



IDC New Zealand Education Study

BYOD and Digital Education in New Zealand Schools

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IDC's 2018 Survey of New Zealand Schools Indicates;

<p>Top 3 BYOD Impacts</p> <ol style="list-style-type: none"> 1. Self-directed learning is enhanced 2. Faster content updates and accessibility for students 3. Faster assessment of learning success 	<p>Digital Fluency leads to Equity</p> <p>76% say digital fluency will improve equity of access to digital education.</p>	<p>BYOD Policy</p> <p>48% have implemented a BYOD policy for students and a further 16% plan to develop one. The smaller the school the less likely they are to have a policy</p>	<p>The Most Common Information Sources</p> <p>When making digital decisions:</p> <ol style="list-style-type: none"> 1. Other schools and peers 2. IT service provider/vendors 3. Events and conferences 	<p>Security and Privacy</p> <p>59% of respondents worry about student security and 69% think they have it covered with current protocols and processes.</p>
<p>Top 3 BYOD Benefits</p> <p>Encourages:</p> <ol style="list-style-type: none"> 1. Learning outside classroom 2. Collaboration and interaction 3. Deeper and personalised learning 	<p>Personalised learning</p> <p>65% use or plan to implement Adaptive Learning Platforms (ALPs) and 87% use or plan to implement personalised learning</p>	<p>BYOD Implementation</p> <p>55% of schools have already implemented BYOD demonstrating a lag between deployment and developing a policy .</p>	<p>Distribution of ICT Budgets</p> <p>On average 48% of the ICT budget, of schools surveyed, is spent on hardware, 32% on IT services (including cloud) , 12% on software and 8% on networks and telecommunications</p>	<p>Use of cyber security tools</p> <p>60% of responding schools use cyber and data security tools and a further 29% are evaluating their security options.</p>
<p>Top 3 BYOD Challenges</p> <ol style="list-style-type: none"> 1. Widening equity gap, 2. Affordability, 3. Management of multiple device types 	<p>Learning Time</p> <p>it is predicted that 46% of learning time will involve laptops by 2022 (up from 16% in 2018) and 36% of learning time will be on tablets by 2022 (up from (9%)</p>	<p>BYOD by Device</p> <p>26% of laptops used in NZ schools are BYOD/CYOD, 34% tablet devices are BYOD/CYOD</p>	<p>Average Tech Spend</p> <p>On average 6.3% of a school's non-teaching budget is allocated to technology spending.</p>	<p>Digital Citizenship</p> <p>47% of schools surveyed stated that they have already deployed a digital technology citizenship education programme. and a further 46% plan to launch one.</p>
<p>Obstacles to Digital Integration</p> <ol style="list-style-type: none"> 1. Digital skills of teachers, 2. Cost/lack of funding, 3. Online resource development 	<p>87% use pool devices</p> <p>To meet the needs of students and families that cannot afford devices. However, only 6% can take the devices home. This has significant implications of creating an equity gap</p>	<p>BYOD Guidelines</p> <p>44% provide some BYOD guidelines for devices and 22% provide specific guidelines (Choose Your Own Device – from a list, CYOD) .</p>	<p>Chromebooks & iOS on Students' Devices</p> <p>51% of laptop devices used by students, in schools surveyed are Chromebooks and 62% of Tablets in schools are Apple devices (iOS)</p>	<p>Use of Education Applications on Devices</p> <p>87% of the schools surveyed said Google's G-Suite for Education is used on student devices and 24% use Microsoft Office 365 for Education</p>

*BYOD = Bring your own device

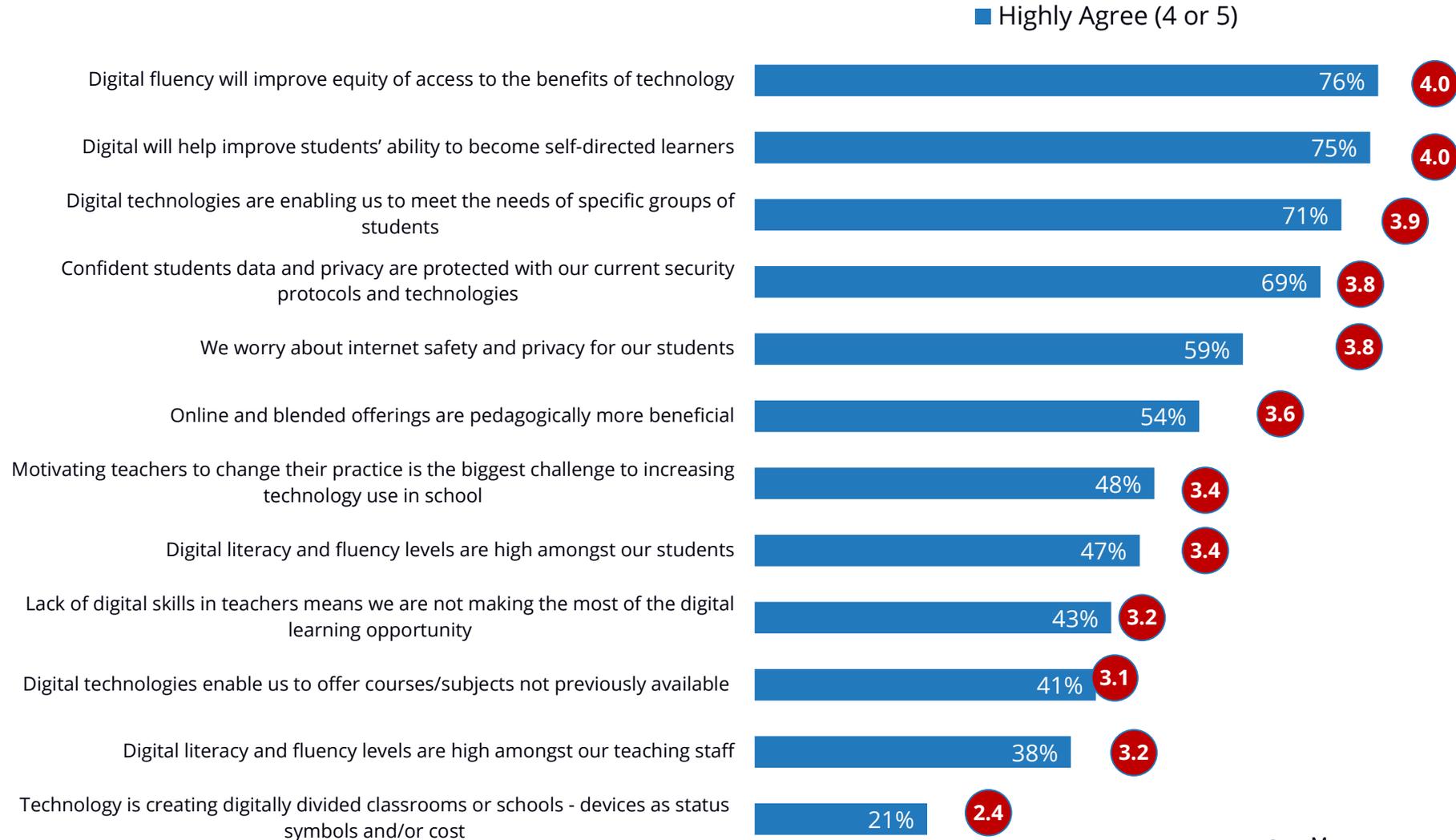
CYOD = Choose your own device which is a subset of BYOD

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Attitudes towards digital technology and education

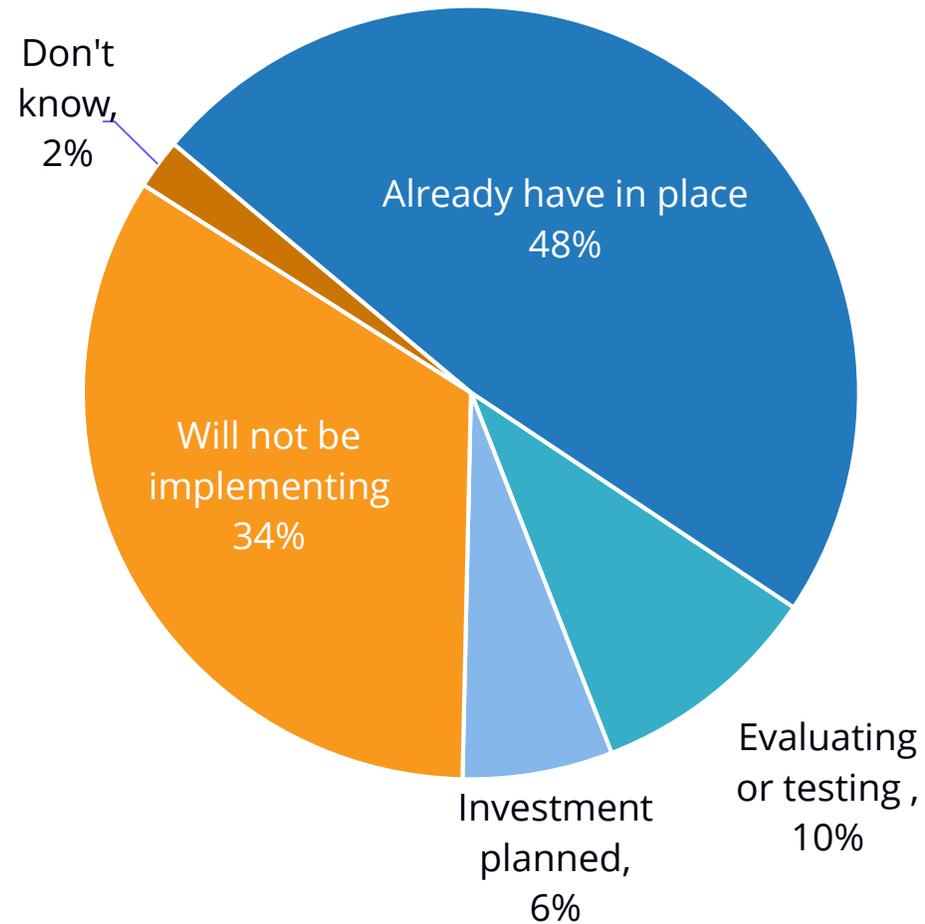
Q: Please rate the degree to which you agree/disagree with the following statements about the use of digital technology in schools (1 = disagree completely and 5= agree completely).



● Mean response (out of 5)

Schools' with a BYOD policy for students

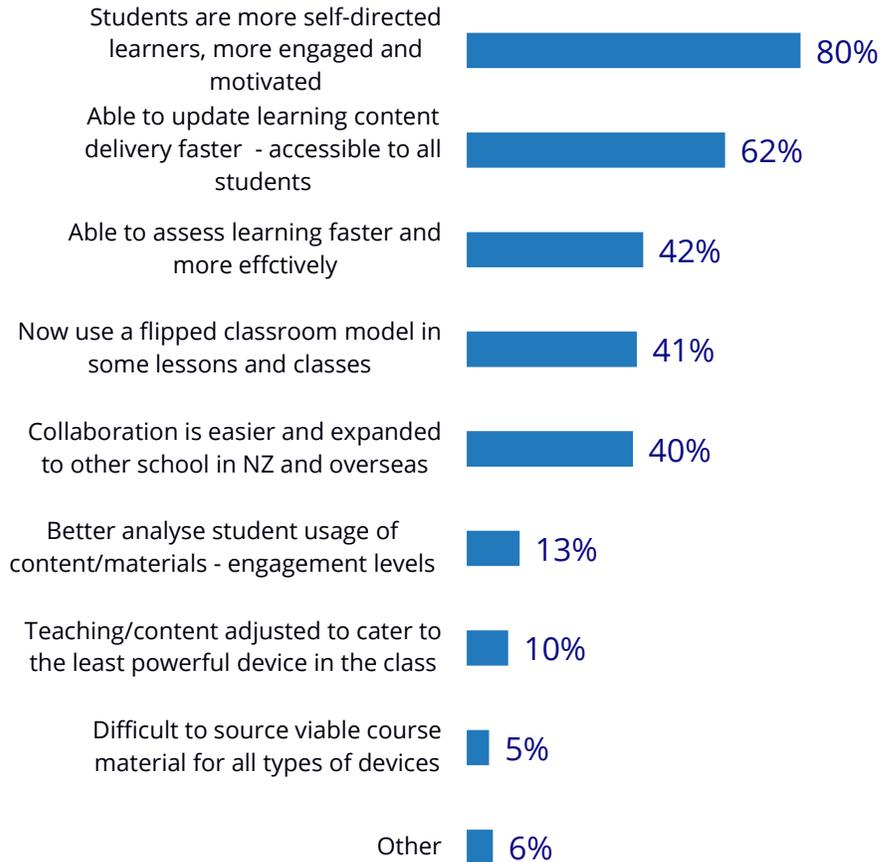
Q. To the best of your knowledge, which of these areas will your school be investing in or evaluating/testing in 2018? "Introducing a Bring Your Own Device policy for students."



N=290

BYOD's Impact, benefits and challenges on teaching

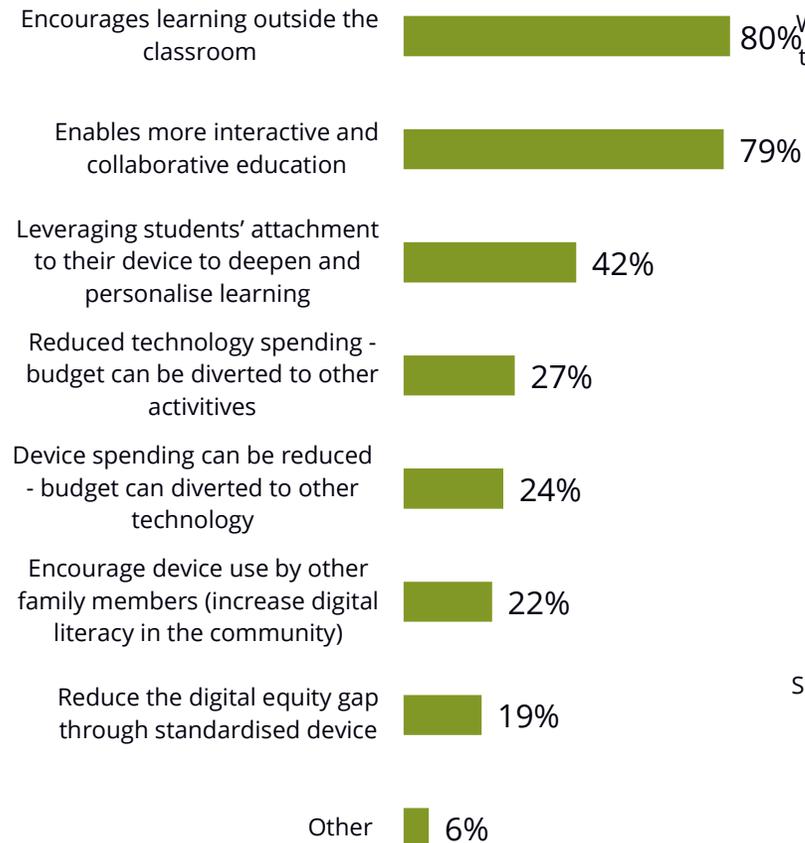
Impact on Teaching



Examples: the ability to allow children to become creators of content, become more critically minded and enrichment of teaching.

Q: How has BYOD affected teaching in your school classrooms?

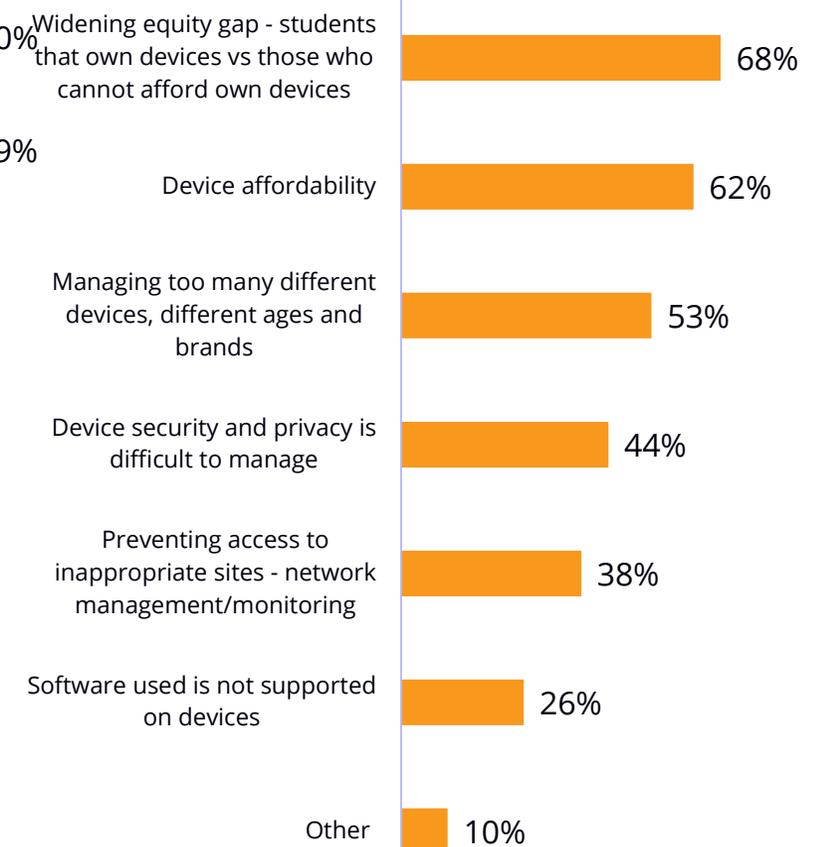
Benefits of BYOD/CYOD



Examples: holistic learning, learn to use devices as a problem solving tools, build resourcefulness and resilience, engage students who lack motivation.

Q: Which of these BYOD/CYOD advantages are important to you?

Challenges of BYOD/CYOD

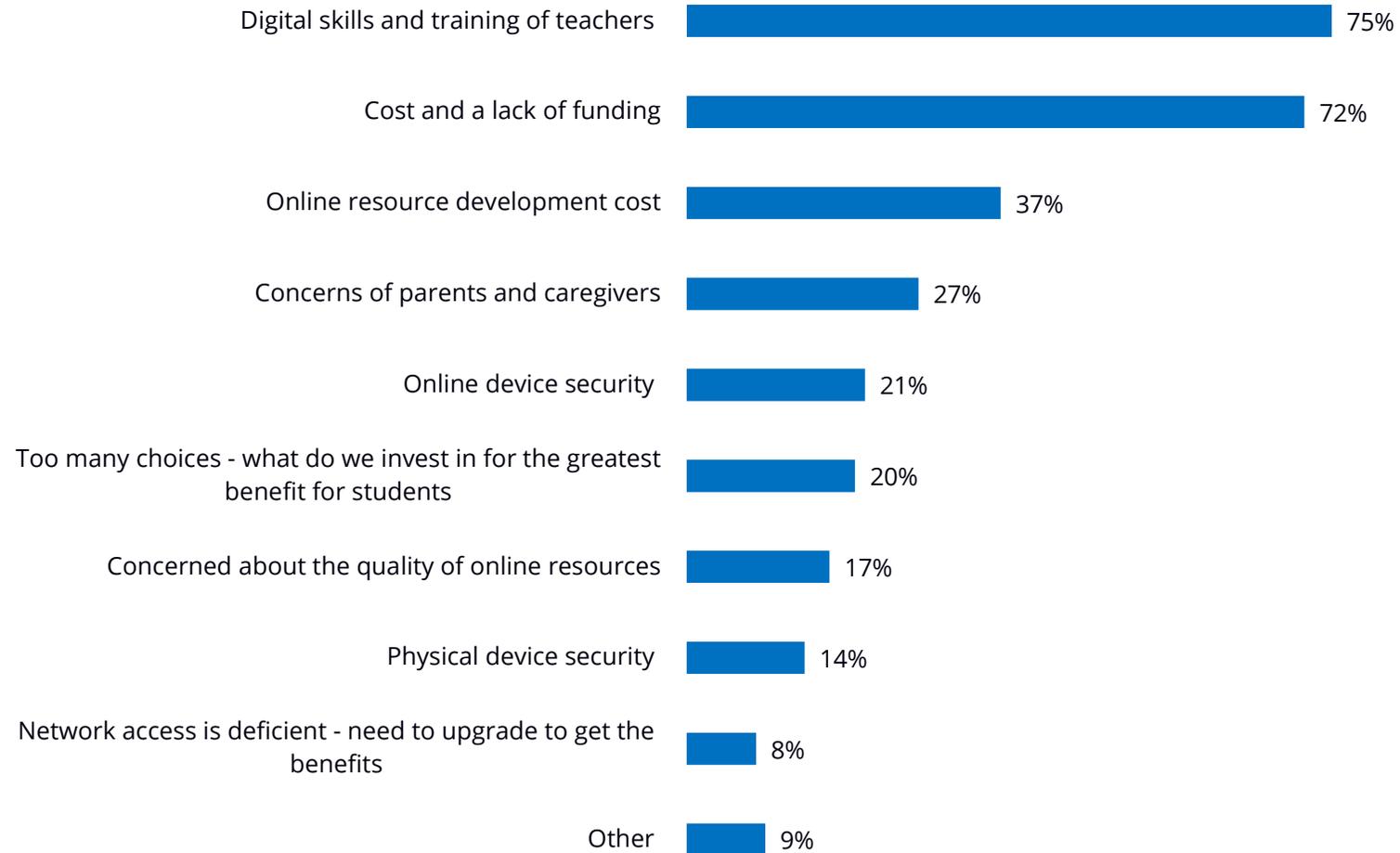


Examples: device charging keeping all devices up to date, inconsistent digital fluency, breakages/lost devices, keeping policy up to date.

Q: What are the key disadvantages of BYOD/CYOD?

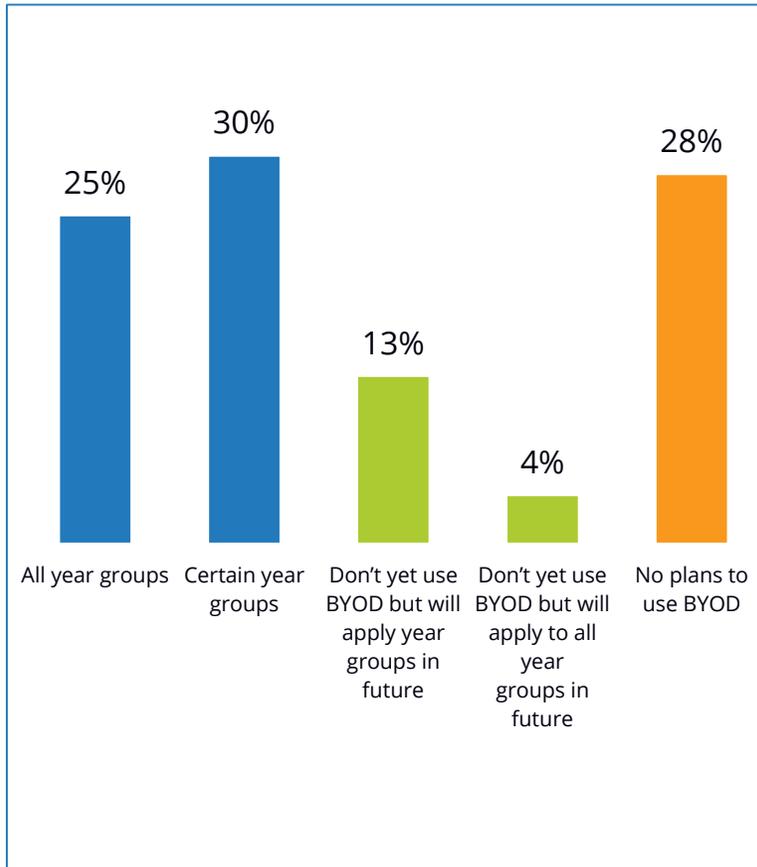
Obstacles to integrating technology into teaching

Q. What do you see as the three biggest obstacles to integrating more technology into your teaching environment? (Aggregated responses)



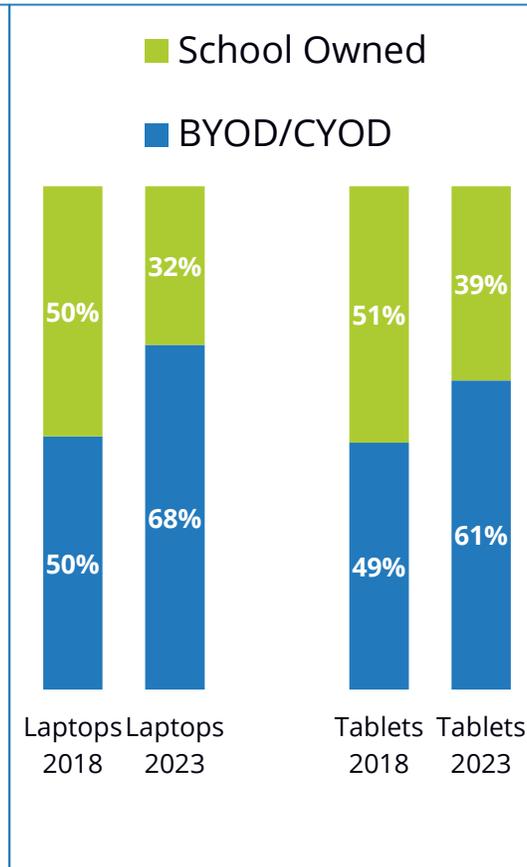
BYOD/CYOD deployment, migration and device usage

BYOD/CYOD Deployment



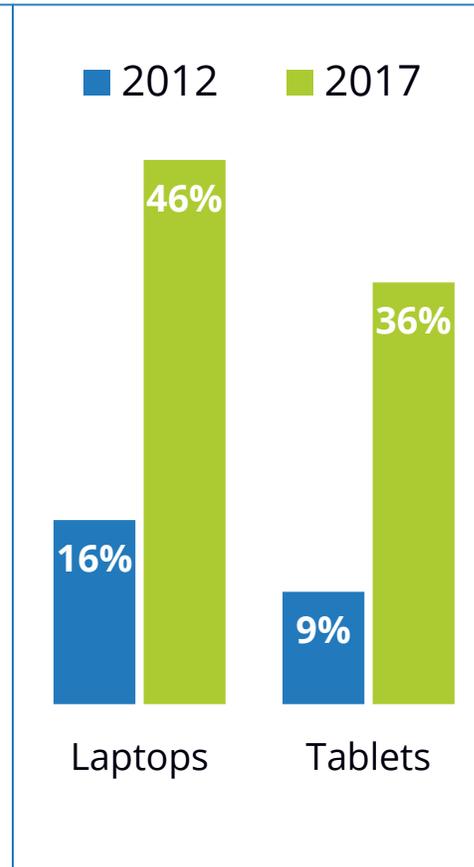
Q: Does BYOD/CYOD apply to all year groups or only certain year groups?

Migration to BYOD/CYOD



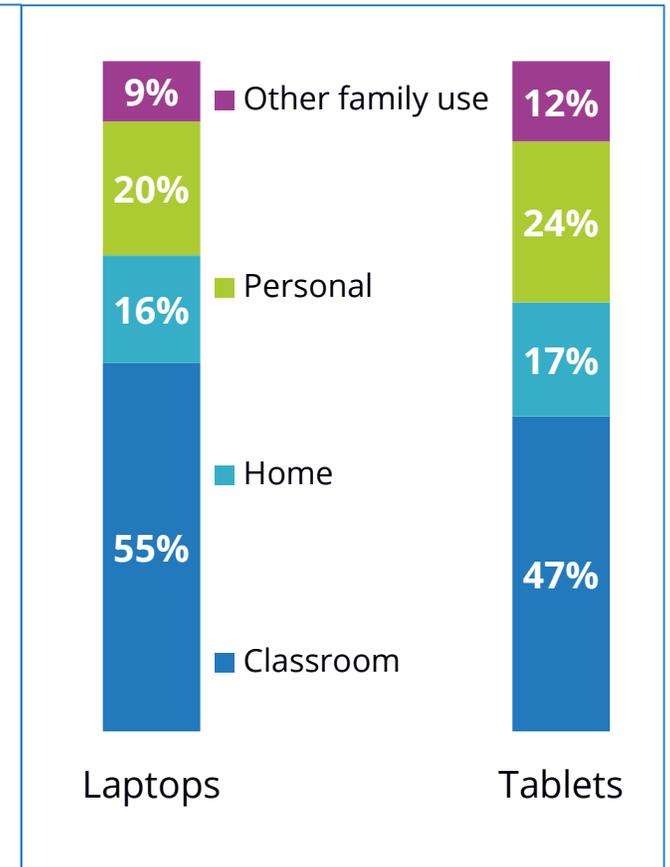
Q: Within the next 5 years how much do you think schools device ownership model will change

Learning Time on Devices



Q: What do you estimate is the % of learning time using devices? 2012 vs. 2017

Estimated Device Workloads



Q: How do you estimate the proportion of time devices are used for each of the following purposes?

Mobile device provision in New Zealand schools

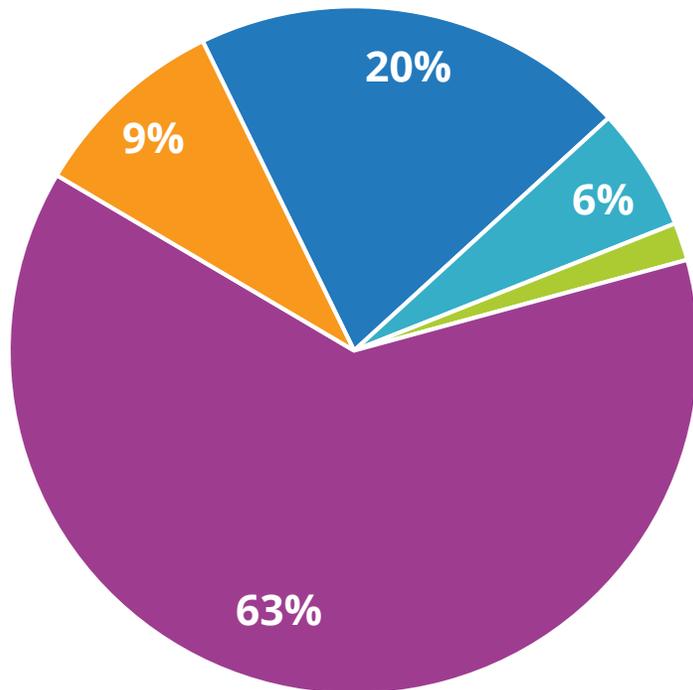
91% Use Laptops

78% Use Tablets

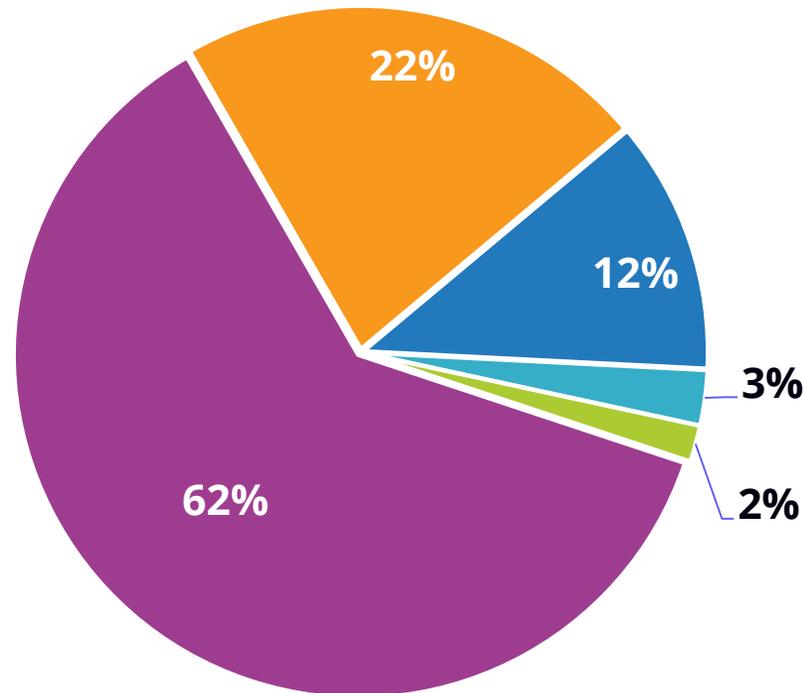
22% Use Smartphones

Q: Please estimate how the following mobile devices, that are used by students, are sourced by your school.

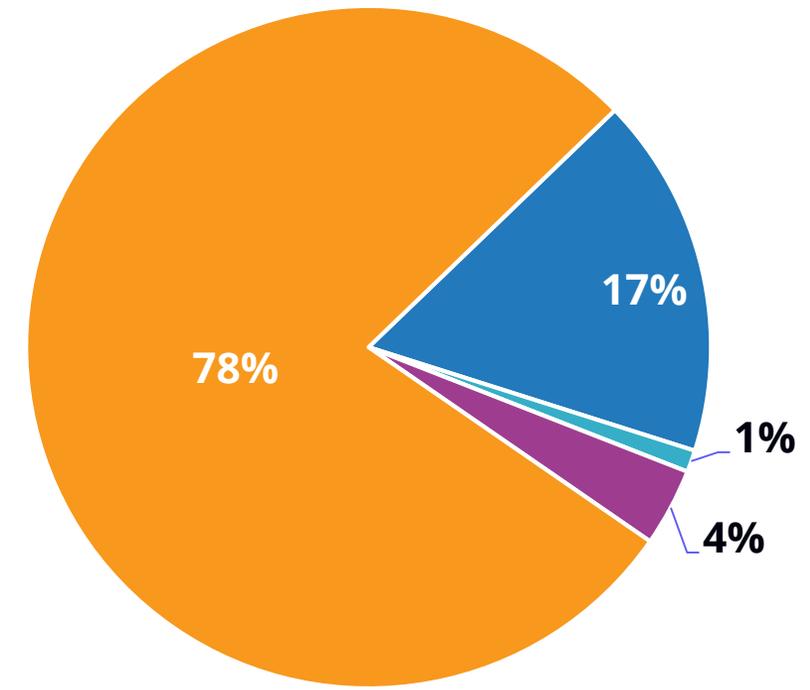
Laptops



Tablets



Smartphones



BYOD

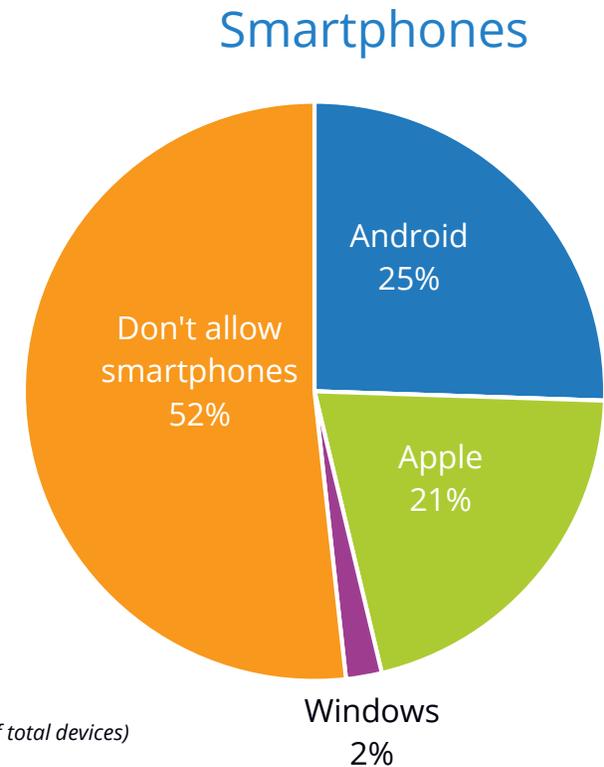
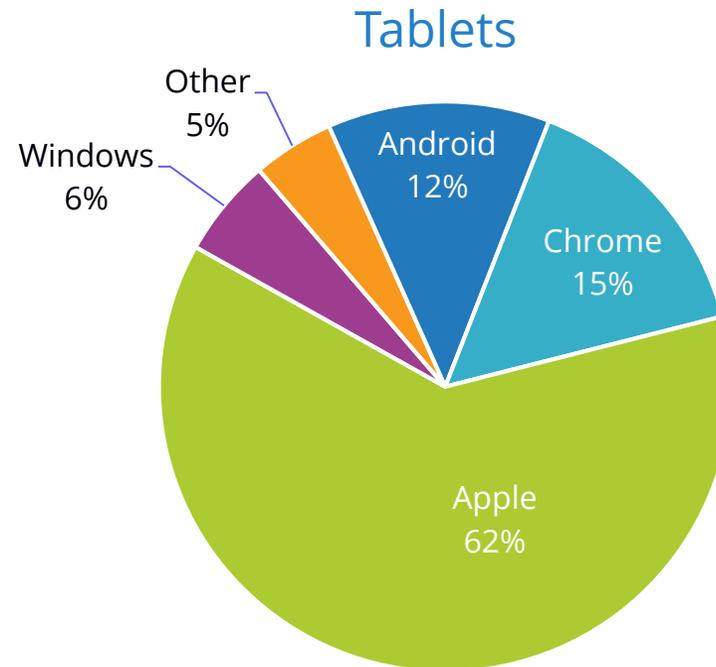
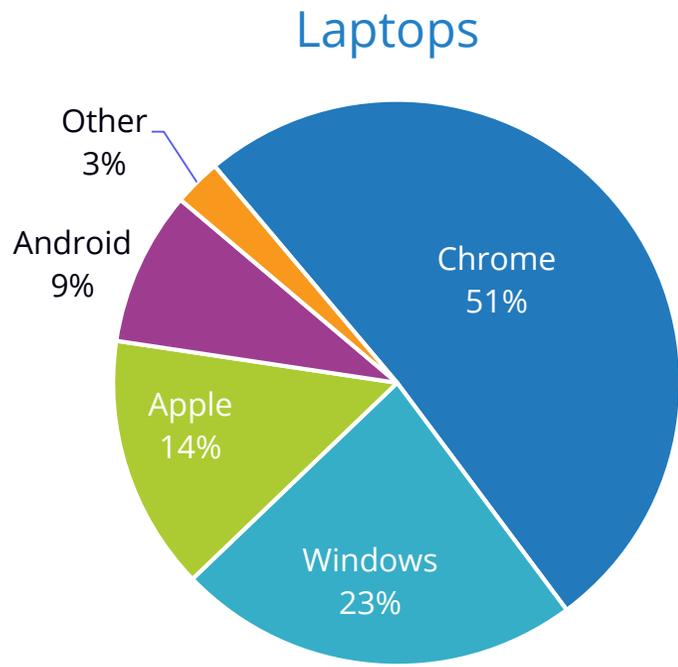
CYOD

School provided - can take home

School provided - cannot take home

No provision

Distribution of device operating systems (OS)

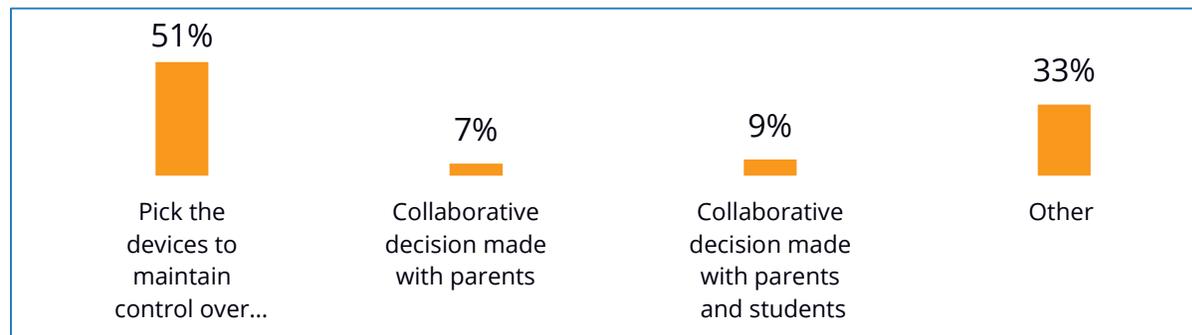
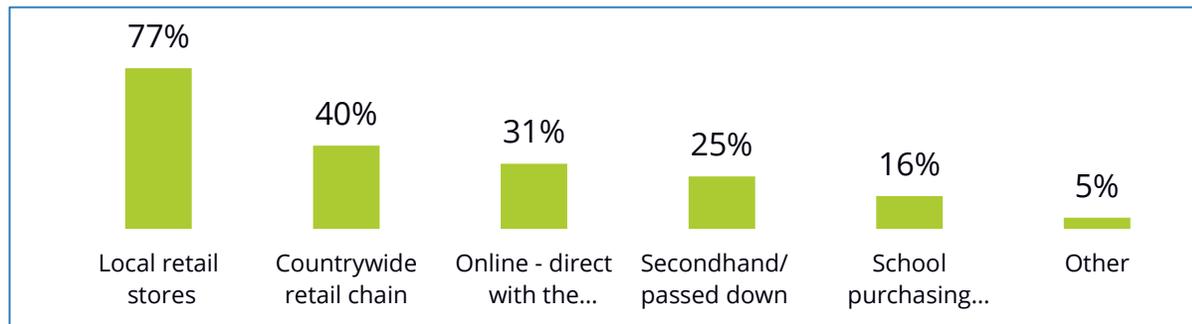
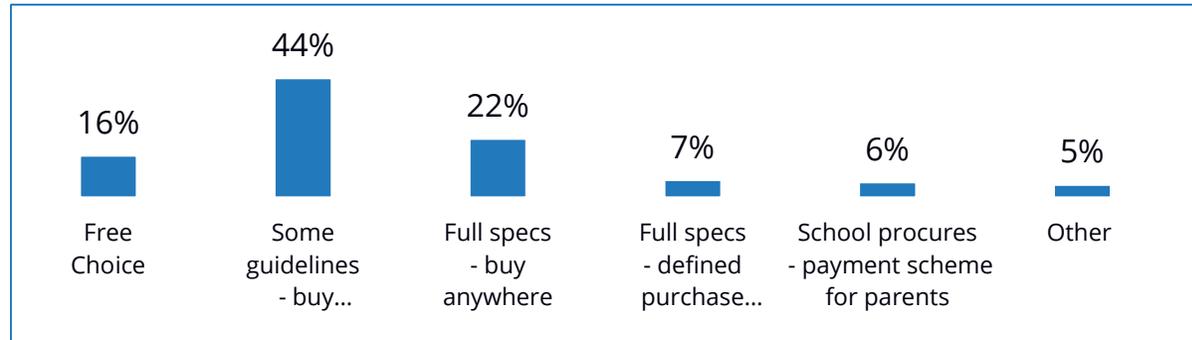


Q: What is the most commonly used operating system for the devices used/ to be used by the students? (please estimate % of total devices)

- **Laptops: The Rise of Chrome:** Chromebooks are the preferred 'laptop' of choice. These devices are a lot cheaper than other laptop devices, they are fast, portable, easy-to-use, and have a long battery life, all essential for classwork.
- **Tablets: The Apple Stronghold:** Apple's iPad still holds a lion's share of the tablet device market in schools. However, while this is the current situation, IDC's research shows a shift is occurring within new shipments to the market from competitors (source: IDC Tablet Tracker Q4 2017).

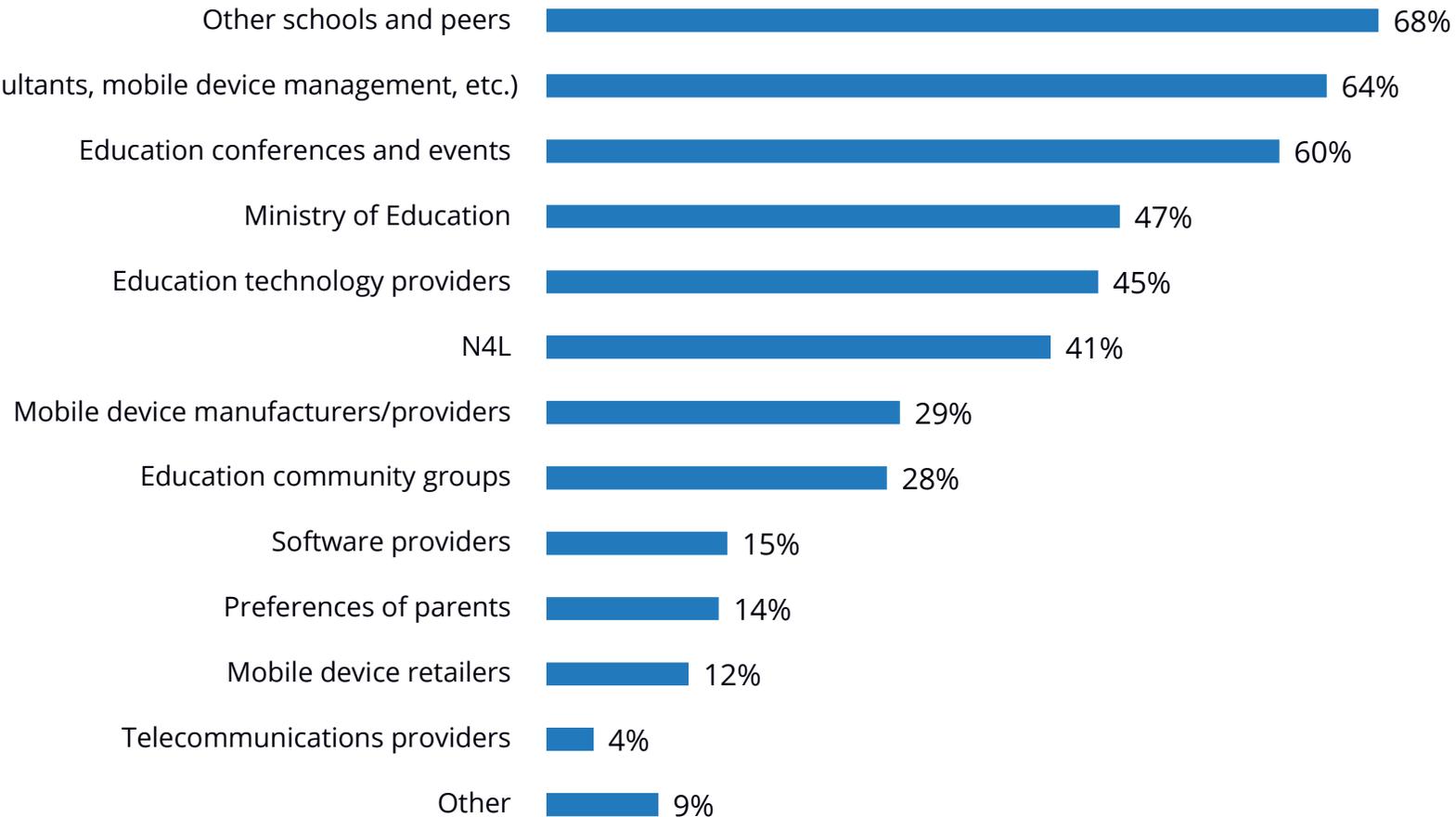
BYOD/CYOD device funding models

Q: How are BYOD/CYOD models set-up and devices funded/purchased?

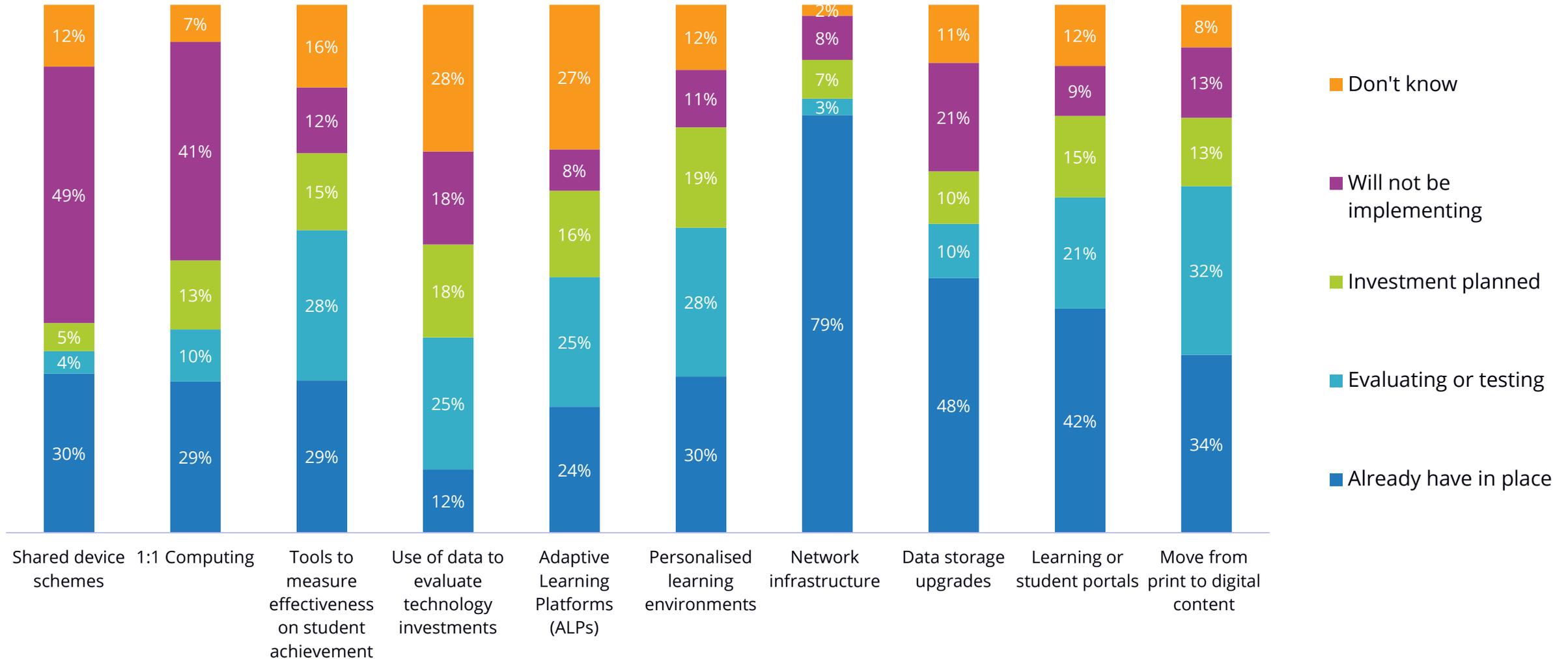


Information sources used to select devices

Q: What information sources do you use when deciding what devices to select or recommend for students and teachers (select all that apply)?

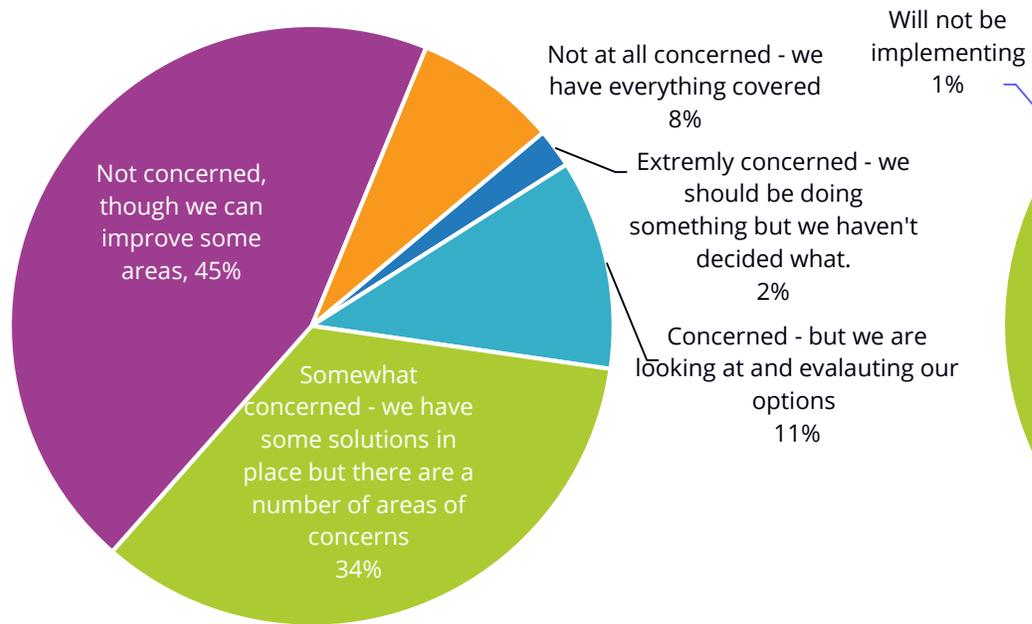


Digital education usage and implementation plans



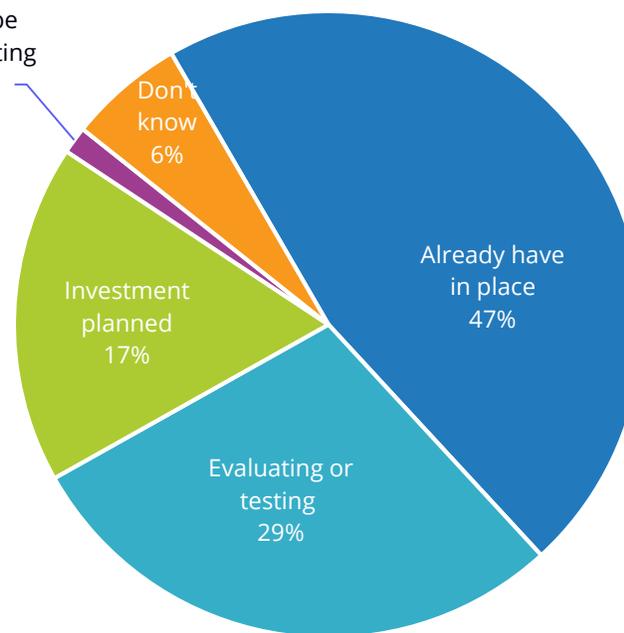
Digital security, privacy and safety

Concern about student safety on devices



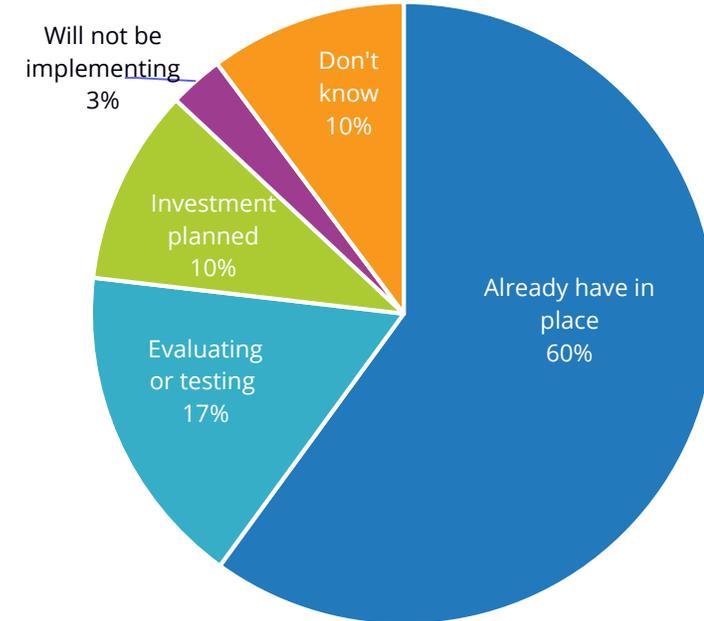
Q: How concerned are you about the security of devices used by children?

Digital Citizen Training



Q. To the best of your knowledge, which of these areas will your school be investing in or evaluating/testing in 2018? Digital Citizenship training

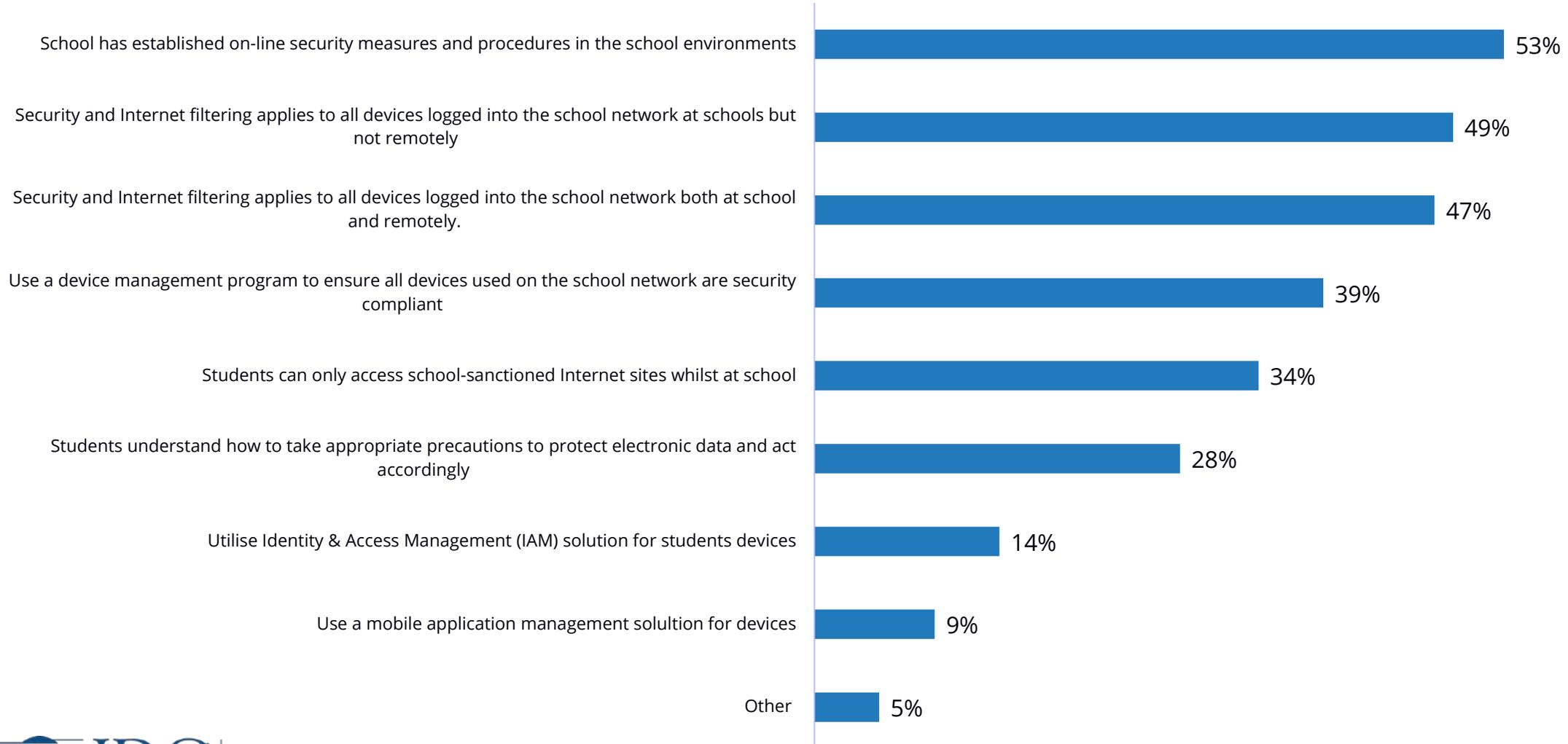
Cybersecurity Tools



Q. To the best of your knowledge, which of these areas will your school be investing in or evaluating/testing in 2018? Cybersecurity and Data Security Tools

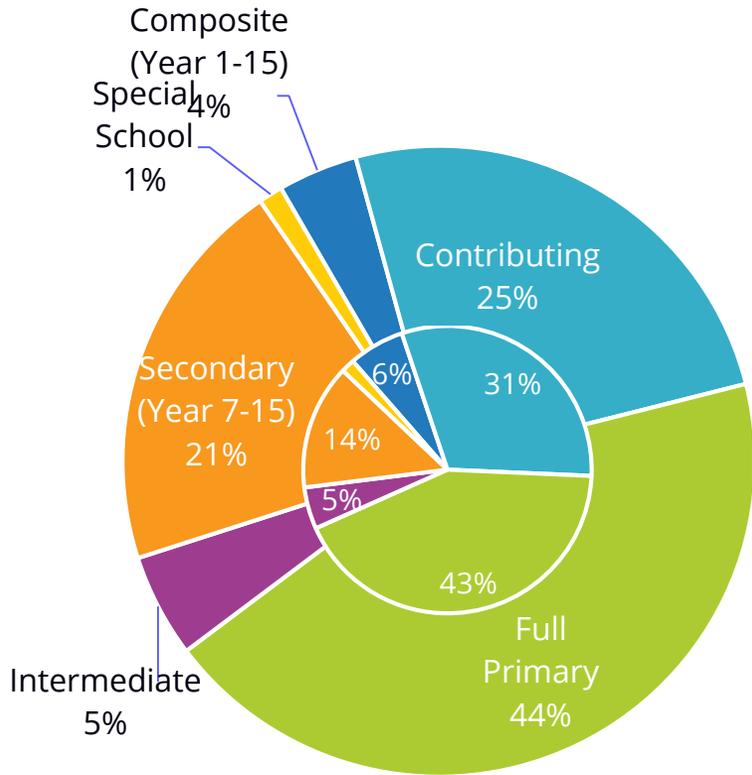
Security infrastructure for devices at school

Q: How is the infrastructure set up to keep students safe when on devices at school?



Appendix: Sample Demographics

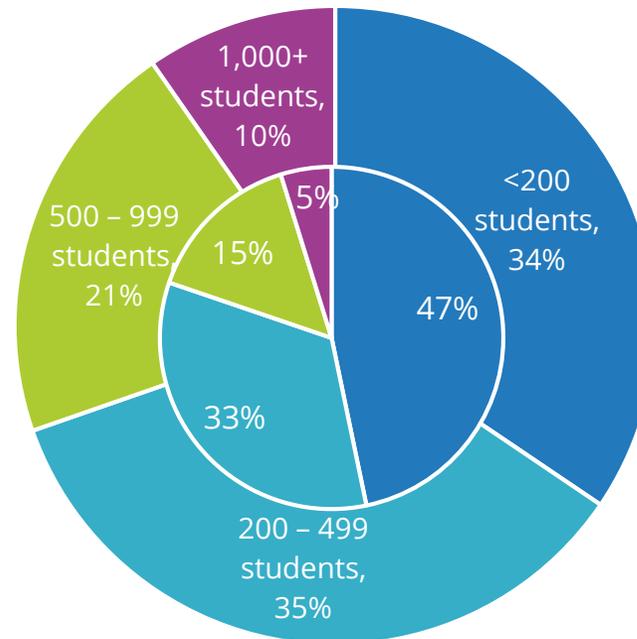
School Types



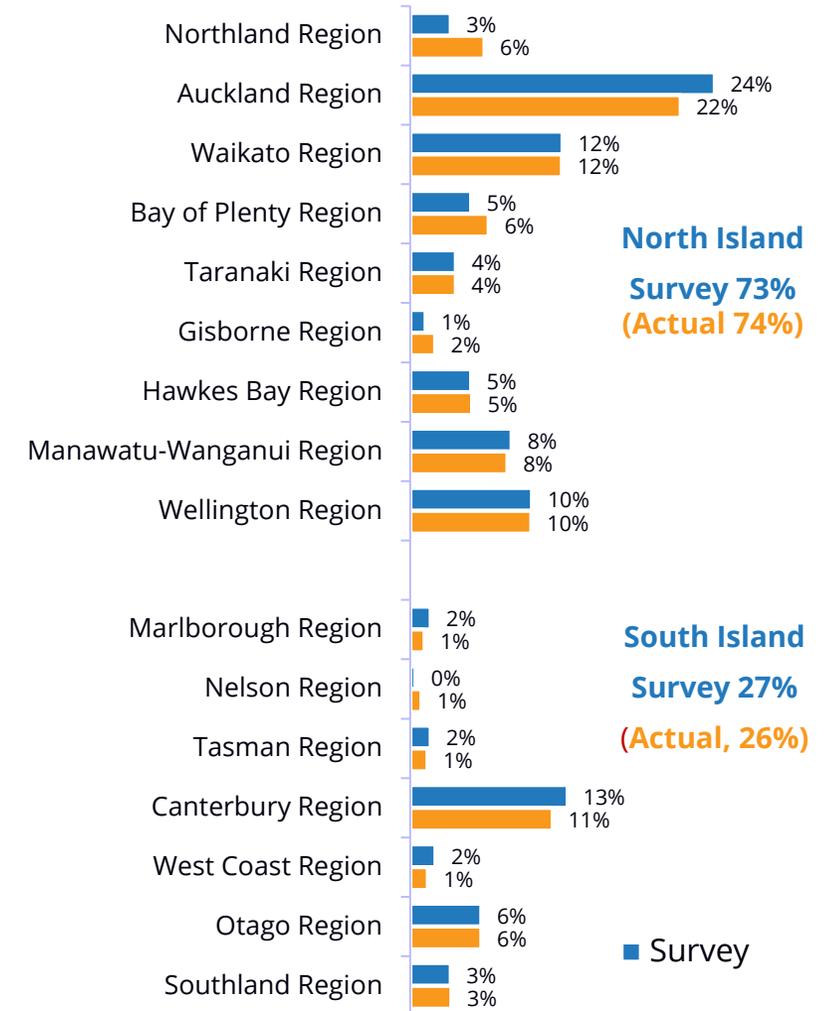
Outer Ring: Survey Sample
Inner: Actual school distribution

N=291

School Size



Regional Distribution



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