

Management of IT | **2013**
in non-government schools

Research conducted by



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Purpose and Use of this Report

Our second annual survey of IT in Australian non-government schools received complete responses from 228 schools, a sample representing¹:

- 21% of all Australian independent schools offering secondary education
- 17% of all Australian Catholic schools offering secondary education

Such a high level of participation, we believe, makes it a highly useful and authoritative study of the management of IT in all non-government secondary schools. It addresses:

- Challenges experienced in 2012
- Objectives set for 2013
- School IT resources: equipment levels, staff levels and budgets
- Technology trends and directions in the data centre and classroom
- IT policies, including student devices and use of external support
- IT issues of concerns, including misuse of IT by students

As the second such study, it is also designed to show trends and directions in school IT management and usage – as well as providing a ‘yardstick’ for school IT teams, educators and administrators to measure their own IT function, policies and resources.

This year, we have highlighted some of the significant statistical differences by type, size and location of schools in a series of ‘drill downs’. We trust these will enable readers of this report to benchmark their own school against similar institutions, as well as to observe differences by state, city versus regional, size and Catholic versus independent.

In assessing these statistical differences, please have regard to the demographic information included at the beginning of the survey results.

About the Methodology

During late 2012/early 2013, Computelec invited non-government schools by email and telephone to complete an online questionnaire. School IT Managers were directly invited, while other staff were asked to forward a link to the questionnaire to their school’s IT Manager. After eliminating incomplete responses and multiple responses from the same schools, we have based the results in this report on unique insights from 228 independent and Catholic schools.

¹Based on Australian Bureau of Statistics August 2010
[Click here to view.](#)

Section 1: Key Findings

When we commenced this research in late 2011, we expected some surprises and found them. What makes this second annual research additionally interesting is the insight it offers into trends within school IT over the past two years.

The following is a summary of our key findings, with references to page numbers in this report where more detailed results can be examined.

School IT teams are growing page 9

In 2013, 69% of respondents expect their schools to have three or more staff, a rise of 10% from 2011. Meanwhile, schools with less than one full-time IT person have dropped to 5% in 2013 from 8% in 2011. This indicates that management of IT is increasing in terms of effort and resource budgets.

Smaller schools are spending more, larger schools less page 11

Overall, respondents indicated that their planned IT budgets for 2013 are rising over those for 2012. Smaller schools are beginning to spend a little more, and larger schools a little less, on their IT.

Focus shifting to improving educational outcomes

pages 12, 14-15, 21

The leading justification for school IT budgets is still improved education outcomes. Last year we saw a clear priority given to servers, infrastructure and administrative applications, ahead of IT that directly relates to the provision of education. This year we see shifts towards support for end devices, teacher professional development and online teacher/student/parent portals – indicating that IT teams are increasing their focus on the needs of the broader school community.

Factors behind increased outsourcing page 14

Factors in the expected increase in use of external resources for monitoring and support of core systems, business continuity and security in 2013 include:

- Greater challenges in implementing core systems during 2012

- A mission-critical 2013 objective for successfully implementing security, backup and disaster recovery policy, procedures and systems
- Expectations of spending more IT staff time on provisioning core systems and security

Independent schools are around twice as likely to spend more on external resources this year (40% compared to 21% Catholic schools) – with Victorian schools mostly likely (43%) and NSW least likely (13%).

Objectives continue to contradict challenges pages 16-17

Again this year – although the gap has slightly diminished – there was a paradox between the objective of performance and reliability of student devices (sixth out of 10 key objectives) and the challenge of actually accomplishing this (second most challenging, down from last year's top position and now slightly behind reliability of networks and internet access). Further, 45% of respondents say they will spend more staff time, and 31% spend more IT budget, on the provision and support of end devices in 2013 (pages 14-15).

Virtualisation increases but the burden continues pages 18-19

The trend towards virtualised servers continues, with 41% of respondents say their school has 21-plus, while numbers of physical servers have only slightly decreased. This possibly indicates that, while new applications are being virtualised, there remains significant opportunity for reducing administrative effort and operational costs by virtualising existing physical servers or moving the applications they run on-premises to the cloud.

2013 trends in technology use pages 19-20

The greatest shifts in forecast technology use this year are towards Learning Management Systems (LMS), online teacher/student parent portals and multimedia in the curriculum. There is also an observed shift towards Apple devices and applications at the expense of the Microsoft Windows – as well as laptops, tablets/slates and smartphones connected to the network compared to desktops.

Catholic schools lead in the journey to the cloud page 20

Catholic schools are twice as likely to use more Cloud IaaS than independent schools in 2013 (27% versus 13%) – with 60% of independent schools saying it is not applicable to them. Catholic schools are also more likely to increase usage of Cloud SaaS applications (36% versus 22%) – with a surprising 53% of independent schools saying they are not applicable to them. We conjecture this is most likely driven by Catholic Education Office (CEO) infrastructure limitations.

Independent and Catholic schools differ in their concerns

page 24

Again this year, respondents from Catholic schools were significantly more concerned about student abuse of technology and cyberbullying than their independent peers. The explanation we posit is that Catholic schools care more about these issues, although it is possible that independent schools have more resources focussed on mitigating these issues.

Commitment to 1-to-1 programs deepens pages 25-26, 28

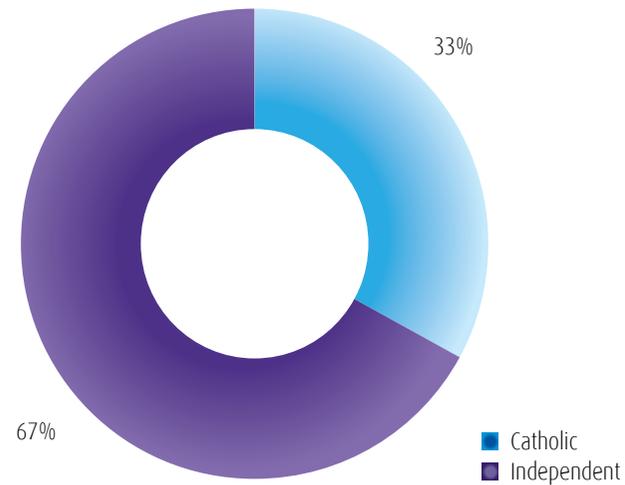
The dependence of school commitment to 1-to-1 student/device ratios based on continued government funding has significantly diminished this year – boding well for future educational outcomes. Some 74% of respondents say their school has a 1-to-1 program in place, the majority school-owned (rather than student/parent-owned) devices – with 57% having achieved it in 2012, up from 50% in 2011.

BYOD achieves greater acceptance page 27

This year we asked respondents to specify what Bring Your Own Device (BYOD) means to their school and over half (59%) said they interpret it as students bringing any device to school – although a further 23% see it as school-devices and software loaded. In terms of adoption, over half say they have rolled out, plan to rollout or will be trialling BYOD programs within two years (page 28).

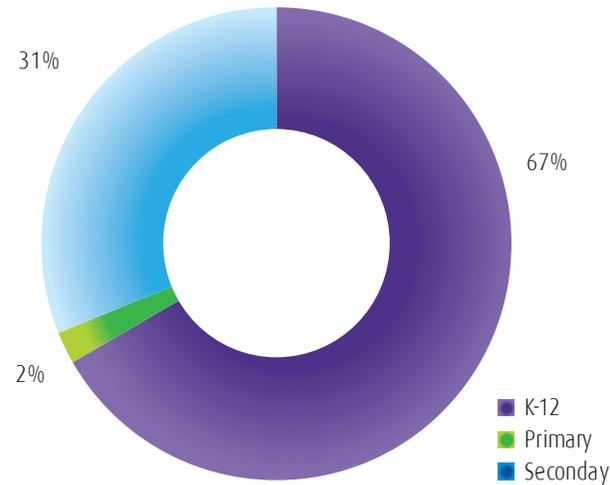
School Type

Of the 228 schools responding to this year's survey, two-thirds were independent and a third were Catholic (up from 28% in our 2012 survey).



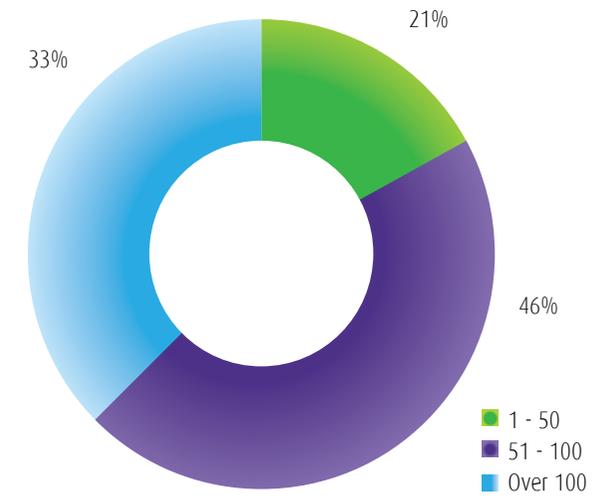
Years Taught

We asked respondents to indicate the first and last year their school taught. Two-thirds of respondents were from schools teaching K-12, with 98% offering secondary education (Year 7 and over).



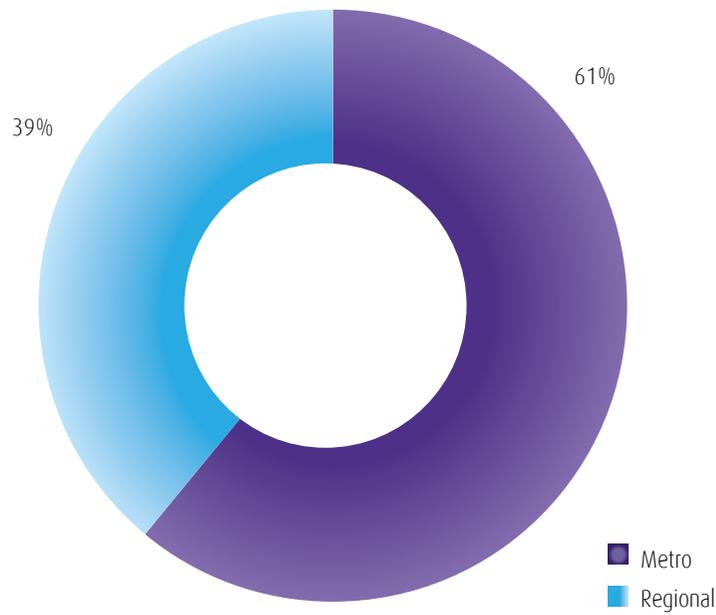
Number of Teachers

We asked respondents to indicate the number of teachers at their school. Some 79% of respondents said they were supporting over 50 teachers – up from 71% from last year's sample.



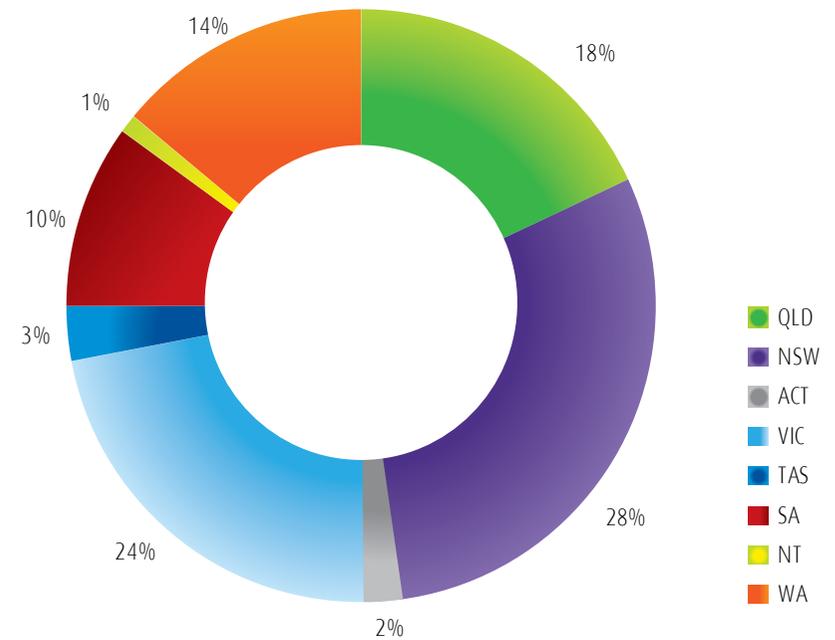
Location

We asked respondents to indicate whether their school was located in a metropolitan or regional area.



State

Represented schools come from every state and territory in Australia.



Number of Students

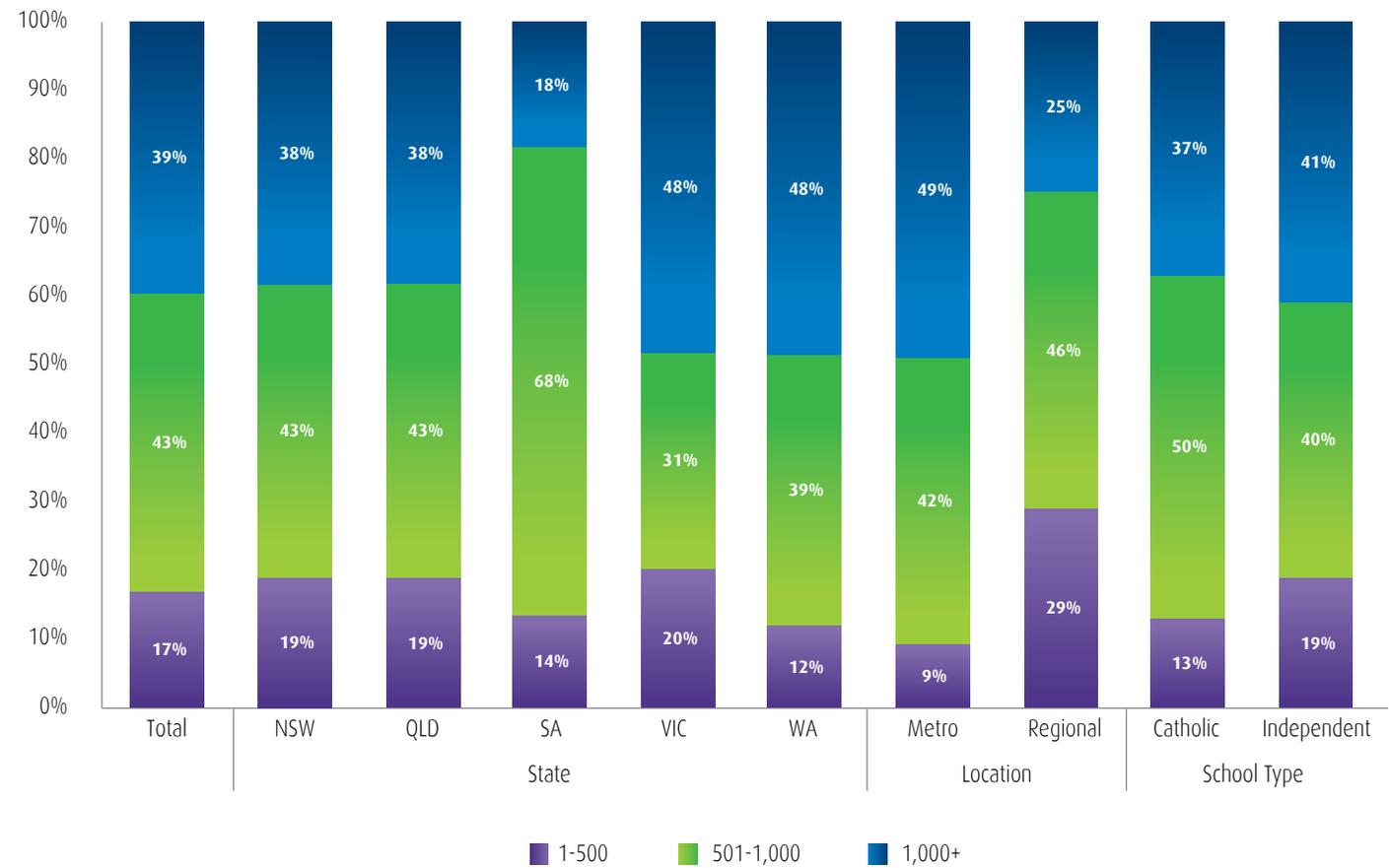
In order to get an understanding of the size of a school's IT requirements, we asked respondents to indicate the number of students at their school. As shown in the graph at right, overall 82% of respondents were catering to over 500 students – up from 77% in our 2012 survey.



Tip

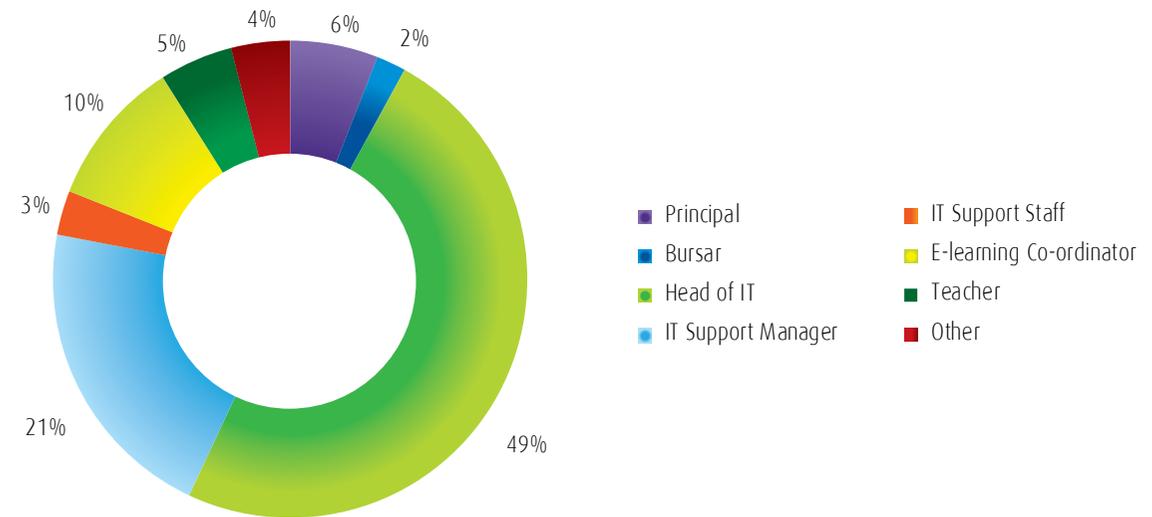
When interpreting detailed 'drill-down' statistics in this report, please bear school size by type and location of school in mind!

How many students are there in your school?



Primary Job Role

The respondents were asked to select their primary job role, 83% indicating they are responsible for technology and e-learning within their schools (the same number as last year).



Number of Computers

We asked respondents to indicate the number of computers they have at their school. The following table shows the average number of computers provided by students, and by the school for students and for staff, according to each computer type.

How many computers are:	Desktops		Laptops/Tablets/Slates		Thin Client	
	2013	2012	2013	2012	2013	2012
Provided by Students	2	3	110	147	n/a	n/a
Provided for Students	160	213	502	353	14	8
Provided for Staff	40	44	102	93	3	2

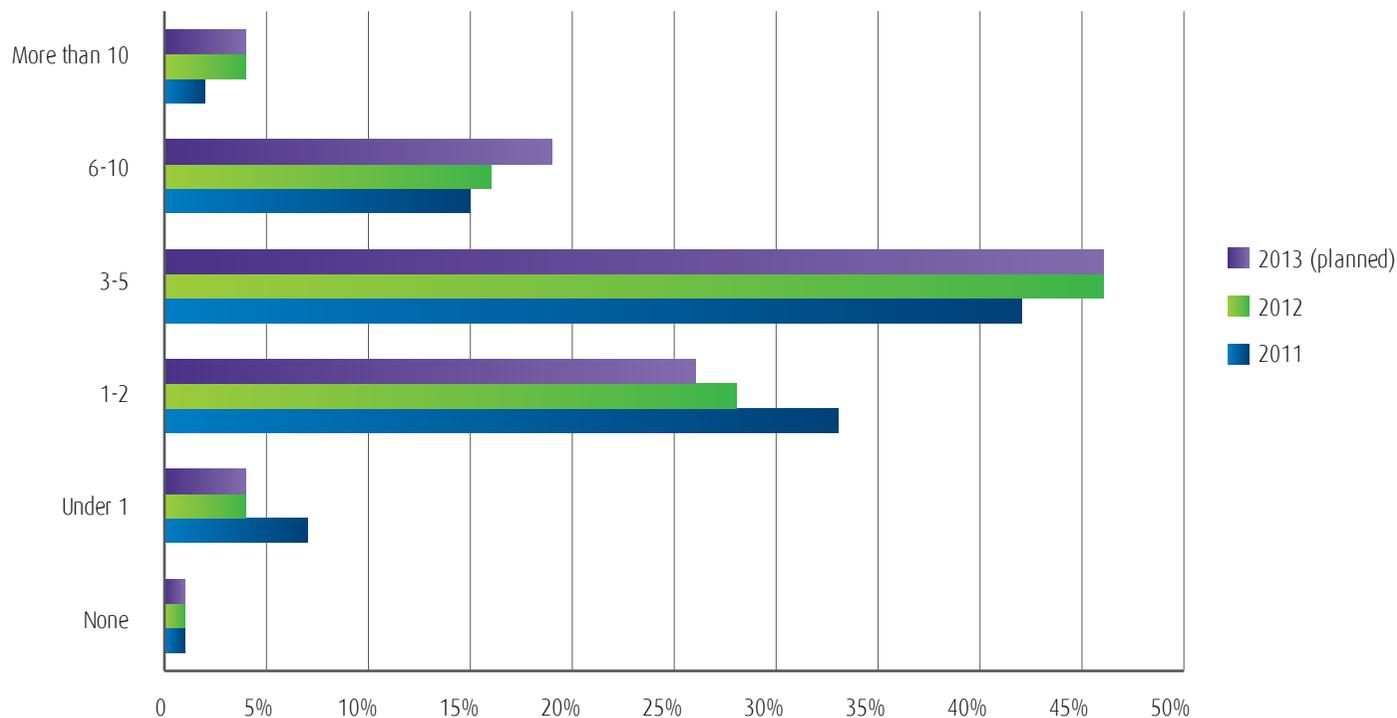
Size of IT Team

We asked respondents to indicate the number of staff within their schools devoted to IT functions in 2012, and planned for 2013, on a Full-Time Equivalent (FTE) basis.

Results show that, in 2013, 69% of respondents expect their schools to have three or more staff, a rise of 10% from 2011. At the same time, schools with less than one FTE have dropped to 5% in 2013 from 8% in 2011. This indicates that management of IT is increasing in terms of effort and resource budgets.

As would be expected, the larger the number of students, the larger the IT team, with respondents from metropolitan schools statistically more likely to say they will have three or more FTEs devoted to IT in 2013 (73%, compared to 63% of regional schools).

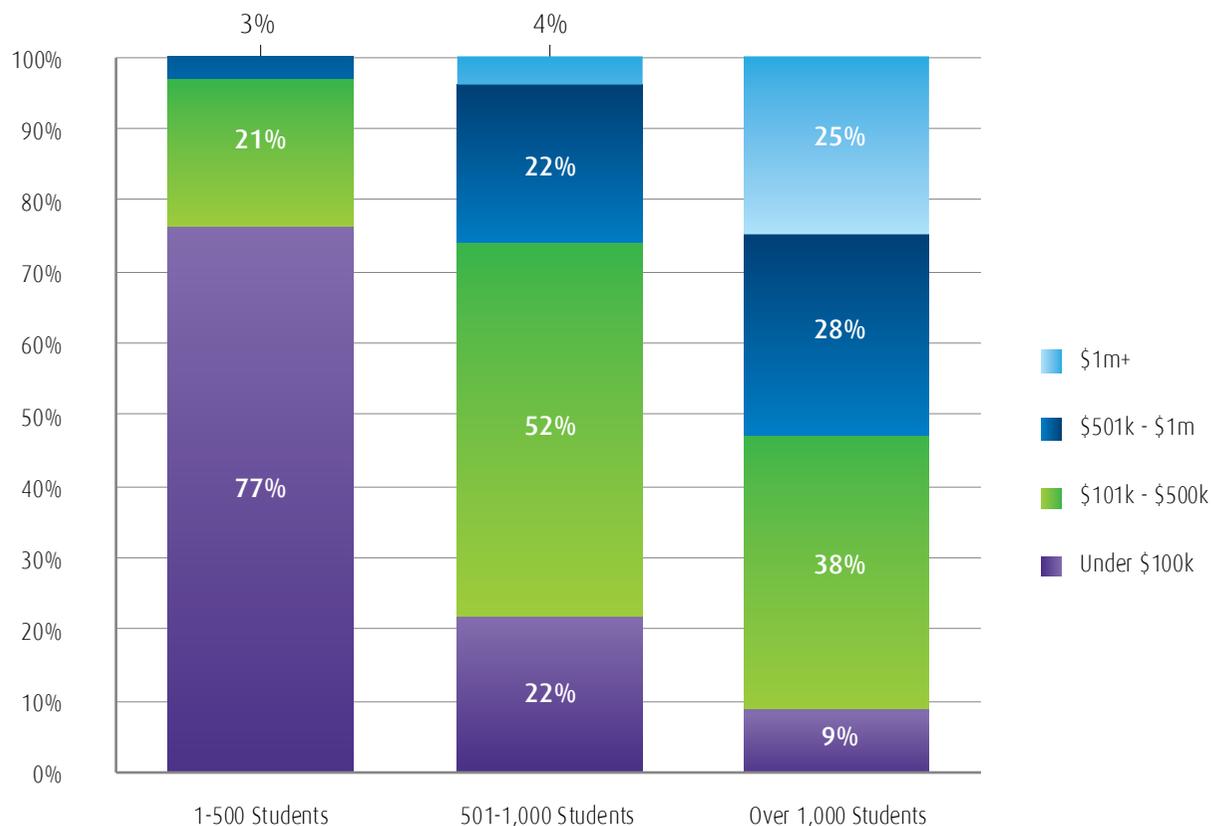
What is your current IT team for 2012 and your planned IT team for 2013?



Size of IT Budget

Respondents were asked to indicate their IT budget for 2013. In this graph, responses have been graded by size of student population.

What is your planned IT budget for 2013 for all projects, systems and support (excluding salaries and teacher professional development)?



Drilling Down

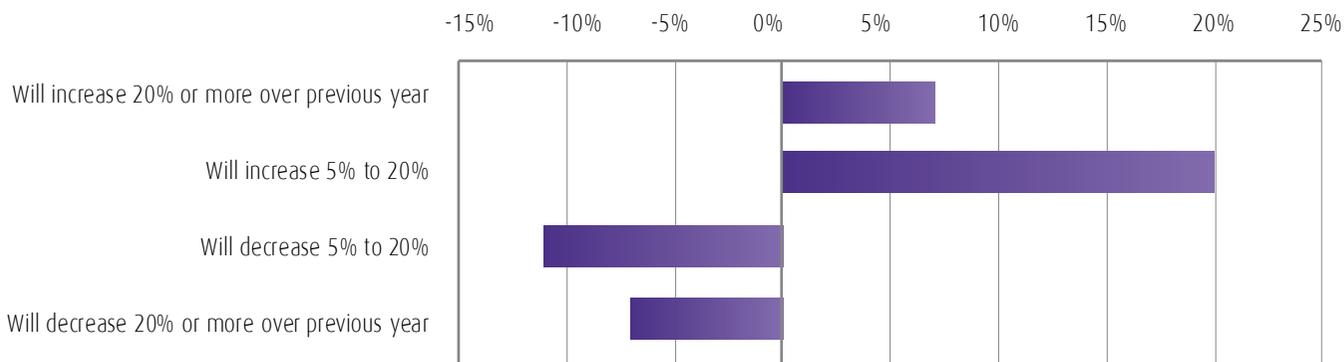
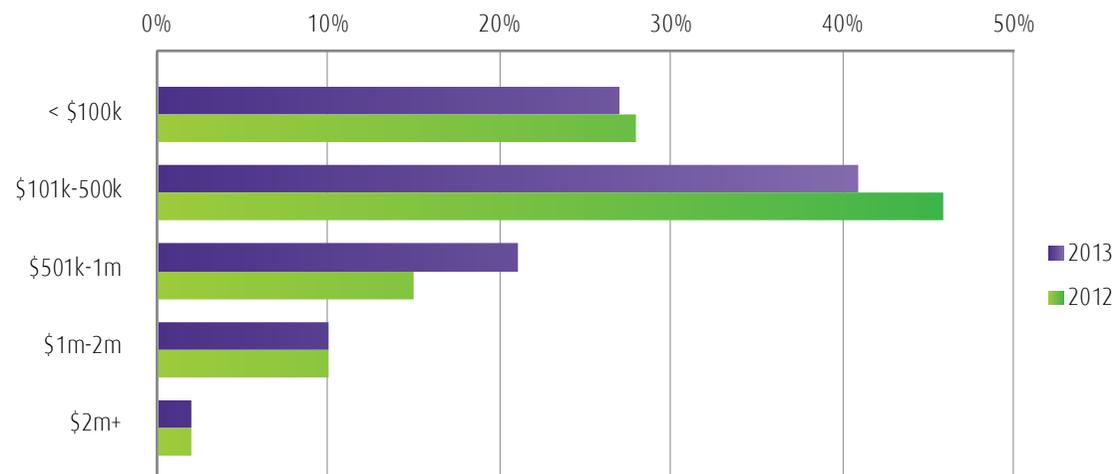
- Twice the number of independent schools (38%) surveyed have a 2013 budget of over \$500,000 compared to just half the number of Catholic schools (19%).
- Metropolitan schools are significantly more likely to have an IT budget over \$500,000 – 43% compared to just 16% of regional schools, of which 39% have a budget less than \$100,000.
- Only 21% of NSW schools surveyed will have a budget of over \$500,000 in 2013, compared to Victoria (33%), Queensland (37%), SA (41%) and WA (44%).
- NSW schools are also significantly more likely (42%) to have an IT budget under \$100,000 (compared to Queensland and WA at 19% each).

Budget Comparison with Previous Years

Overall, respondents indicated that their planned IT budgets for 2013 are rising over those for 2012.

When we look at planned IT budgets for 2013, we see that while 55% of respondents expect their budget to remain much the same as their 2012 budget, 28% expect an increase of 5% or more compared to 18% expecting a similar decrease.

How does your 2013 budget compare to your 2012 budget?



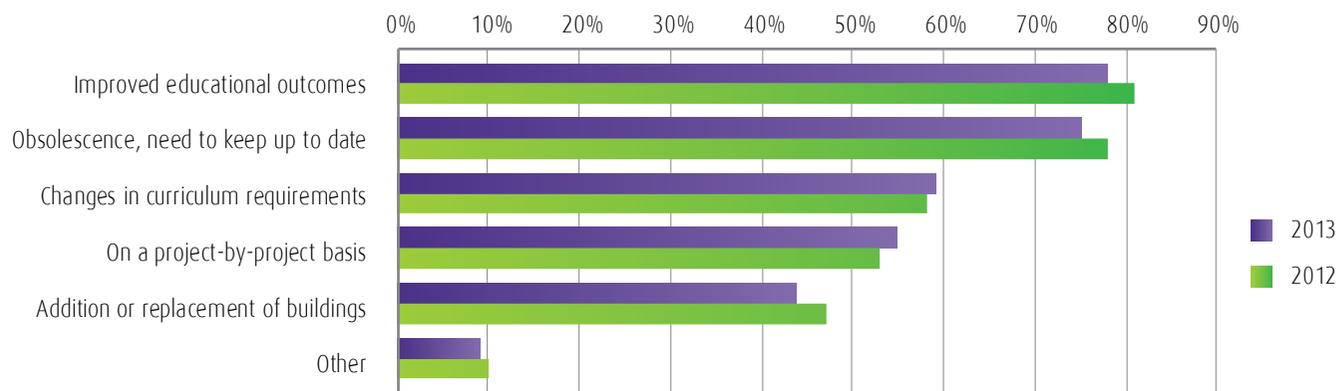
Key Finding

Smaller schools are beginning to spend a little more, and larger schools a little less, on their IT.

IT Budget Justification

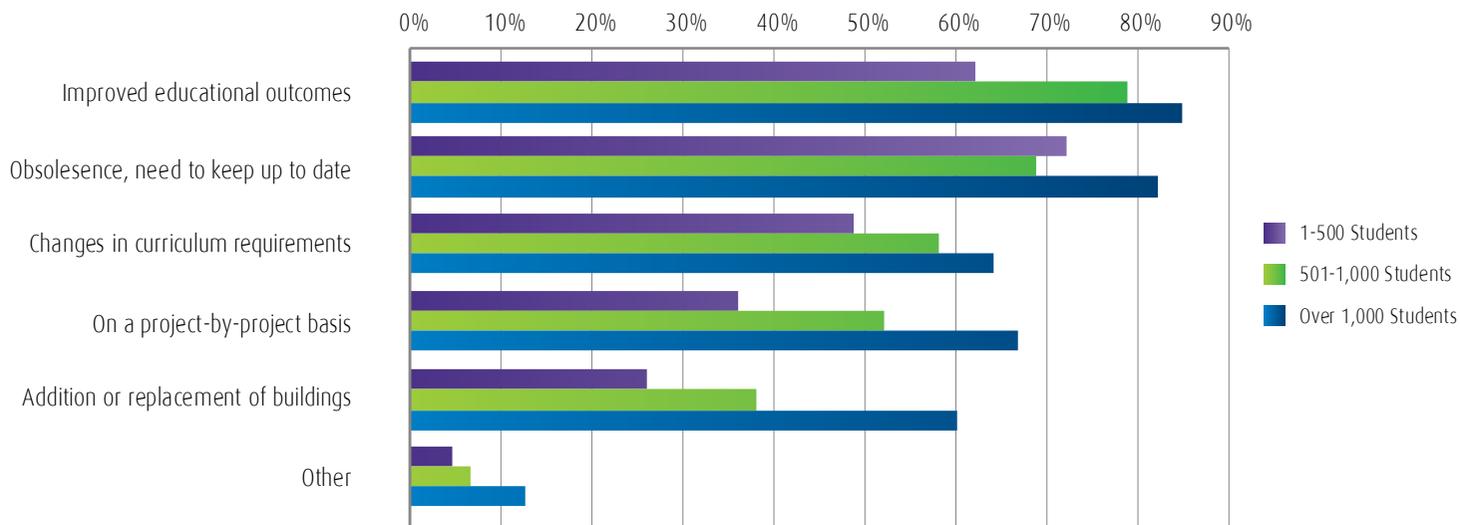
Respondents were asked to indicate the ways in which they justify IT expenditure within the overall school budget. Improving educational outcomes is still the highest-rating reason followed by obsolescence and keeping up to date, although both slightly lower than in our 2012 survey.

How do you justify your IT budget internally?



IT Budget Justification by Size of School

When we break down budget justification by student population, we see that the larger the size of school, the more types of ways respondents say they use to justify their IT budget. The largest schools are significantly more likely to use improved educational outcomes and additional or replacement buildings as a justification, and to justify expenditure on a project-by-project basis than the smallest schools.



Planned Budget for Teacher ICT Professional Development

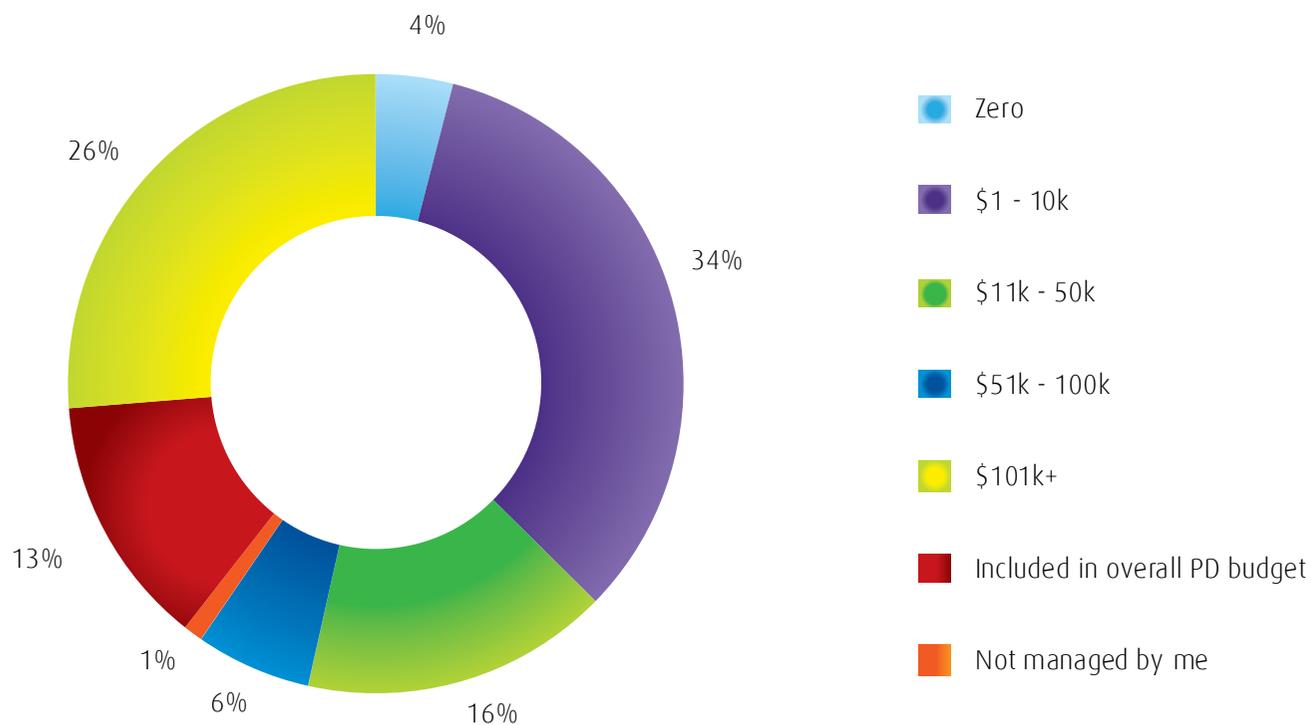
When asked about their planned budget for professional development (PD) of teachers in 2013, 43% said they either had no budget for this function, or it was not included in the IT budget – slightly lower than 2012 (48%). A further third (34%) said their PD budget was \$10,000 or under.

Drilling Down

Unfortunately, given that teacher PD is not always in the domain of the IT team (and the majority of our respondents were school IT professionals) it is difficult to ascertain school commitment. However, we can note that:

- The smallest schools (up to 500 students) are the most likely to manage PD within the IT budgets – 79% compared to 49% of the largest schools (over 1,000 students), although three-quarters of these small schools have allocated under \$10,000 to PD in their 2013 budget.
- 22% of the largest schools have a PD budget separate to the IT budget – double that of schools with the mid-sized schools.
- Regional schools are more likely to have allocated \$10,000 or less to PD within their IT budget – 44% compared to 26% of metropolitan schools.

What is your planned IT budget for 2013 for teacher ICT professional development?



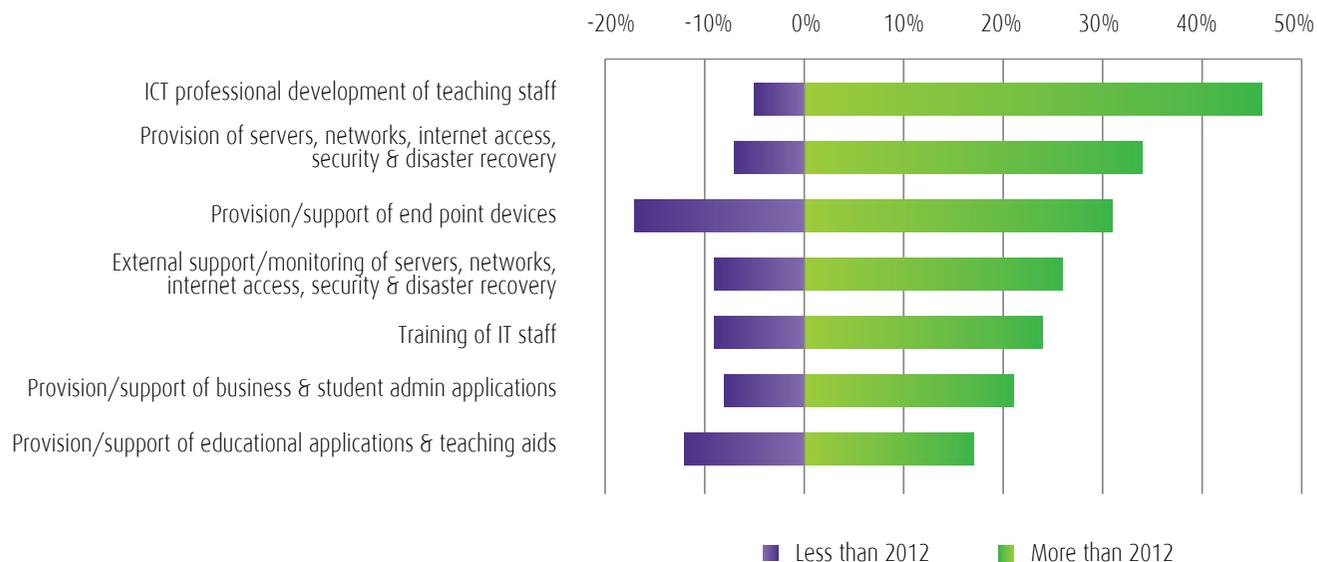
IT Budget Trends

To further understand the issue of performance and reliability of IT systems in schools, we then asked respondents to rate these same objectives in terms of the challenge they represented during 2012. As in last year's research, performance and reliability of student devices and networking/ internet infrastructure were neck-and-neck as the leading challenges, with security/backup and servers/core systems staff devices close behind.

Drilling Down

- Mid-sized schools (501-1,000 students) are significantly more likely to spend more on teacher PD in 2013 (45%, compared to 19% of smaller and 31% of larger schools).
- A quarter of the largest schools (over 1,000 students) expect to be spending less on provision and support of end devices compared to just 10% of mid-sized schools (501-1,000 students).
- Independent schools were almost twice as likely to spend more on provisioning core systems (40% compared to 21% of Catholic schools). They are similarly around twice as likely to spend more on external support and monitoring of these systems (31% versus 16%).
- By state, 50% of Victorian schools expect to spend more on provisioning core systems compared to just 22% of NSW schools – and 43% of Victorian respondents are most likely to spend more on external monitoring and support in 2013, with NSW least likely (13%).

How will your budget be spent in 2013?



Insight: In-house or outsource?

Examining factors in the decision to increase the use of external IT resources in 2013 we find:

- Respondents who found it challenging or somewhat challenging to achieve the successful implementation of core systems in 2012 are more than twice as likely to be planning to spend more of their IT budget on external monitoring and support in 2013 than in 2012.
- Those who said the 2013 objective of successful implementation of security, backup and disaster recovery policy, procedures and systems was mission critical were more likely to spend more of their IT budget on external monitoring and support this year.
- Those who said that more internal IT staff time will be spent in 2013 on the provisioning of core systems and security were also significantly more likely to spend more of their IT budget on external monitoring and support this year.

IT Staff Time

To further understand IT priorities within schools, we asked respondents how they expect the IT team to be spending its time in 2013 compared to last year.

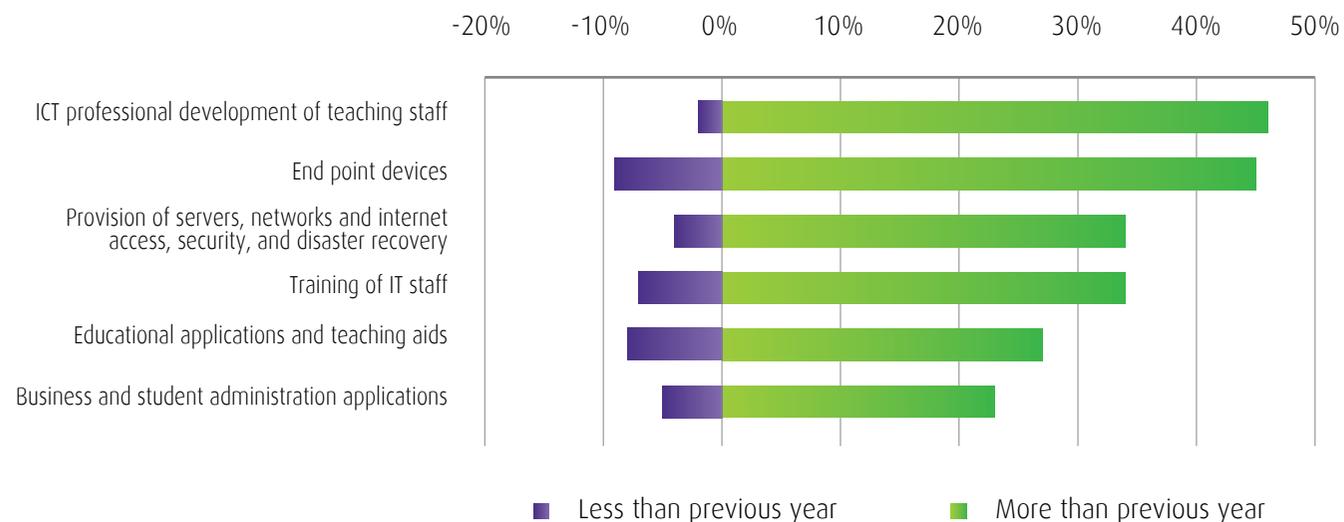
The following graph shows the shifts to and from areas of IT responsibility – with over 40% of respondents saying they will be spending more time on ICT professional development of teaching staff and on end point devices than in they did in 2012.

Drilling Down

- Western Australian respondents were the most likely to say their IT staff will spend more time on end point devices this year (61%) and Queenslanders the least (31%).
- IT teams in mid-sized schools (501-1,000 students) are significantly more likely to spend additional time on the provision and support of business and student administration systems (31% compared to just 11% of smaller schools).
- Mid-sized schools also expect to spend greater IT staff time in 2013 on provision, support and monitoring of their core systems: servers, networks, internet access, security and disaster recovery – 43% compared to 25% of larger schools.

This last point indicates an opportunity for mid-sized schools to consider cloud services and disaster recovery for their core systems.

How will your IT staff time be spent in 2013?



IT Objectives

We asked respondents to indicate the level of importance a range of IT objectives relating to IT performance and reliability held for them in 2012 and will hold in 2013. Performance and reliability of core server and networking infrastructure still lead as mission-critical objectives for the IT team, and levels of criticality in 2012 across all categories were at least the same but mostly higher than in last year's research.

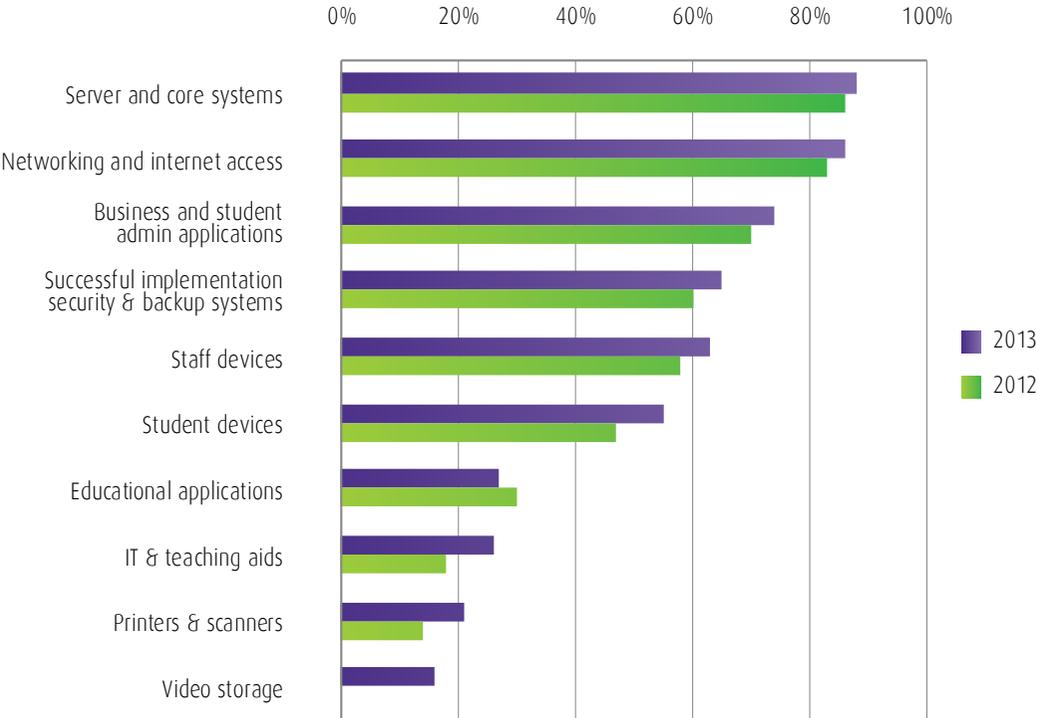
Interestingly, given that they are slowest at adopting virtualisation as noted on page 18, respondents from NSW were significantly less likely to rate performance and reliability of servers and other core systems as mission critical in 2012 (84%, compared to 90-95% of respondents from other states). They rate it even lower as an objective in 2013 (80%, compared to 98% of Victorian schools).

We asked about performance and reliability of video storage for the first time this year and found that, at 20%, respondents from metropolitan schools were twice as likely to rate it as mission critical compared to their regional colleagues.

Drilling Down

- As might be expected, the larger the school, the more critical are performance and reliability of business and student administration applications. Respondents from independent schools are more likely to see them as mission critical in 2013 than their Catholic counterparts (79% compared to 62%).
- In 2013, the criticality of networking and internet access is also significantly higher for independent schools (90% compared with just 76% of Catholic schools).
- Also in 2013, performance and reliability of student devices is being seen as increasingly mission critical – possibly reflecting the fact that it was a top challenge in 2012 (as we will see below). Respondents from secondary-only schools were more likely to see them as high priority (65% compared to 51% from K-12 schools).
- As an aside, we note that a third of Queensland respondents regard performance of printers and scanners as mission critical in 2013, as compared to just 3% of their counterparts in Western Australia.

How important were/are the following IT objectives in 2012/2013?



IT Challenges in 2012

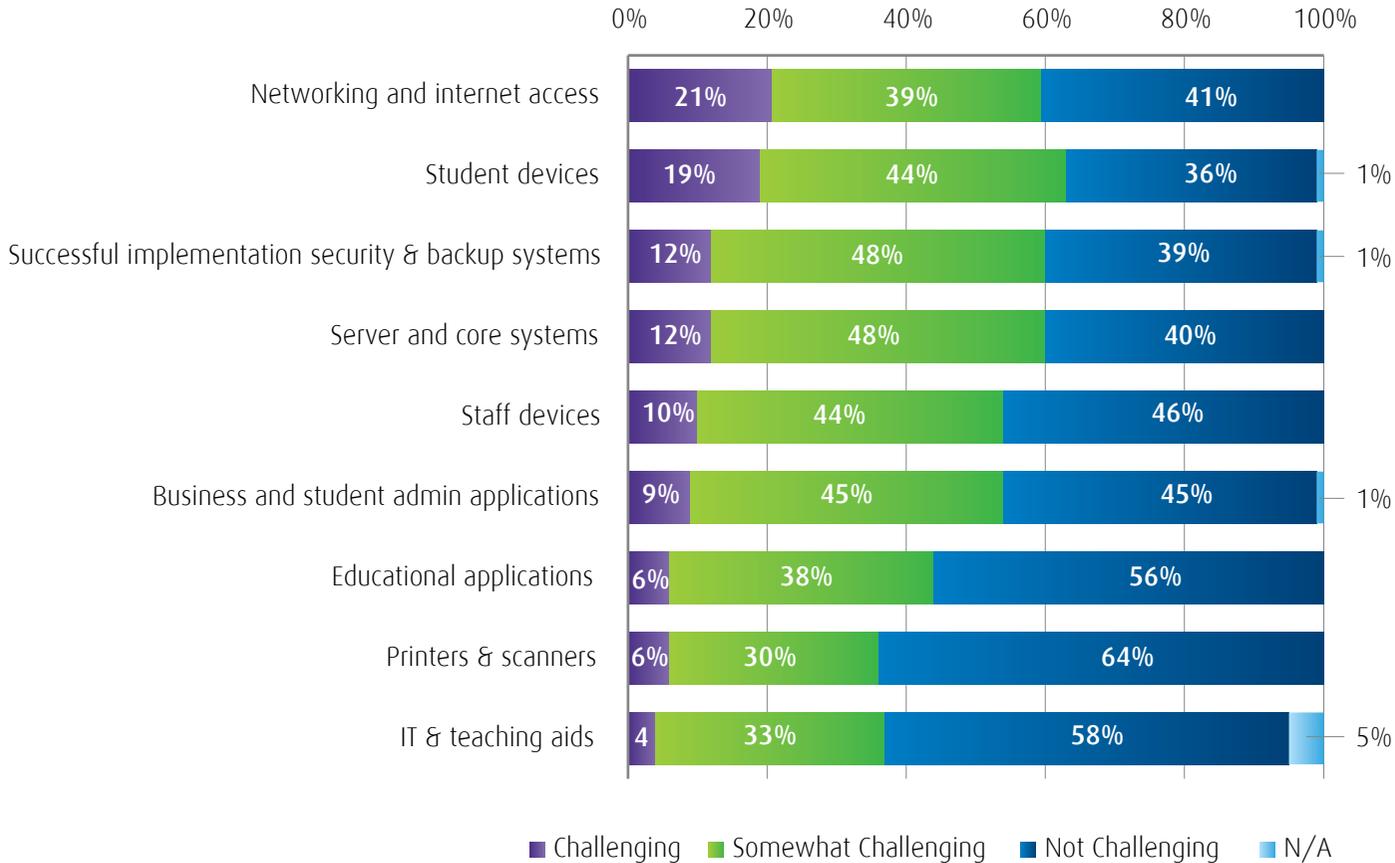
To further understand the issue of performance and reliability of IT systems in schools, we then asked respondents to rate these same objectives in terms of the challenge they represented during 2012. As in last year's research, performance and reliability of student devices and networking/internet infrastructure were neck-and-neck as the leading challenges, with security/backup and servers/core systems and staff devices close behind.

Drilling Down

As last year, it is concerning to see the performance and reliability of student devices far down on the list of objectives for 2012, then appearing at the top of the list of challenges.

- At 29%, respondents from Catholic schools found them twice as challenging as their independent school peers (14%)
- Victorian respondents were the least likely to say they were challenging (4%) and South Australian schools the most likely (29%)

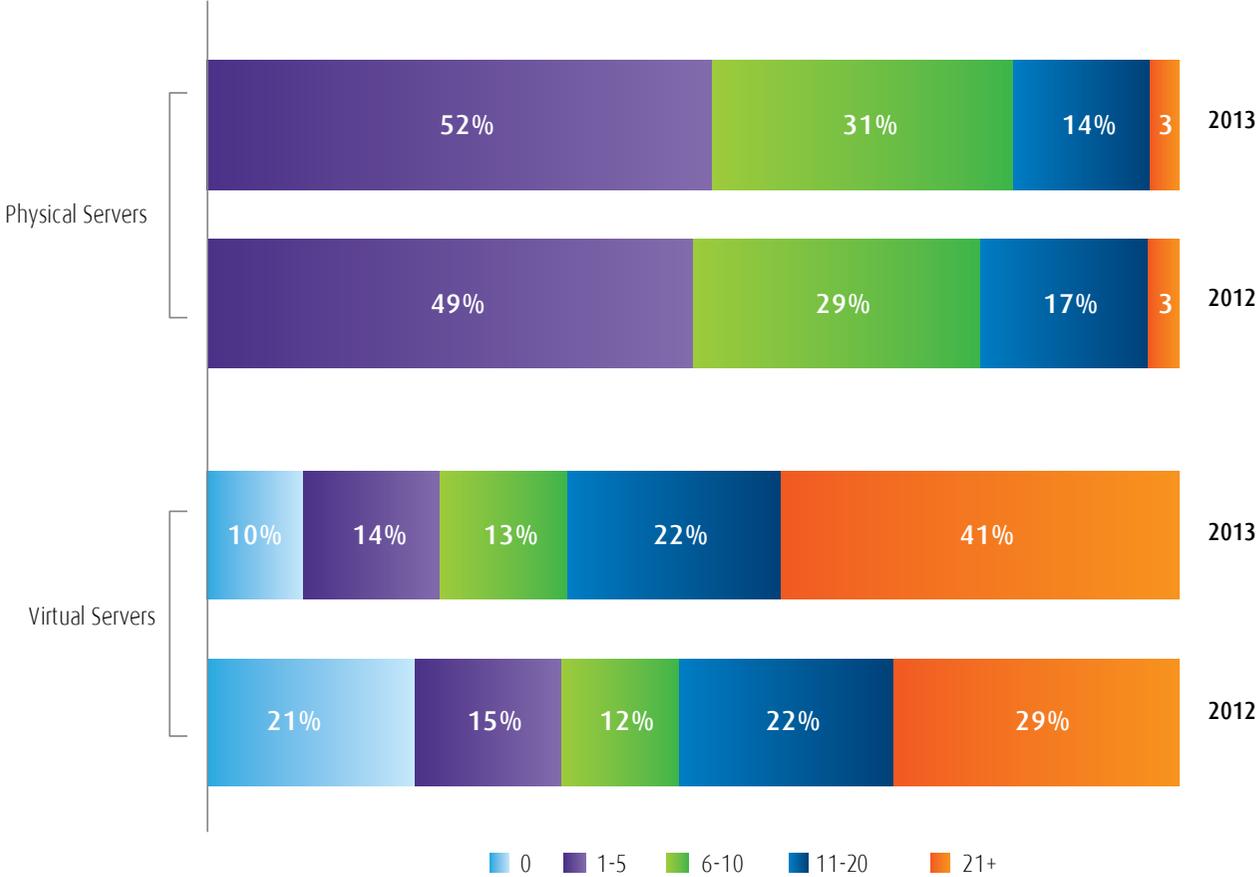
How challenging were the following objectives in 2012?



Number of Servers

Respondents were asked to indicate the number of physical and virtual servers they operate – with results over the two years of this survey showing a trend towards virtualised servers, while numbers of physical servers have only slightly decreased. This possibly indicates that, while new applications are being virtualised, there remains significant opportunity for reducing administrative effort and operational costs by virtualising existing physical servers or moving the applications they run on-premises to the cloud.

How many servers do you have?



Number of Servers by School Type

As noted last year, many schools are comparable with mid-sized commercial organisations in terms of the numbers of servers they operate. The following graph shows the average number of servers by different types, locations and sizes of schools.

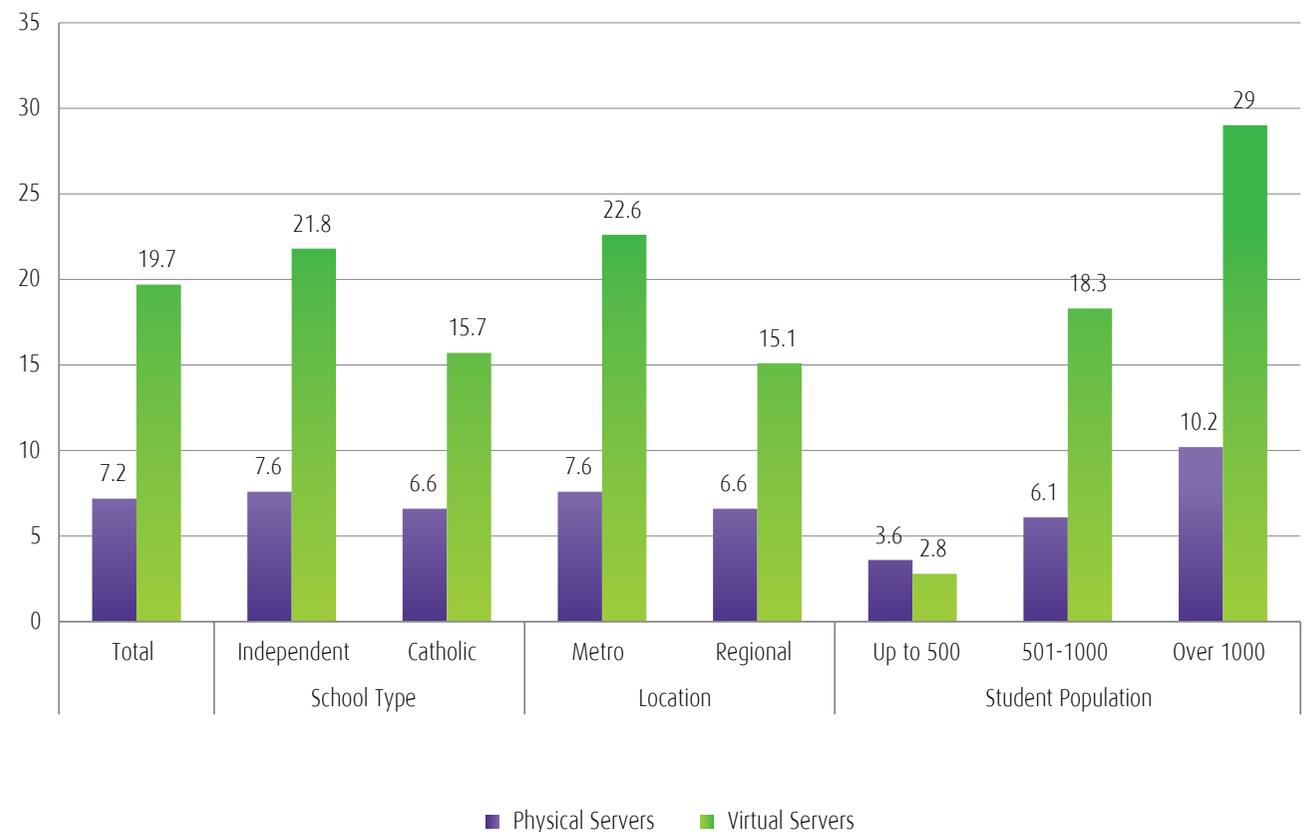
Drilling Down

Growth in the average number of virtual servers over the past year is most noticeable in:

- Regional schools (15.1 compared with 9.4 in 2012)
- Schools with a student population of 501-1,000 (18.3 compared with 11.8 in 2012)

NSW schools have been slowest in adopting server virtualisation, with 40% having five or less, compared to just 9% of Victorian schools.

How many servers do you have?



Infrastructure Technologies

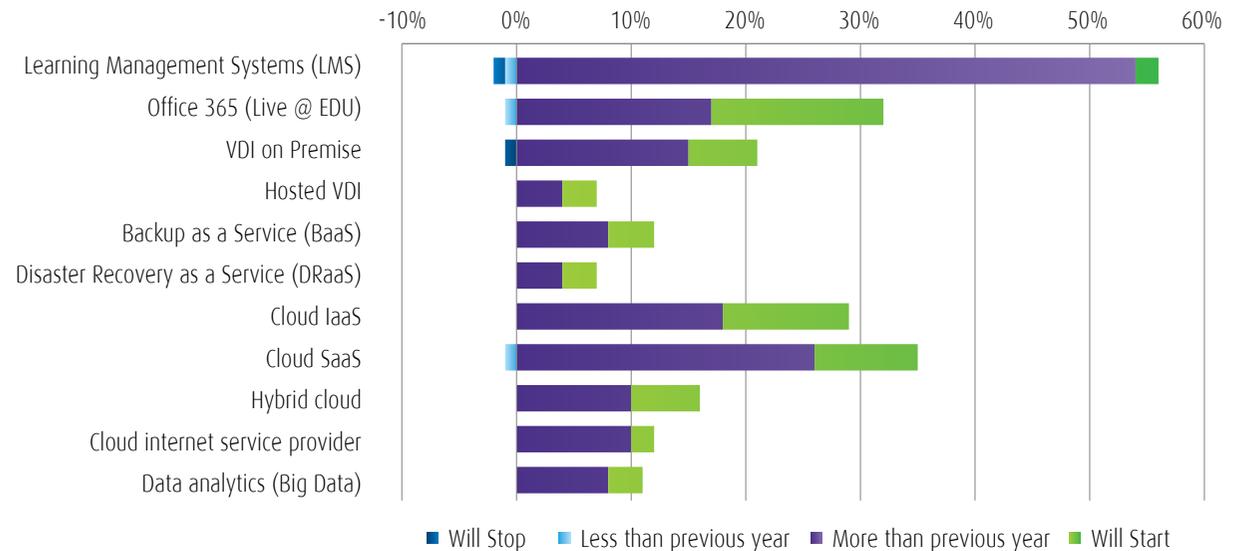
In order to understand trends in technology use in non-government schools, we asked respondents how they expect their use of a range of different server and infrastructure technologies to change in 2013 compared to 2012. Overall, Learning Management Systems are most likely to be used more this year.

Drilling Down

- Respondents from secondary-only schools are much more likely to say they will increase their use of Learning Management Systems (71% compared to 47%).
- When it comes to cloud technologies, secondary-only schools are more likely to increase their use of Cloud Infrastructure as a Service (IaaS) – 26% versus 13% of K-12 schools – and Cloud Software as a Service (SaaS) – 38% versus 21%.
- Mid-sized schools (501-1,000 students) are most likely to increase their use of Cloud SaaS in 2013 (36% compared to 8% of smaller and 24% of larger schools).

We believe uptake numbers for SaaS may be not be fully reflected in this data, as a significant number of decisions around SaaS may be made at classroom level – for example, on-line tutorial-based software – which may not be subject to formal approval by IT departments. In this respect, schools are no different than commercial organisations, where it is estimated that some 40% of applications are now purchased directly by the business rather than IT – which is creating issues for applying corporate security policies to these ‘buy your own’ applications and maintaining enterprise-wide Single Sign On (SSO).

How will your school use the following infrastructure technologies in 2013?



Key Finding: Catholic Schools Lead in the Cloud

- Catholic schools are twice as likely to use more Cloud IaaS than independent schools in 2013 (27% versus 13%) – with 60% of independent schools saying it is not applicable to them.
- Catholic schools are also more likely to increase usage of Cloud SaaS applications (36% versus 22%) – with a surprising 53% of independent schools saying they are not applicable to them.

We believe this is most likely driven by the Catholic Education Office (CEO) placing infrastructure limitations on the schools they are responsible for. For example, in Western Australia the CEO requires schools to use its firewall and then distributes that provision on to the schools (thus qualifying as IaaS). It is also providing shared Identity Management which could qualify as either IaaS or SaaS. The overarching bodies for independent schools have not been successful in compelling Independent schools down the same path (or have not tried to).

Classroom Technologies

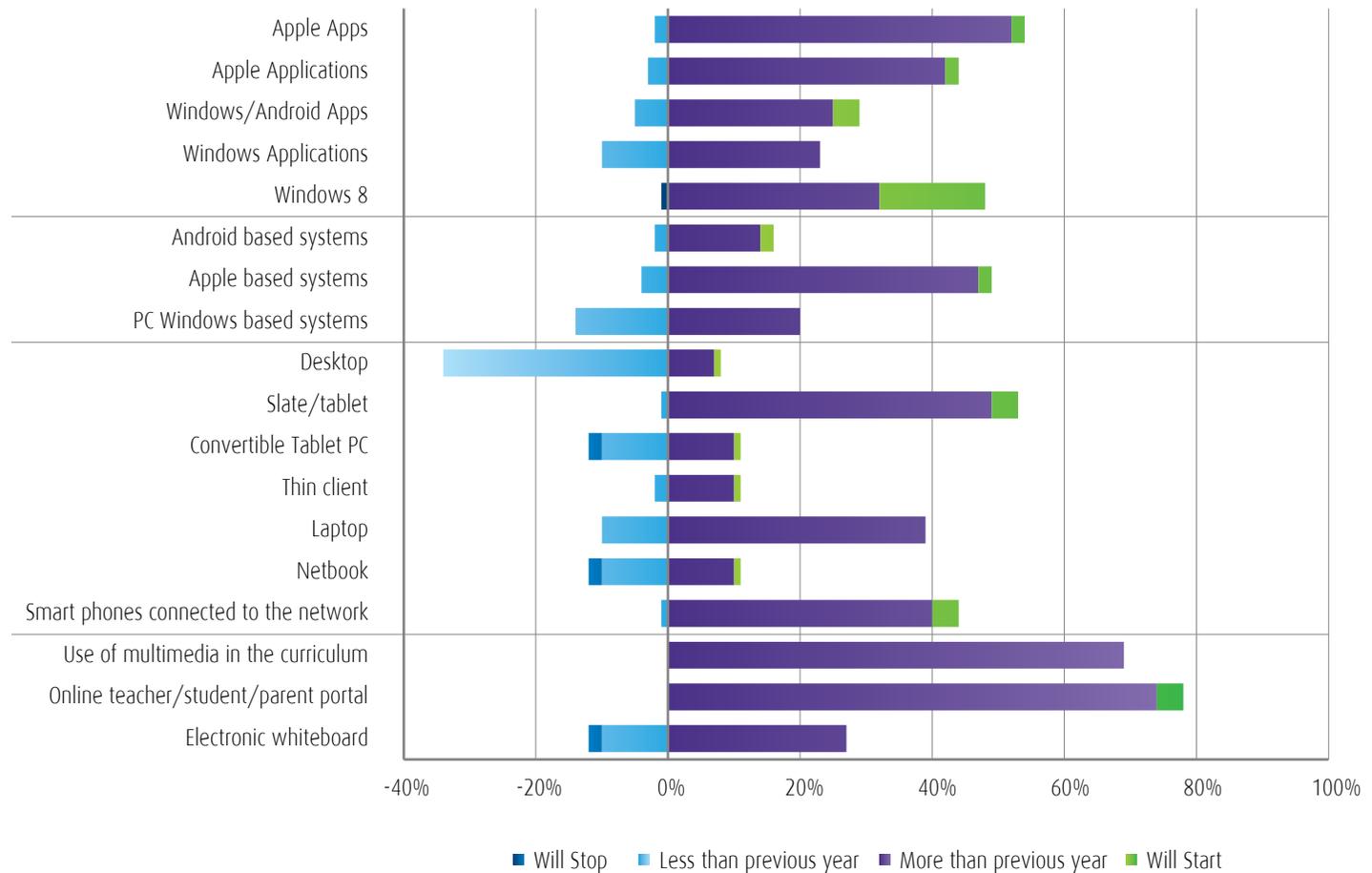
We also wanted to understand trends in the use of classroom technologies between 2012 and 2013.

Online school community portals lead in terms of expected increased usage, with 80% of schools with 500-plus students planning to extend existing use in 2013. Respondents predict a growth in the use of Apple-based systems and apps in 2013 compared to Microsoft Windows-based devices and applications. As would be expected based on the above, use of desktops is 'going backwards' with secondary-only schools leading the retreat: half predict they will use them less or stop using them in the classroom this year.

Drilling Down

- Over half (51%) of the largest schools (1,000-plus students) plan to increase usage of smart phones connected to the network in 2013 compared to only 14% of the smallest schools (less than 500 students), half of which say it is not applicable to them
- Catholic schools are catching up in use of laptops with nearly half (49%) planning to use them more in the classroom in 2013
- Slates/tablets are least in use at the smallest schools with only 40% using them or planning to use them more in 2013 – compared to 77% of mid-sized and 69% of the largest schools

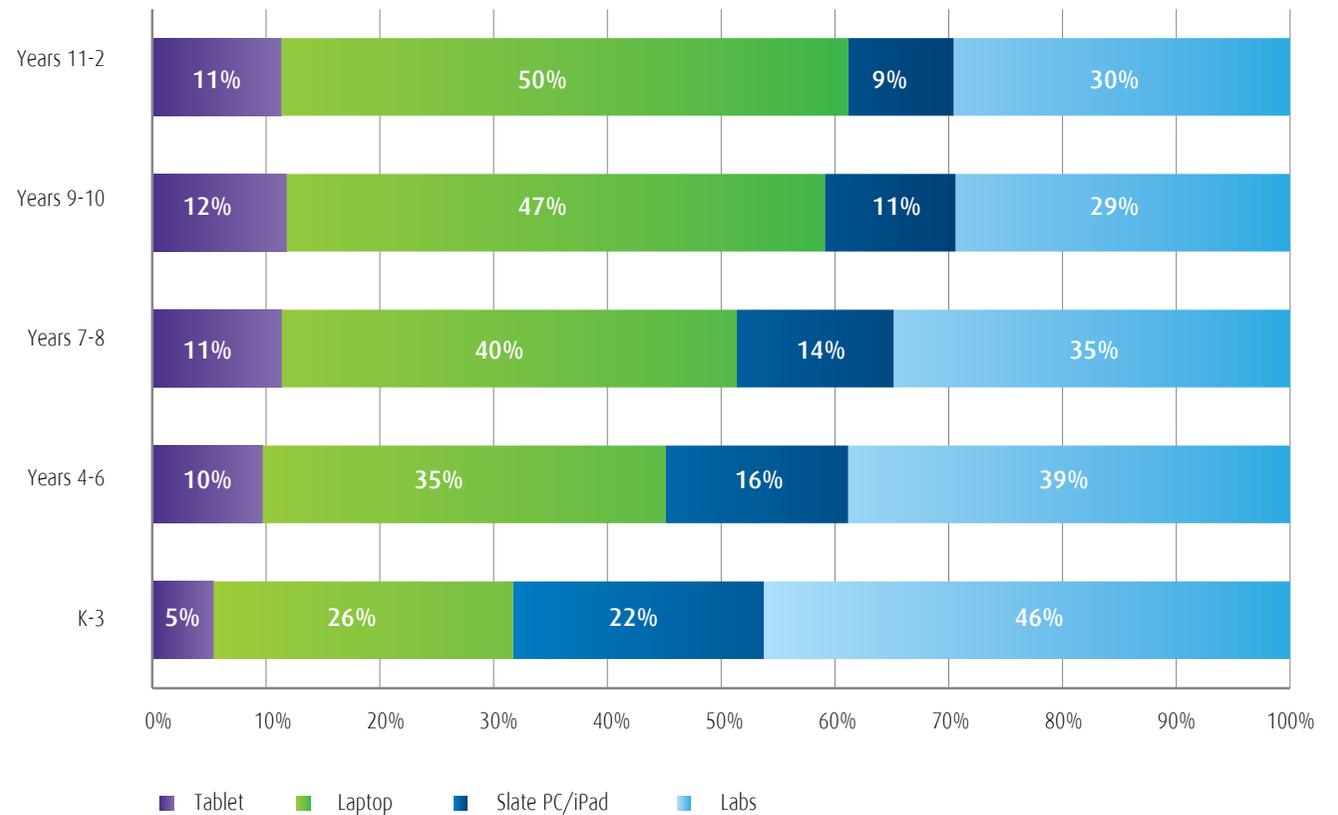
How will your school use the following classroom technologies in 2013?



Classroom Technologies by Years Taught

This year we also asked respondents which types of devices are used at each level of schooling.

What technologies are the most used by students in nominated year levels?



Issues of Concern in 2012 and 2011

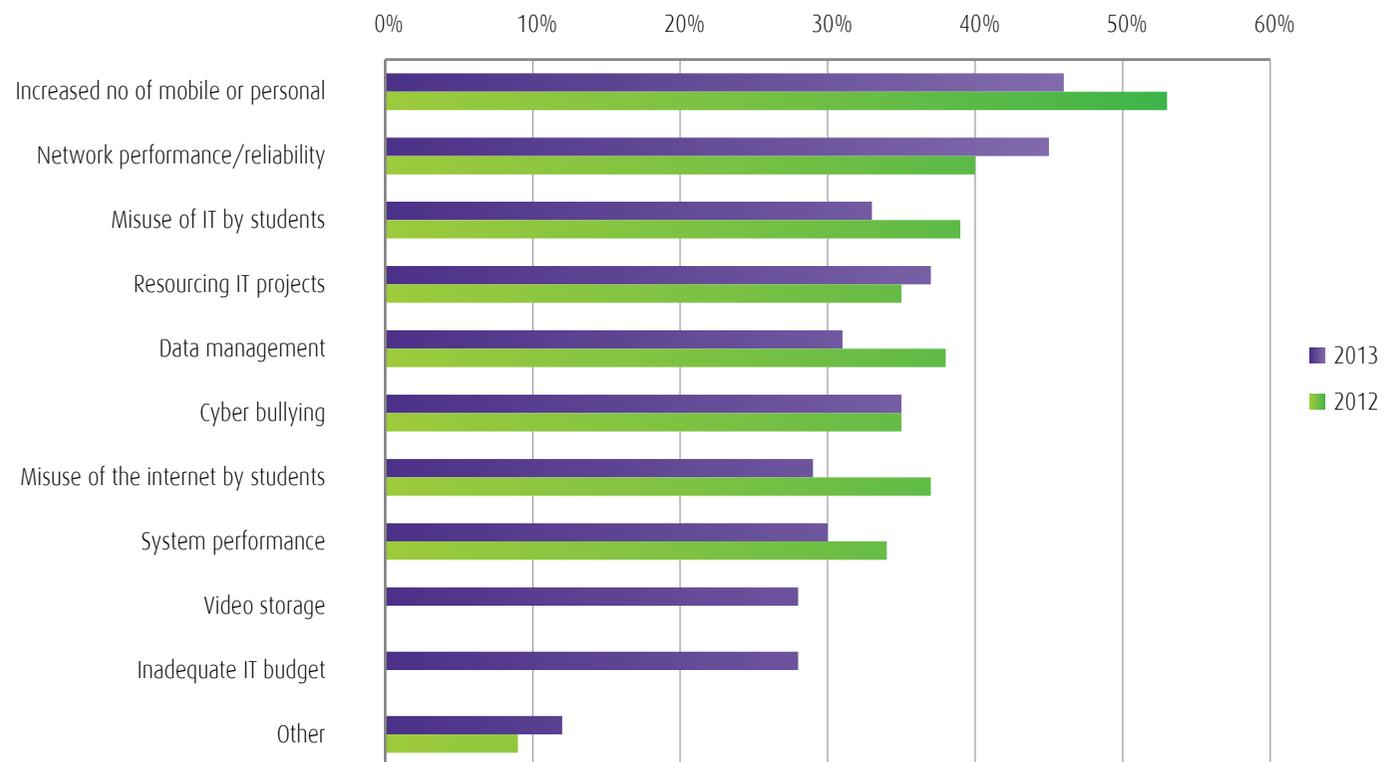
Over the two years of this research we have examined new trends such as social media and how they and other areas of concern are affecting usage policies of non-government schools and taxing their IT departments.

Key Findings

In comparing aspects of school IT that concerned IT teams over the past two years, we see that increased use of mobile or personal devices is still the leading issue, although it has reduced while network performance and reliability has increased to rate a close second.

While concerns over misuse of IT and the internet by students have diminished, cyber bullying is still a concern for over a third of respondents.

Which IT issues were a significant cause for concern last year?



Concerns by State, Size and Type of School

Drilling Down

Concerns by State

- Respondents from Queensland schools are half as likely to cite increased use of mobile or personal devices as a significant concern (31%) than their South Australian counterparts (61%)
- Cyberbullying is of greatest concern in Western Australia (53%) and of least concern in South Australia (15%)
- Around four in 10 NSW and Queensland respondents cited inadequate IT budget as a significant concern – contrasting with just 4% of Victorian schools surveyed

Concerns by Size of School

- Nearly 70% of the smallest schools had significant concerns about network performance and reliability in 2012, compared to around 40% of schools with 501-plus students. Half were also concerned about system performance
- Over a third (36%) of mid-sized schools had significant concerns over video storage, compared to just 8% of the smallest schools
- The smallest schools were also significantly more likely to be concerned about inadequate budget (47%) compared to mid-sized (27%) and the largest schools (just 20%)

Catholic versus Independent Schools

Catholic schools still have significantly greater concerns in the areas of student use than independent schools, although these concerns diminished across the board last year. Cyberbullying remained at much the same level of concern, and is now of greater concern than student misuse of IT and the internet, as the following table shows:

IT issues that caused significant concern last year	Independent		Catholic	
	2013	2012	2013	2012
Cyberbullying	30%	31%	45%	46%
Misuse of IT by Students	29%	34%	43%	50%
Misuse of the internet by students	25%	32%	37%	46%

These results beg the question: Do Catholic schools have a greater issue with IT misuse and cyber bullying, or do they just care more about it? Another possible interpretation of these statistics is that independent schools have more experience in dealing with countering abuse of technology.

Commitment to 1-to-1

We again asked respondents about their commitment to 1-to-1 based on continued government funding. Fortunately, respondents to this year's survey were significantly less likely to depend on government funding to support their commitment to a computer for every student.

Drilling Down

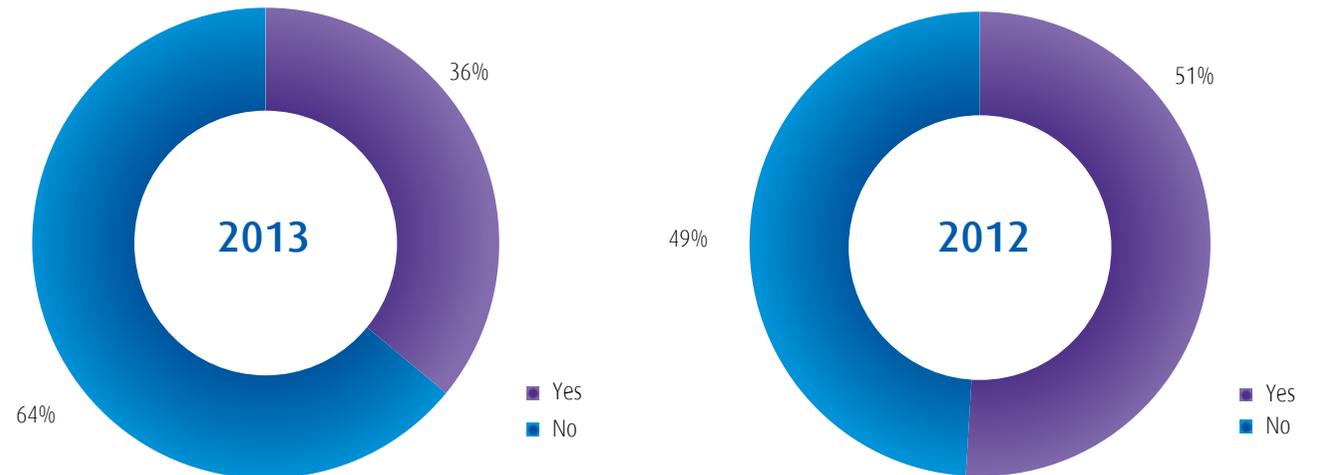
The commitment to 1-to-1 regardless of continued government funding was especially marked in the responses of:

- Victorian and Western Australian schools (78% and 74% saying their commitment was not based on government funding respectively)
- The largest schools (75% committed regardless of government funding, compared to just 38% of the smallest schools)
- Metropolitan schools (73% committed compared to 51% of regional schools)

Key Finding

In 2013, schools are significantly more likely to be committed to a 1-to-1 student computer ratio, regardless of continued government funding.

Is your commitment to a 1-to-1 computer to student ratio dependent on continued government commitment to funding?



Adoption of 1-to-1 Programs

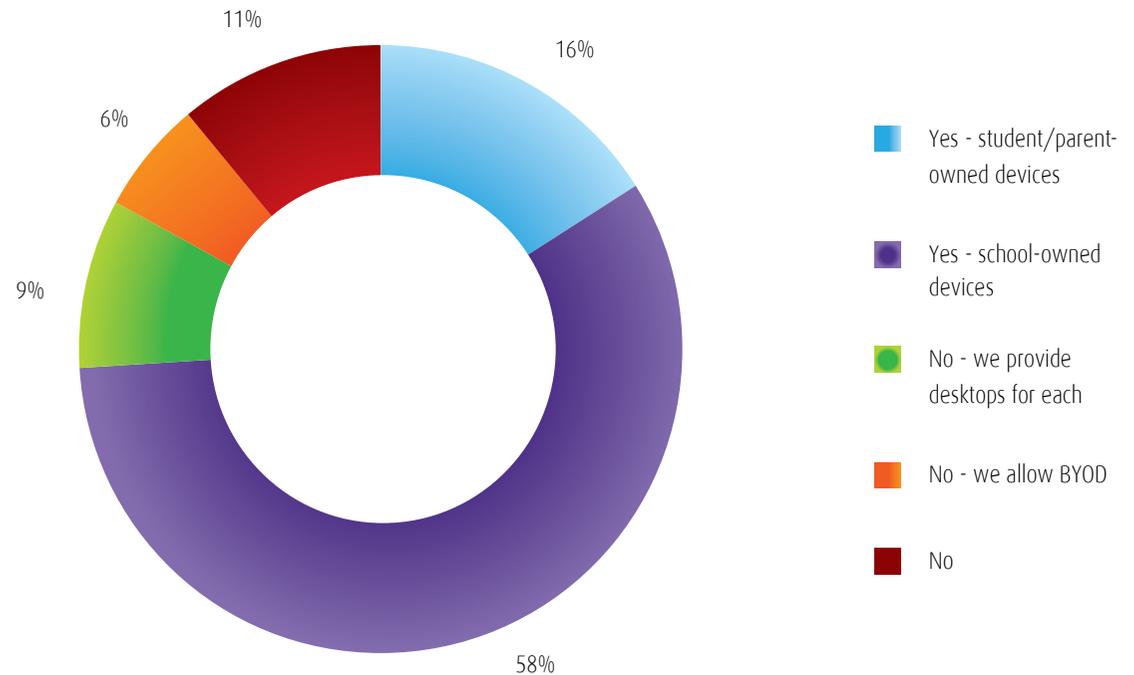
We asked respondents whether they currently have a 1-to-1 program and, if so, who supplies these devices.

Drilling Down

Interestingly, there were no significant differences across segments except by state, where:

- Victorian schools are twice more likely than the 16% average to operate 1-to-1 based on student/parent-owned devices (34%) and Queensland schools least likely to (5%).
- Conversely, Victorian schools are less likely to base 1-to-1 programs on school-owned devices (45%) and Queensland schools the most likely (85%).
- At 64% and 60% respectively, NSW and South Australian schools are the least likely to operate 1-to-1 programs with either parent or school-owned devices, and Queensland schools the most likely to (a total of 90%).

Do you have a 1-to-1 program?



BYOD

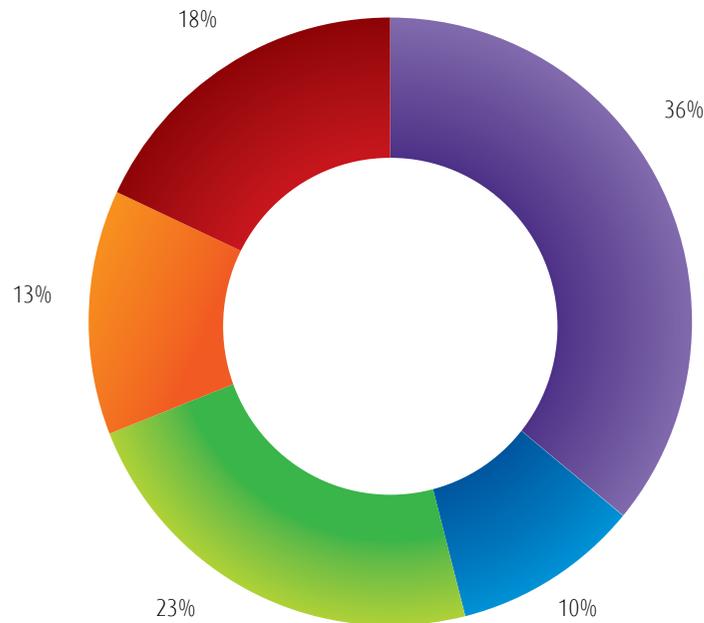
Given confusion in the marketplace about the different 'models' of BYOD, we thought we'd ask respondents exactly how they interpret the term.



Drilling Down

There are no significant differences in interpretations of BYOD by size, type or location of school, except that Western Australian schools are the most united in agreeing on 'students can bring any device and configure software themselves' (60%, compared to an Australian average of 36%). From this we infer that the subject has been a subject of discussion and agreement amongst IT managers within the non-government school community in that state.

What does BYOD mean to you?



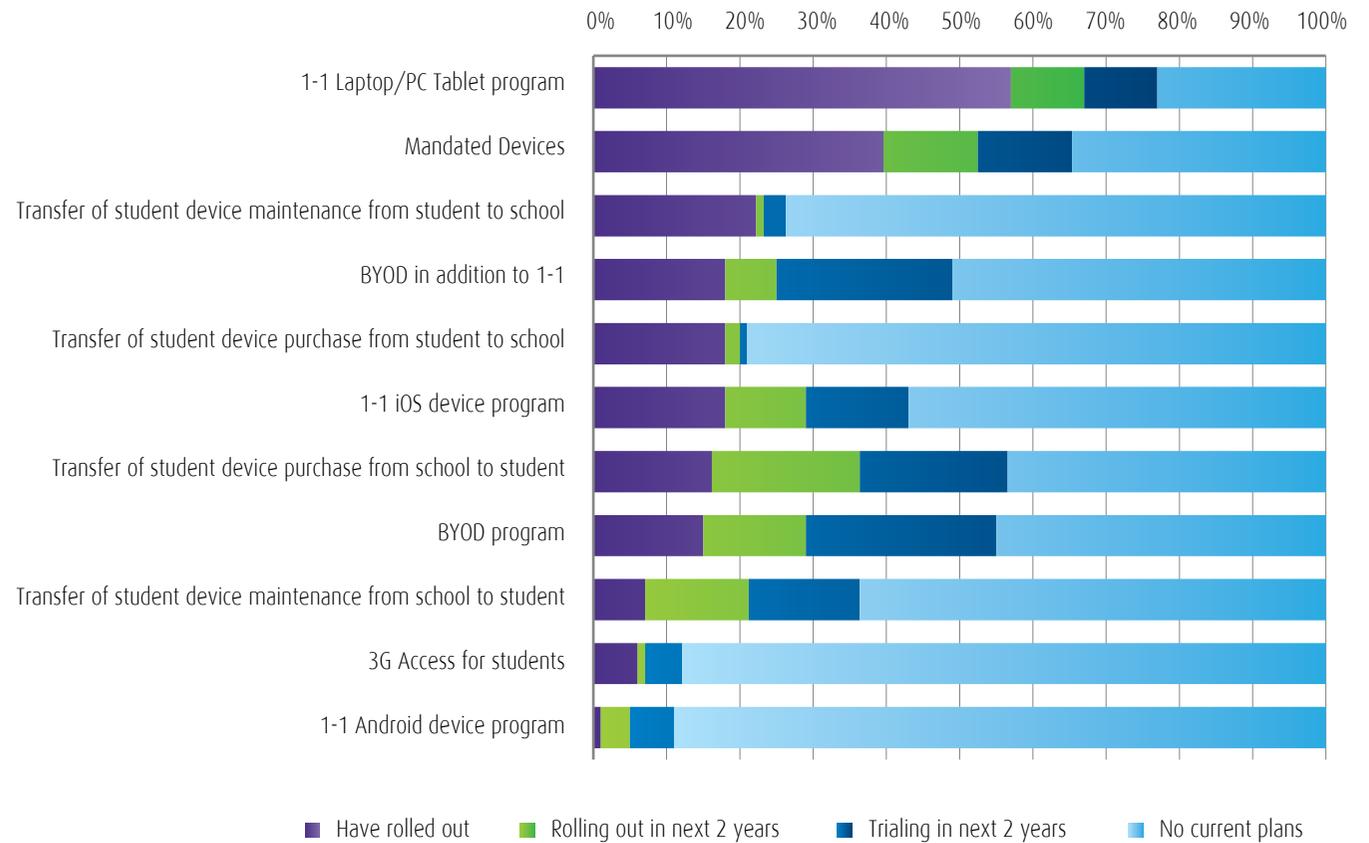
Students can bring:

- **Any device** to school and configure the software themselves
- **Any device** to school and install software preselected by the school
- **One of a selection of devices** to school and install software preselected by the school
- **Any device** to school but must use a VDI for all school work
- Other

Plans for Technology Adoption and Usage

We asked respondents about their school's approach to widely-discussed trends in educational computing.

The following are being widely discussed as possible future trends in IT in schools - what is your school's approach to these trends?



About the Authors

Bruce Dixon - AALF, AUS

Bruce Dixon is the founder and president of the Anywhere, Anytime Learning Foundation and consults to schools, School Districts, Education Departments, Ministries of Education as well as technology companies such as Microsoft, HP, Apple, Bertelsmann and Toshiba on technology in education.

Bruce has more than 27 years' experience working with schools and technology, as a teacher, principal, software developer, undergraduate college lecturer, and then in 1987 with a partner he established an educational technology company, Computelec. As a national company of more than 90 staff, the company were fundamental to the establishment and growth of laptop programs in more than 80 schools across 3 states, before he sold it in the mid-nineties to focus on consulting. Since 1995 he has worked extensively in North America, and was in part responsible for developing the 1-to-1 program there.

Over the past four years, Bruce has consulted in the US, Australia, Canada, Germany, UK and New Zealand, and has been invited to speak at conferences in Korea, Thailand, Italy, Singapore, Taiwan, Philippines, Japan, South Africa, United Kingdom, as well as Australia and the US.

Darryl Watson - All Saints' College

Darryl is the Manager of ICT at All Saints' College in Western Australia. All Saints' College has been operating a 1-to-1 notebook program for their students since 2002. Being one of the first schools in WA to adopt this level of technology in their curriculum delivery has provided many opportunities to see the technology available for teaching change and improve.

Darryl has been actively involved in the IT Managers' group in Western Australia for the last ten years. He has organised a Conference for IT professionals working in schools for the last two years. The conference was organised for all three sectors of education with participants coming from Catholic, independent and government schools, from locations all over Western Australia and from as far afield as New South Wales.

Jennifer Sharman - Ascham School

Jennifer Sharman is Director of Information Technology at Ascham School in Edgcliff, NSW. She previously held the same role at Wenona School in North Sydney for over 12 years. Her focus is on organisation learning and development, customer relationship management, project management, business continuity and risk management.

Jennifer has a Bachelor of Arts, with a double major in psychology and special education, (Macquarie University), holds an ITIL certification and is currently studying at the University of New South Wales in the Master of Business and Technology program. She is a member of the Australian Institute of Management and the Project Management Institute and is currently finalising her project management certification.



About Computelec

For more than 27 years, Computelec has been successfully supporting schools to get more out of the technology they use. With specialist staff including engineers and former educators, Computelec is made up of over 90 people who are committed to enhancing learning through the integration of technology in the curriculum.

Computelec services include:

- IT infrastructure support services
- Designing, planning and implementing specialised IT projects
- 1-to-1 program management
- Cloud services
- Professional learning programs for teachers



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