explicitly collected for this assessment. Instead, insights from parent reflections, anonymous survey feedback, student discussions and feedback were utilised to complete the study. Group discussions can be a valid qualitative research method because they provide an opportunity to observe and analyse the dynamics of collective interaction within a specially created group (Payne & Payne, 2004). Narrative research involves collecting and analysing people's accounts of their experiences and their interpretations of those experiences

(Overcash, 2003). These ethical approaches were chosen as permission was not obtained to collect stories.

SBTDWS Programme Implementation

Before the in-class sessions, anonymous surveys were completed by all year 5 and 6 students. All parents were invited to participate in the surveys, and nearly half of them chose to do so. The survey results indicated a lack of systematic digital safety strategies employed by both students and parents.

In-class sessions

Each in-class session was tailored to the specific year level, considering the age and experience of the students. The duration of the sessions varied accordingly. Here is a breakdown of the activities conducted during the sessions:

1. New entrant and year 1-2 classes (30 minutes):
    - Interactive Unplugged Coding Activity: An interactive unplugged coding game was employed to engage the students. Students actively participated in "programming" a human robot using symbols, such as a forward arrow ($\rightarrow$). The facilitator or capable students wrote symbol sequences for the robots to follow. This activity allowed every student to participate as a programmer or robot.
    - Group Discussion on Watching Habits: Following the coding activity, a group discussion on watching habits was facilitated to establish context for introducing the SBT strategy.
2. Year 2-3 class, year 4-5 class, and year 5-6 class participated in the same activities as above as well as these below:

- Additional Group Discussions: For these year levels, additional group discussions specific to their experience levels were conducted to establish context for introducing the SBT strategy.
- PMI Activity: The year 4-5 and year 5-6 classrooms engaged in a PMI activity, enabling students to discuss the positives and negatives they face online.
- Utilisation of Videos: Videos were incorporated into the sessions to provide age-appropriate scenarios and facilitate discussions on important digital safety and wellbeing topics. Specifically, the videos focused on demonstrating how to create videos and share content without sharing personal information and addressed the concept of digital footprint.
- Roleplay: Roleplay activities were integrated into the sessions, allowing students to enact real-life situations and apply the SBT strategy.

3. Digital ambassador session
   - Group Activities: Students engaged in group activities to brainstorm ideas on utilising and promoting the SBT strategy to other students.
   - Student Agency: Two student leaders were chosen to lead the digital ambassadors, with their primary responsibility being to remind the year 5-6 teacher to allocate time for the ambassadors to work on their projects.

Refer to Table 1 for a detailed breakdown of the activities performed in each classroom.

Table 1. In-class session activities

Class	Session Length	Activities	Data collection methods
New entrant	30 minutes	- Unplugged coding activity - Group discussion on watching habits	Notes after session based on student answers

Year 1 and 2	30 minutes	• Unplugged coding activity • Group discussion on watching habits	Notes after session based on student answers
Year 2 and 3	45 minutes	• Unplugged coding activity • Group discussion on watching habits • Group activity to discuss negatives they deal with online	Notes after session based on student answers
Year 4 and 5	90 minutes	• Unplugged coding activity • Group discussion on watching habits, games played and social media used • PMI • Videos • Roleplay	Google doc captures PMI and negatives students deal with to use as age appropriate scenarios to introduce and reinforce SBT strategy
Year 5 and 6	90 minutes	• Unplugged coding activity • Group discussion on watching habits • PMI • Videos • Roleplay	Google doc captures PMI and negatives students deal with to use as age appropriate scenarios to introduce and reinforce SBT strategy
Digital Ambassadors	60 minutes	• Group discussion on potential ways to reinforce the SBT strategy • Group activity to begin to create the	Observations and follow up observations two terms later.

		resources and activities that reinforce the SBT strategy throughout the school.	

Whānau workshop

The whānau workshop was held the same evening as the Digital Ambassador session, with 15 parents participating, representing approximately 20% of the school families. At the end of the workshop, feedback was collected through a survey. Additionally, I received ongoing feedback through stories and parental comments, ranging from one week to one year and two months after the workshop.

Findings and Discussion

The Ministry of Education and the New Zealand government have expressed their dedication to digital safety and wellbeing by incorporating them into the Digital Citizenship curriculum (Ministry of Education, 2014). The Department of Internal Affairs has also emphasised the importance of digital safety within the broader concept of Trust in their Digital Inclusion Blueprint (2019). Moreover, Netsafe has provided valuable guidance on fostering a cohesive approach among the home, school, and community to promote digital safety and wellbeing (Melhuish et al., 2018). For teachers and schools, supplementary resources are available to support them in implementing digital literacy education in New Zealand, offering specific approaches and tools aligned with the broader curriculum framework (Crow et al., 2019). While these initiatives contribute to children's digital safety and wellbeing, this case study addresses a significant gap in the existing literature by examining and investigating the role of students at the micro-level.

Students as Digital Change Agents

Policymakers and heads of organisations play a crucial role in envisioning, leading by example, and nurturing digital literacies within their respective contexts (Brown et al., 2016).

Teachers are instrumental in operationalising the curriculum and integrating educational technologies in classrooms and beyond. Students can also act as digital change agents or leaders through peer-to-peer learning. However, the existing research literature is lacking regarding the specific role of students as digital change agents. This case study addresses this gap by investigating and exploring students' potential to actively contribute to advancing digital safety and wellbeing in their environments. By filling this void in the literature, the study seeks to shed light on the impact and significance of student involvement in promoting a safer and healthier digital landscape.

Students can effectively navigate and ensure digital safety and wellbeing once they receive appropriate instruction and guidance. The findings from Brandau et al. (2022) and Buchanan et al. (2017) have highlighted the capability of students to comprehend the consequences of their online behaviour. Through PMIs and group discussions, students were able to identify risks associated with using devices online (Table 2). Furthermore, through a subsequent group activity, Year 5-6 students identified additional risks not initially listed in the PMI (Table 3). In a role-playing activity using an identified risk, students could appropriately apply the SBT strategy.

Feedback from students regarding the SBTDWS programme indicates a positive reception and enjoyment of learning about digital safety and wellbeing strategies, aligning with previous research that supports the notion that students have a positive attitude towards learning about this topic. Brandau et al. (2022) reported that participants expressed satisfaction with the relatability of the content and a desire for more comprehensive coverage of the subject matter beyond what was covered in the sessions.

During a subsequent visit to the school to observe a digital ambassador session, I noticed posters designed by the students in each classroom reinforcing the SBT strategy. This indicated that students actively contribute to advancing digital safety and wellbeing within

their school. During the session, the students performed a skit about online bullying and demonstrated how to apply the SBT strategy. When prompted by the ambassadors, student observers in each class could recite the strategy as a group, showcasing the ambassadors' role as leaders empowering other students through peer-to-peer learning.

Table 2 Year 6 PMI

Year 6 PMI			
App	Pluses	Minuses	Improvement
Snapchat	Chatting with friends	Strangers trying to talk to me Unless you know the person in real life, you don't know if they are faking Bullying	Make sure videos are not inappropriate on the discovery page.
Roblox	Lots of free games	Scams Hackers Blackmail Addiction	Everything is free, you do not need to use Roblox money.
Youtube or Netflix	Entertainment Funny Videos	Violence Inappropriate videos Swearing Not everything is true or real	The age rating for *What's Next* actually works, and videos are always appropriate
Minecraft	Creating	Strangers	Make it look less blocky
TikTok	Texting Making videos	Stalkers Bullying	Add video calls

Table 3. Online risks

Online Risks Identified by year 5 and 6 students through group discussions	
Inappropriate content Inappropriate contact Bad behaviours FOMO Peer pressure Hackers Cyberbullying	Gaming/Social Media addiction Creepy People and Creepy things/predators Misinformation/Fake news Losing control of your content Spams Hard to determine who you are talking too *Students used the scenario that friends of friends can invite*

Privacy issues Scams Swearing Glitches	*students to group chats that they may not have control over to indicate understanding of how it's hard to know who you are talking to online*

Learner-centric Approach and Student Agency

The learner-centric approach is evident in the programme design. Students are placed at the heart of the learning process, where short activities encourage them to discuss their previous experiences and engage in collaborative and cooperative learning (Prince, 2004). Students' positive reception and enjoyment regarding the SBTDWS programme indicate that the learner-centric approach effectively engages students in the learning process and makes it practical and meaningful for them.

The promotion of student agency is another key aspect of the programme design. Students are encouraged to become knowledge generators through group activities and discussions, allowing them to share their experiences and insights (Vaughn, 2020). By actively contributing to advancing digital safety and wellbeing within their school and the broader environment through creating posters and performing skits within their and other classrooms, students exert influence, transform existing practices, and broaden opportunities for reinforcing preventative digital safety strategies. This empowers students and promotes their agency as learners, as they take ownership of their digital experiences and work towards creating a safer digital landscape.

Impact of Parental Empowerment on Children's Digital Safety

The findings of this study highlight the positive impact of parental empowerment on enhancing children's digital safety. By implementing the SBT strategy, parents were equipped with the necessary knowledge and skills to support their children in navigating the online world effectively, matching current research that shows parent awareness and

engagement are among the most significant predictors of children's digital safety, even more so than parental device controls (Wang & Xing, 2018).

One significant outcome of the parental empowerment approach was evident in the story shared by a parent during a netball game. Approximately six months after the in-class sessions, a parent approached me to express gratitude towards the SBT strategy. She recounted an incident where her daughter was subjected to bullying through the use of Messenger Kids, an online messaging platform.

Thanks to the knowledge gained from the SBT strategy, the parent's child quickly recognised the other student's behaviour as bullying and identified that other students were also being targeted. The child promptly confided in her mother, who immediately addressed the situation by contacting the parents of the other children involved.

Furthermore, the prompt resolution of the bullying situation highlights the effectiveness of parental intervention in mitigating the adverse effects of online bullying. By initiating communication with the parents of the other children involved, the parent addressed the immediate issue and fostered a collaborative environment to prevent further bullying. This outcome underscores the potential of parental empowerment in creating a safer and more inclusive online environment for children.

Effectiveness of the SBTDWS programme
While limited research specifically focuses on integrating digital safety and wellbeing strategies, existing studies have demonstrated successful implementation through various activities. Bickham et al. (2021) exemplify this approach by employing diverse methods within the classroom. These methods encompassed listening to podcasts, employing

teacher scripts, engaging in hands-on activities, participating in scenario role-playing, facilitating student reflections, and culminating in a final project that consolidated all the preceding lessons. These activities mirror the approach taken in the SBTDWS programme, which utilises similar techniques such as games, hands-on activities, and role-playing of different scenarios to assess students' understanding of the SBT strategy. By employing a comprehensive approach, students were actively engaged with the material, facilitating the transfer of the SBT strategy to long-term memory.

Research suggests that retrieval practice, such as the active recall used in the SBTDWS programme, is a more efficient learning approach than repeated studying (Karpicke & Roediger III, 2008). By testing students' knowledge and prompting them to retrieve information from their long-term memory, the SBTDWS programme increases the likelihood of later recall. This was evident in my observation of a digital ambassador session where student leaders attended each classroom two terms later to perform a skit about using the SBT strategy if someone is being mean to them online. When the senior leaders asked the students what they should do if someone were mean to them, most students could repeat the SBT strategy.

Facilitator scripts guided the discussions during the SBTDWS programme sessions, while hands-on activities provided practical experiences. Additionally, students actively generated online risk scenarios and engaged in role-play activities. Research indicates a notable impact of role-playing on students' mastery of concepts, fostering their creativity and skill development (Gamanik et al, 2019). These role-play activities allowed students to apply the SBT strategy to age-appropriate scenarios, demonstrating their understanding and concept mastery. Notably, all students could effectively apply the SBT strategy during these role-play activities.

By incorporating various activities such as unplugged coding games, group discussions, videos, roleplay, and student-led initiatives, the SBTDWS programme ensured active student engagement and facilitated a comprehensive understanding of the SBT strategy. These activities were adapted to suit the different year levels to provide age-appropriate context.

Implications and recommendations

This case study highlights how the SBTDWS programme can empower students to become digital change agents by promoting digital safety and wellbeing. Students can influence their peers and shape the school culture through peer-to-peer discussions and sharing experiences. Their efforts extend beyond the micro-level and impact the broader school environment.

Moreover, students demonstrated their agency and the efficacy of the SBT strategy when they came up with creative ways to reinforce the SBT strategy. Using skits and posters, they effectively communicate key messages and principles of digital safety to the entire school community by capturing attention and raising awareness among students, teachers, staff and parents. As these skits and posters become integrated into the school's cultural landscape, they contribute to a shared understanding and commitment to digital safety, thereby influencing the school culture at the meso-level.

Based on these findings, it is recommended that schools consider adopting the SBTDWS programme or similar learner-centric approaches to empower students as digital change agents who actively manage their digital safety and wellbeing. Additionally, providing a digital wellbeing and safety programme directly to students can help overcome barriers to implementation. However, collaboration among policymakers, school leaders, teachers, and parents should be prioritised to ensure sustained impact.

Conclusions

In conclusion, this case study provides valuable insights into the role of the SBTDWS programme in empowering students as digital change agents and promoting digital safety and wellbeing. It also provides insights into the impact of parental empowerment on children's digital safety and wellbeing. The findings confirm that students have the potential to influence their peers and shape the school culture through peer-to-peer discussions and sharing experiences. Moreover, the study highlights the effectiveness of creative methods, such as skits and posters, in communicating critical messages about digital safety to the entire school community.

The analysis suggests that integrating the SBTDWS programme or similar learner-centric approaches in schools can significantly impact fostering a digital safety and wellbeing culture. The positive outcomes observed in this study reinforce the notion that students possess agency and can drive change at various levels within the school environment. By engaging students actively and providing them with the necessary tools and resources, schools can overcome barriers to implementation and ensure a sustainable integration of digital safety practices.

Future research should examine whether the SBTDWS approach can effectively address barriers to implementation, explore its long-term impact, and delve into how students' actions and initiatives reverberate across different layers of the educational ecosystem. This includes investigating the influence of their efforts on the attitudes and behaviours of teachers, administrators, and other stakeholders. Furthermore, understanding the interplay between students' advocacy for digital safety and the broader societal context at the macro-level can provide insights into the long-term implications of their actions and the potential for systemic change. By conducting such research, we can gain a more

comprehensive understanding of the transformative potential of students in promoting digital

safety and wellbeing.

References

Bickham, D. S., Moukalled, S., Inyart, H. K., & Zlokower, R. (2021). Evaluating a
middle-school Digital Citizenship curriculum (Screenshots): Quasi-Experimental
study. *JMIR Mental Health*, *8*(9), e26197.

Bonka, C.J. & G. Stevenson Smith. (1998) Alternative instructional strategies for creative
and critical thinking in the curriculum. Journal of Education, 16(2), 261-293

Brandau, M., Dilley, T., Schaumleffel, C., & Himawan, L. (2022). Digital Citizenship among
Appalachian middle schoolers: The common sense Digital Citizenship curriculum.
Health Education Journal, 81(2), 157-169.

Brown, C., Czerniewicz, L., Mayisela, T., & Huang, C. W. (2016). A practice based
approach to theorising digital education leadership.

Buchanan, R., Southgate, E., Smith, S. P., Murray, T., & Noble, B. (2017). Post no
photos, leave no trace: Children's digital footprint management strategies.
E-learning and digital Media, *14*(5), 275-290.

Crow, T., Luxton-Reilly, A., Wünsche, B. C., & Denny, P. (2019, January). Resources and
support for the implementation of digital technologies in New Zealand schools. In
Proceedings of the Twenty-First Australasian Computing Education Conference (pp.
69-78).

Department of Internal Affairs. (2019). The Digital Inclusion Blueprint, Te Mahere mō te
Whakaurunga Matihiko. Wellington: Department of Internal Affairs. Retrieved from
https://www.digital.govt.nz/assets/Documents/113Digital-Inclusion-BlueprintTe-Mah
ere-mo-te-Whakaurunga-Matihiko.pdf.

Erickson, A. (2018). Case Studies. In R. Kimmons, *The Students' Guide to Learning Design
and Research*. EdTech Books. https://edtechbooks.org/studentguide/case_studies

Gamanik, N. M., Sanjaya, Y., & Rusyati, L. (2019). Role-Play Simulation for Assessing
Students' Creative Skill and Concept Mastery. Journal of Science Learning, 2(3),
71-78.

Gerring, J. (2004). What is a case study and what is it good for?. *American political
science review*, *98*(2), 341-354.

Hammond, M. (2020). What is an ecological approach and how can it assist in
understanding ICT take‑up?. British Journal of Educational Technology, 51(3),
853-866.

Huber-Koizumi, N. (2023). Youth Workbook: Digital Wellbeing and Safety. Digital Waitaha Charitable Trust. https://doi.org/CC BY 4.0 Retrieved from https://digitalwaitaha.org.nz/orangebook

Karpicke, J. D., & Roediger III, H. L. (2008). The critical importance of retrieval for learning. *science*, *319*(5865), 966-968.

Magis‑Weinberg, L., Muñoz Lopez, D. E., Gys, C. L., Berger, E. L., & Dahl, R. E. (2023). Short Research Article: Promoting Digital Citizenship through a school‑based intervention in early adolescence in Perú (a pilot quasi‑experimental study). Child and Adolescent Mental Health, 28(1), 83-89.

Martin, F., Bacak, J., Polly, D., Wang, W., & Ahlgrim-Delzell, L. (2022). Teacher and School Concerns and Actions on Elementary School Children Digital Safety. TechTrends, 1-11.

Melhuish, N., Spencer, K., Webster, A., & Spence, P. (2018). From Literacy to Fluency to Citizenship: Digital Citizenship in Education. Netsafe.(2018). From Literacy to Fluency to Citizenship: Digital Citizenship in Education (2nd ed.). Wellington, NZ: Netsafe.

Ministry of Education. (2014). Digital technology safe and responsible use in schools: A companion to the guidelines for the surrender and retention of property and searches. Retrieved from https://www.education.govt.nz/assets/Documents/School/Managing-and-supporting-students/DigitalTechnologySafeAndResponsibleUseInSchs.pdf

Overcash, J. A. (2003). Narrative research: a review of methodology and relevance to clinical practice. Critical reviews in oncology/hematology, 48(2), 179-184

Payne, G., & Payne, J. (2004). Group discussions/focus groups. SAGE Publications, Ltd, https://doi.org/10.4135/9781849209397

Prince, M. (2004). Does active learning work? A review of the research. *Journal of engineering education*, *93*(3), 223-231.

Teschers, C., & Brown, C. (2019). Media literacy and Digital Citizenship in Aotearoa New Zealand.

United Nations Educational, Scientific and Cultural Organization (UNESCO). (2017) Conference on Digital Citizenship Education in Asia-Pacific Outcome Document. Retrieved April 8, 2023 from, https://en.unesco.org/sites/default/files/dkap-conference-outcome-mar2017.pdf

Vaughn, M. (2020). What is student agency and why is it needed now more than ever?. *Theory Into Practice*, *59*(2), 109-118.

Wang, X., & Xing, W. (2018). Exploring the influence of parental involvement and socioeconomic status on teen digital citizenship: A path modeling approach. *Journal of Educational Technology & Society*, *21*(1), 186-199.