Application No. GR000292022_23 From Dr Caroline Keen

Form Submitted 30 Oct 2023, 5:38PM NZDT

Grant report

Instructions

Thank you for completing your funded initiative.

This form will be placed on our website for transparency and enables us to understand and share the work you have done through this grant.

Please complete and submit this form no later than the date stipulated in your funding agreement. If you cannot meet the deadline, contact us to arrange an alternative date by emailing funding@internetnz.net.nz. You may not be eligible to apply for further grants from InternetNZ if this is not submitted.

The completion of this form should be overseen by someone with intimate knowledge of the funded mahi.

* indicates a required field

Grant initiative update

Initiative title *

Exploring student privacy risks presented by EdTech in NZ schools

Provide a short summary of the work that was completed as part of this initiative.

Background and methodology

The digitalisation of education, and in particular the expansive growth in EdTech in schools presents new challenges for the safeguarding of students' personal information. Not only do schools collect, generate and share considerable student information, but the expansive growth of educational technologies (EdTech) within schools brings new challenges to protect children's data from commercial interests (Ausland, Bernardino, Doern, Edwards, & al., 2022; Hooper, Livingstone, & Pothong, 2022; Human Rights Watch, 2022).

The use of educational technology (EdTech) in schools has become increasingly prevalent in recent years, with many communication, administration, and teaching services being implemented. The growth of EdTech in other countries has been expansive, and yet there little is known about the scale and process of its adoption in NZ schools.

This research study explored how student privacy is understood in schools, what data the schools collect, and the awareness and privacy protocols that schools implement in relation to EdTech used across communication, administration, management, and learning and assessment functions within schools in New Zealand. It highlights some of the challenges associated with protecting student data privacy in relation to commercial EdTech.

This small pilot study generated numerous insights as to the state of EdTech in NZ schools and highlights future challenges in protecting student data privacy in the now somewhat privatised education setting.

Research Design: The research utilized a mixed methods approach, with semi-structured interviews as the primary mode of data collection. These obtained a range of insights concerning the use of communication, administration, teaching and learning educational technologies, and the safeguards and protocols set up to ensure the privacy of student data

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held by schools and in relation to commercial EdTech providers.

Data Collection Methods: Six qualitative interviews were conducted via Zoom between July 31st and August 2nd, 2023. Each interview session lasted between 1 to 2 hours. These sessions were recorded for transcription and subsequent analysis. Following the transcription, each interview was meticulously examined to extract key insights and themes. Surveying EdTech Across Four New Zealand Schools:

Initial Approach: During interviews, participants were shown a preliminary list of potential EdTech tools and services. This list was curated based on information from the Ministry of Education website and from the Australian Safer Technologies for Schools (ST4S) organisation (https://st4s.edu.au/).

Incorporation of Direct School Inputs: As the study progressed, IT staff from the participating schools provided valuable insights, especially leveraging data available through the Google Dashboard. This information was instrumental in expanding the initial list with data from New Zealand school settings. Teachers from the participating schools were presented with the updated list and requested to identify the tools and services they either personally use or have observed their students using for academic tasks and assignments.

Iterative Process: As interviews and discussions with participants from the four New Zealand schools were conducted, the list was adjusted and expanded. Each school, having its unique set of EdTech solutions, contributed to the diversification of the list. While some EdTech tools were universally adopted across multiple schools, others were more niche or specific to institutions.

Refinement and Consolidation: Upon completion of the data collection phase, the responses from all participating schools were analyzed and cross-referenced to create a comprehensive and representative list of EdTech tools and services employed across the four schools in New Zealand.

This iterative and participant-driven approach demonstrated the expansive scope of EdTech currently employed in four schools, but further research is needed to get a more accurate sense of the scale of EdTech across New Zealand schools.

Recruitment: As this was a small exploratory study a purposive sampling strategy was chosen. This approach led to the recruitment of a select group of two teachers and four IT staff from four high schools. A call for participation was shared on LinkedIn, which was subsequently reposted on a global Facebook group page dedicated to tech enthusiasts in education. This yielded four IT managers from four schools in Invercargill, Bay of Plenty, Wellington, and Auckland participated in the study. Three colleges were co-educational institutions, while one was a girls' college. Each IT manager was encouraged to enlist a teacher from their respective institution for an interview. Two teachers volunteered from the college in Wellington.

Methodology:

Qualitative interviews were executed using a grounded, open-style approach, allowing participants to express their perspectives and experiences organically. An interview schedule was developed from background research. There were six broad areas of interest that were explored with participants.

This research had 6 broad key areas of inquiry:

- A. Conceptualizations of Student privacy in New Zealand schools
- B. Collection and Use of Personal Student Data by Schools
- C. Scale of EdTech in Schools
- D. The selection and integration of EdTech in schools
- E. Privacy challenges in relation to commercial EdTech

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F. Challenges of protecting student information held by schools.

Data Analysis: While the interviews revolved around these broad areas of interest, the openended approach ensured a wealth of spontaneous insights. These responses were analyzed to identify common insights in relation to these six areas of interest.

Describe the "who, what, where and when" of your initiative.

Is this initiative complete? *

Yes ○ No

If your initiative is still in progress, select "no."

What are the outcomes of this initiative? *

Kev Conclusions

Even though the scale of EdTech in New Zealand schools aligns closely with that of American schools, unlike the US (and likely other countries such as Australia and the UK) there's a significant lack of legislative support to safeguard student privacy from potential EdTech risks.

The current process for selecting and adopting EdTech in schools is disorganized and decentralised. Decision-making often overlooks student privacy and typically involves teachers, senior management, or board members without IT staff input. While IT staff are conscious of EdTech data practices, they lack the authority to reject products based on student privacy concerns. Additionally, schools lack the necessary staff resources and government guidance to address EdTech's privacy concerns.

The rise in Google's dominance in schools is evident and two recent studies have raised concerns about children's exposure to the internet via Google, the leading EdTech provider (Ausland et al., 2022; Hooper et al., 2022), and the ability for Google to introduce its other products to students (a captive market) through its presence in schools has been criticized (Hooper et al., 2022). Another study done by Internet Safety Labs highlighted that as "Google dominates K12 edtech as the prime supplier of both hardware and software" there were concerns "about the safety of having children deeply connected to the internet by the world's leading advertising platform" (Ausland et al., 2022). While this study has not delved deeply into the specifics of the Google dashboard and approval system, feedback from interviews hints that there might be areas for improvement regarding review of EdTech data policies. Some indications suggest that other Google products beyond the Google Education package may be being promoted, along with third-party integrations that utilize Google Analytics, potentially expanding data collection from children during their education.

Although preliminary, this study prompts critical inquiries surrounding the adoption and integration of EdTech in schools. Concerns arise over the seemingly autonomous and random selection of these technologies without due consideration for student data privacy both held by schools and potentially mined by commercial EdTech. Additionally, there's a notable lack of clarity regarding who consents to the use of EdTech and their data practices. Central questions emerge: Are the existing methods for acquiring consent both clear and adequate? How can stakeholders such as governments, schools, parents, and students collaborate to bolster the protection of student data?

In the context of integrating technology in schools, there is a clear desire for improved governance. The current Privacy Act was thought to fall short in delivering unambiguous guidelines, and there were calls for a specific data protection regulation to assist schools. Additionally, some expressed a need for a more centralized and consistent approach to the deployment of EdTech. A broader discussion is needed on how to improve data privacy safeguards for students.

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While integrating technology into educational settings is vital, it's crucial that we prioritise the protection of student data privacy.

Describe major achievements resulting from this grant.

Which population group/s were affected by this project or program? *

Age groups > Children and youth (age 0-17) > Adolescents (people aged 13-17) Education status > Secondary school students Work status and occupations > Academics > Teachers Work status and occupations > Professionals

Please choose only the group/s that were at the very core of this project/program.

If you have any supporting documentation, you can share it below.

This could include photos, surveys, feedback, your evaluation plan, published research or annual report.

Remember this report will be placed on our website for transparency.

Upload files:

Filename: Dr Keen - EdTech in NZ schools study - Report .pdf

File size: 434.0 kB

Upload files:

No files have been uploaded

Provide web link:

http://www.sociodigitalresearch.net

Must be a URL.

Financial report

Budget

Provide details of funds received and spent in relation to this grant.

Income	\$	Expenditure	\$
internetnzgrant	\$10,000.00	Salary	\$8,000.00
	\$	Office, software sub- scription	\$1,460.00
	\$	transciptions and communications	\$300.00
	\$	Koha	\$240.00

Budget Totals

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Total Income Amount	Total Expenditure Amount	Income - Expenditure
\$10,000.00 This number/amount is calculated.	\$10,000.00 This number/amount is calculated.	\$0.00 This number/amount is calculated.

Have you experienced any issues with your intended budget? If so, please explain reasons for any major variances or for providing incomplete information: $\mbox{N/A}$

Feedback
You are almost at the end of your final report. Before submitting, please take a few moments to provide some feedback.
Please tell us how you found the reporting process: ● Very easy ○ Easy ○ Neutral ○ Difficult ○ Very Difficult
How many minutes in total did it take you to complete this form? 30 Estimate in minutes (i.e. 1 hour = 60 minutes)
Do you have any feedback? N/A For example, feedback on the evaluation toolkit if you used it, the process of working with InternetNZ or anything else.
InternetNZ is a membership organisation. Would you be interested in hearing more about becoming a member? O Yes please O No thanks I am already a member