



'Supporting Learning Communities Worldwide through Technology'

SURVEY REPORT

ON THE USE OF INFORMATION TECHNOLOGY IN TEACHING AND LEARNING IN
INTERNATIONAL BACCALAUREATE MIDDLE YEARS PROGRAMME SCHOOLS

*Triple A Learning
Essex, UK
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'Supporting Learning Communities Worldwide through Technology'

INTRODUCTION

TRIPLE A LEARNING

[Triple A Learning](#) is a company that specializes in providing online resources and workshop opportunities for international educators. It provides services to different organizations including the International Baccalaureate Organization.

Whereas this survey only included IB authorized schools, Triple A Learning would like to make it clear that the survey was not commissioned, sanctioned, approved or sponsored in any way by the IB. It was offered as a way of collecting data on the use of Information Technology in a diverse group of schools with a common mission, and to inform future planning of IT provision within them.

THE SURVEY

This survey was carried out over a 5 week period in April and May 2011 and was open to all MYP schools on the company's database. Last year, 151 schools responded to the survey representing 19.6% of the total. Last year's response rate was very high, and it led us to believe that it represented an interest and possibly a growing awareness of the use of Information Technology (IT) in teaching and learning. This year, 69 schools replied representing less than ten per cent of the total of MYP schools. Despite this lower than anticipated response rate, we believe the data provided here is representative of the current situation in MYP schools as a whole, as it supports anecdotal evidence that we have gleaned from the large number of teachers and other professionals that we come in to contact with on our workshops.

The survey itself was developed and administered through the use of [Survey Monkey](#). This web-based program allows for rapid collection and analysis of results.

A similar and related *Survey on the uses of IT in teaching and learning in IB Diploma Programme schools* was administered at the same time as this survey. The report on that survey is published separately by Triple A Learning. The findings in that report are broadly similar to the findings in this report.

THE STRUCTURE OF THIS REPORT

This report takes each section of the survey and provides the following subsections.

- Section focus – a description of the scope of the section
- Responses and analyses – statistical tables of the schools' responses followed by a brief description of the major findings. Further analysis, including cross referencing with other responses, is included as appropriate. This subsection also includes associated information that schools might find useful and some questions related to the findings that schools might want to consider.
- Summary of the section – including the major findings along with further questions for consideration.

A NOTE ABOUT THE RELATED QUESTIONS

As explained in the above paragraph, each section has some 'related questions'. These are suggested as starting points for a review of IT provision and to inform future development. They are not intended to be pejorative in any way about existing practices mentioned by schools; instead, they are put forward as a way to focus discussion about existing and future IT provision.

A summary of the questions is provided at the end of the report.

Related questions

- How will you use this report in school?
- How can the results, analyses and related questions be used to inform developments in teaching and learning?

USE OF DATA

Triple A Learning assured users anonymity when responding to the survey. Consequently, data can only be provided at the regional level.

ACKNOWLEDGEMENT

Triple A Learning would like to thank all respondents for sharing information on their schools' IT provision, management and training. Without their help, this report would not have been possible.

SECTION 1 – BACKGROUND SCHOOL INFORMATION

SECTION FOCUS

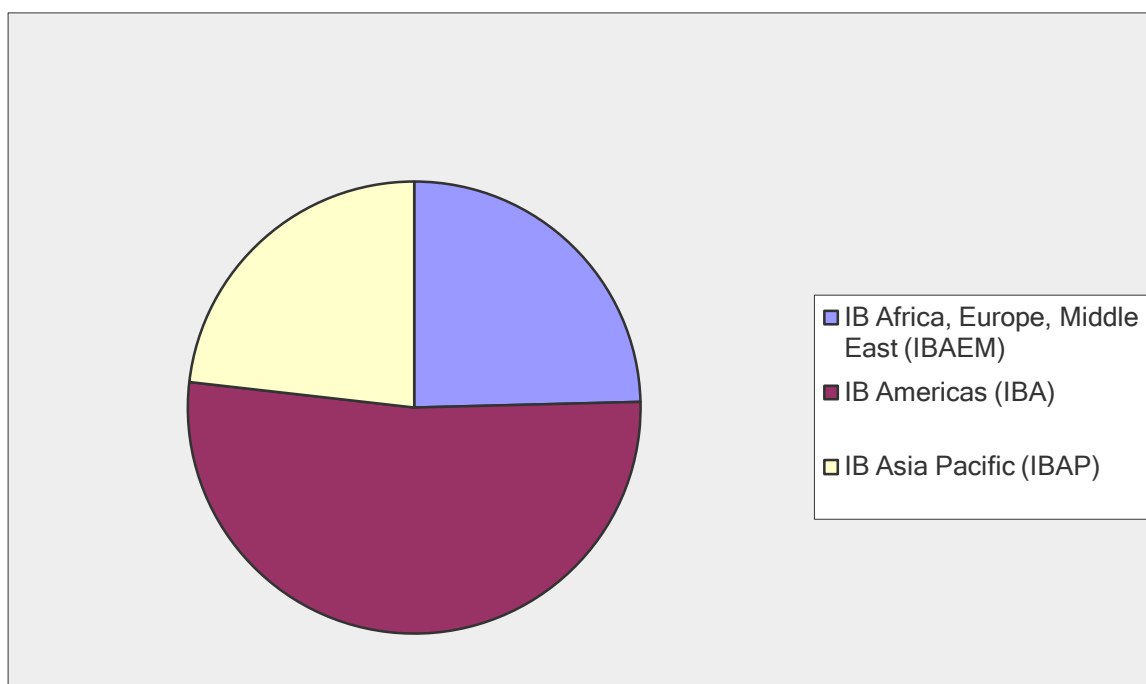
This section asked about the school's geographic location, in terms of the IB region, and the approximate number of students. These questions were asked as it is possible using [Survey Monkey](#), to cross tabulate responses to see if any interesting patterns emerged.

Respondents were also asked for an email address to which Triple A Learning could forward a copy of this report.

RESPONSES AND ANALYSES

QUESTION 1.1

In which region is your IB school?



Clearly, the largest response (52%) was from IB Americas. This was not unexpected as 69% of all authorized MYP schools are in that region¹. The responses from the other regions broadly follow the MYP global distribution pattern.

¹Taken from <http://www.ibo.org/facts/schoolstats/progcombinationsbyregion.cfm> accessed 25 May 2011

QUESTION 1.2

What is the approximate number of students in your school?

School size based on the number of students in the programme, as represented in the survey, range from 33 to 2400. The mean and median numbers of students in schools in the survey lie between 600 and 750.

Schools responding to the survey represent over 50, 000 students.

SUMMARY OF BACKGROUND SCHOOL INFORMATION

The data gathered from the survey makes it clear that the responses are consistent with the overall distribution of IB schools globally and represent a broad range of schools in terms of student numbers.

SECTION 2 – MANAGEMENT OF INFORMATION TECHNOLOGY

SECTION FOCUS

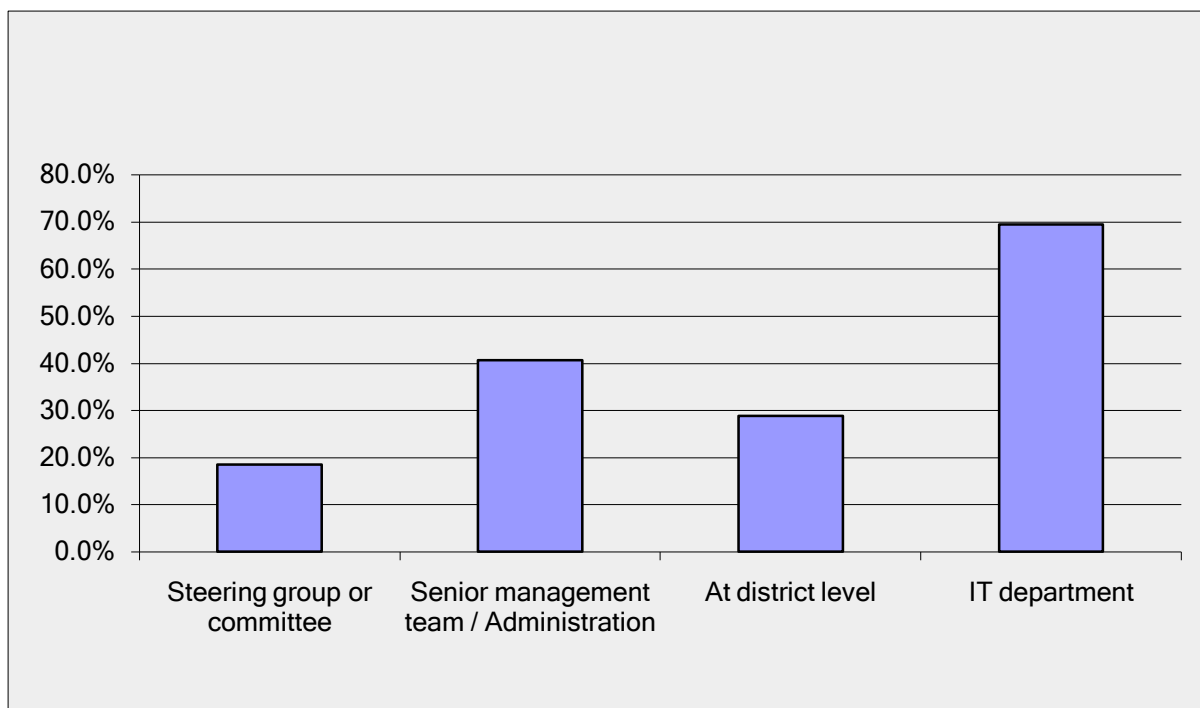
The questions in this section sought to establish

- the individuals or groups that manage and control IT systems and budgets
- how the use of the systems is monitored and regulated
- the guidance and procedures that are provided on the dangers and pitfalls inherent in accessing the web.

RESPONSES AND ANALYSES

QUESTION 2.1

How is your IT provision managed? Check all boxes that apply



The majority of schools report that management of IT provision lies with IT departments, but it is evident that it is often shared among various stakeholder groups.

Approaching half of all schools responding have IT provision managed by the administration/senior management team and a quarter of schools have management at a district level. Clearly there is collaboration with IT departments, technology committees and teachers.

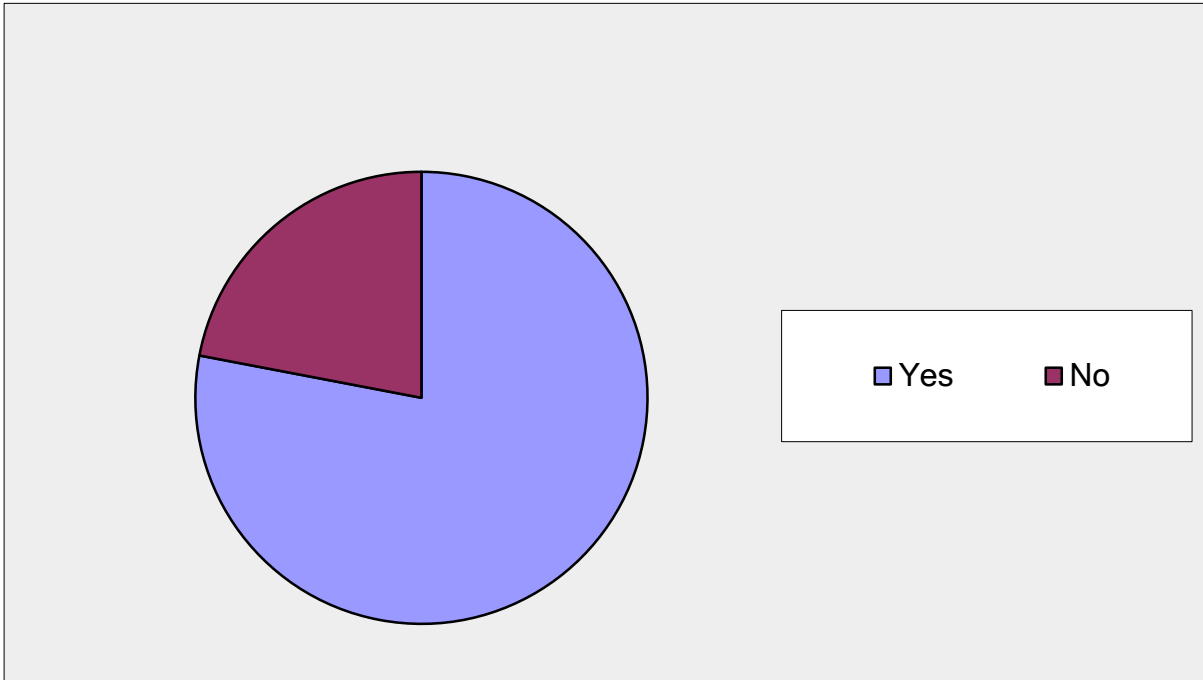
Related Questions

- Are departments, teachers and students consulted in the direction and management of IT provision?

- To what extent might this management structure for IT need to change over time as IT becomes more closely and deeply embedded in the curriculum?

QUESTION 2.2

Do you have a budget specifically allocated for IT?

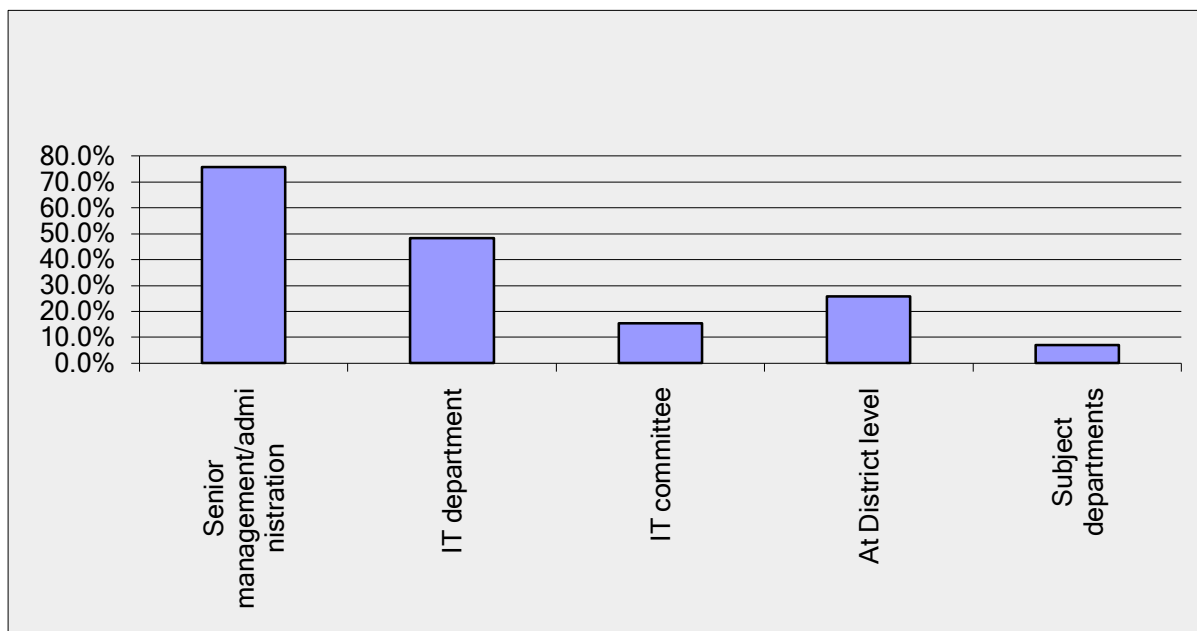


As we discovered last year, a large proportion of schools have a specific budget for IT. We were interested to find out where the remaining 22% of schools found the funds for IT provision and expected that it would come from existing departmental (subject) budgets.

This year, we asked a supplementary question about the source of funds in these schools where there was no budget. The responses revealed that most IT funding in these schools relied on grants and gifts from various sources such as Parent Teacher Associations.

QUESTION 2.3

Who controls how the IT budget is spent? Check all the boxes that apply



Almost three quarters of respondents reported that control of IT budgets lies predominantly at administration/senior management level, but it is evident (and understandable) that financial responsibility is often delegated to IT departments.

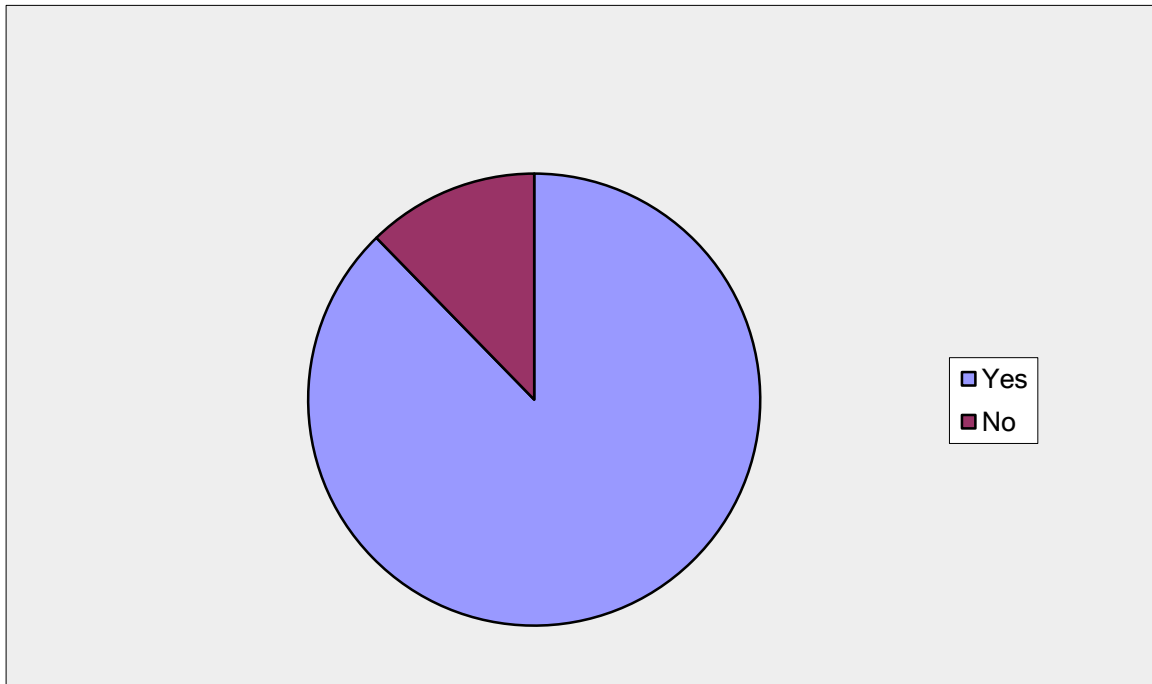
Related Questions

It seems that schools consider the control and financing of IT systems to belong predominantly to the IT department and administrators.

- Could this view exclude other user groups who may not have the technical and financial knowledge but may have an informed opinion on the educational effectiveness and future development of systems employed at a subject level?
- If this is the case, could these groups be better involved in the decision-making process?

QUESTION 2.4

Does your school or district have a Fair and Acceptable Use policy for IT?

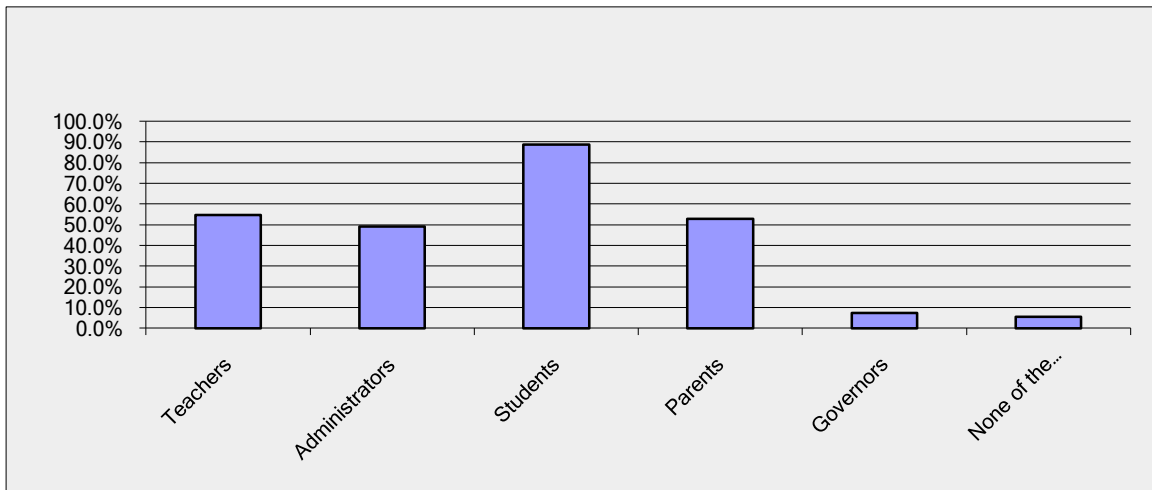


Last year, one school in eight did not have a fair and acceptable use policy for IT. The situation has not changed and 12.5% of schools responding *still do not* have such a policy.

The important underlying issue is how the IT systems are used, or potentially abused, by those with access to it. The abuse of IT systems is regularly reported in the media and schools may leave themselves open to legal proceedings if there is a lack of clarity on the use of their IT systems and no guiding policy.

QUESTION 2.5

**If you have a Fair and Acceptable Use policy, which of the following groups is required to sign it to confirm their understanding of and compliance with it?
Check all boxes that apply**



The majority of schools have some form of school usage policy; not unexpectedly, students are the largest group required to sign the usage policy to confirm their understanding of and compliance with it. Interestingly, just over half of schools require their teachers to sign yet fewer than half require their administrators to sign.

This year, we noticed that 52% of schools responding require parents to sign a Fair and Acceptable use policy. This is up from 42% last year; possibly an increase in the number of schools having parental access to school IT systems may explain this.

Related Questions

- Should all users of school IT systems be required to sign a Fair and Acceptable Use policy, irrespective of their status and access?
- Are stakeholders fully engaged in information systems? Are parents and governing boards, for instance, provided with adequate and appropriate access to school and student data?

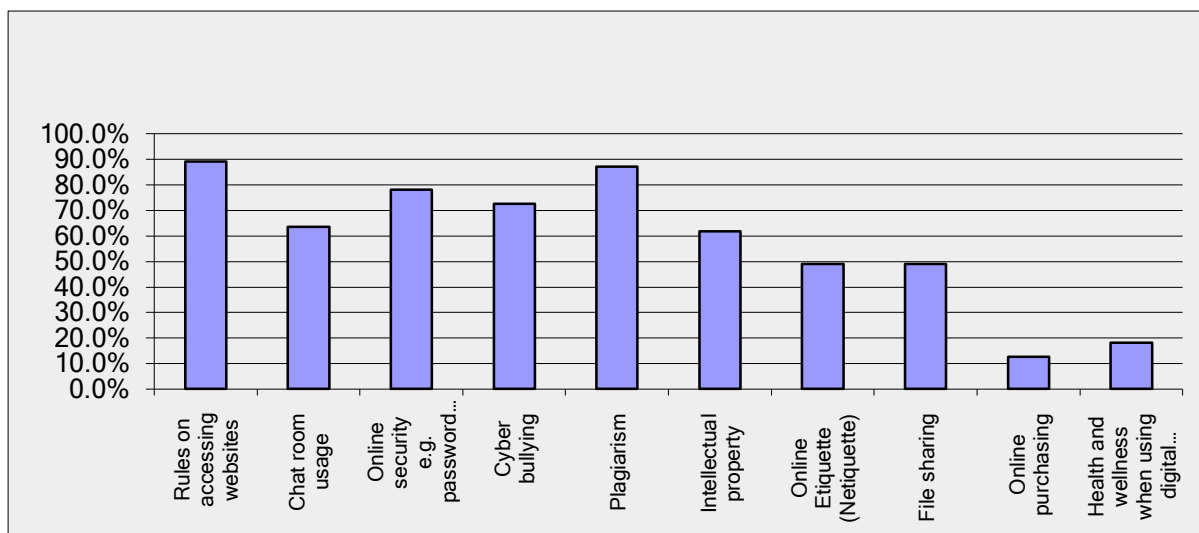
Associated information

There are many illustrations of, and discussions about, Acceptable Use policies on the web; here are two examples of policies – one for students and one for faculty.

- Aston Fields Middle School [Acceptable Use Policy 2011 - 2012](#)
- E-Safety at RRCA [Staff \(and Volunteer\) Acceptable Use Policy Agreement](#)

QUESTION 2.6

Which of the following is included in procedures or guidance shared with students? Check all boxes that apply.



A large majority of schools provide guidance for students on accessing websites, on plagiarism and on internet security, such as protecting passwords. A similar number of schools include advice on chat room use, on cyber bullying and on intellectual property in their procedures and guidance.

Approximately half of schools offer guidance on topics such as online etiquette and file sharing as was reported last year. This year, proportionally fewer schools offer guidance on issues of health and wellness when using digital equipment.

Related Questions

As staff and students spend longer at school and outside using digital equipment, issues of health and safety will inevitably grow.

- Does your school comply with national legislation and industry standards on computer use, especially in relation to students and employees who habitually use display equipment as a significant part of their normal work?
- Should your school address issues of health and wellness when using digital equipment?
- Would your school be liable for any long-term health issues caused by excessive or poor use of digital equipment?

Associated information

Statistics and advice on cyber bullying:

- <http://www.cyberbullying.us/>
- <http://www.bullyingstatistics.org/content/cyber-bullying-statistics.html>

One of the oldest and most enduring sites for Internet safety in the US:

- <http://www.safekids.com/tag/digital-citizenship/>

An excellent wiki that considers digital citizenship for teenager issues identified in this section is:

- <http://digiteen.wikispaces.com/>

This is an archive of a project on the flat classroom – new development is found at the following site:

- <http://digiteen.ning.com/>

Guidance and a checklist on safe use of ICT in schools; this guidance relates to the UK environment. Compliance with individual national legislations and regulations is an issue worthy of regular review

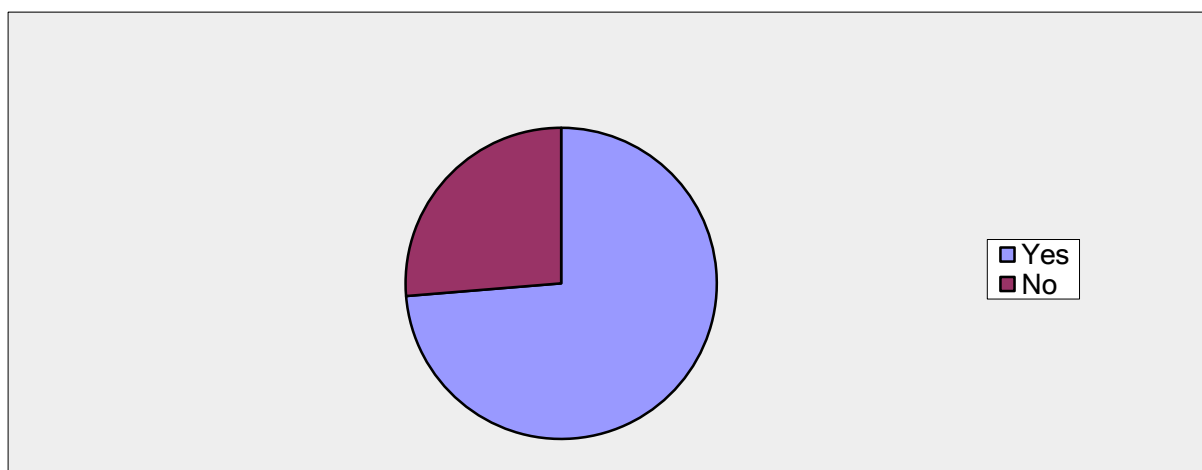
- <http://www.ictknowledgebase.org.uk/healthandsafety>

A comprehensive resource on RSI, its causes, symptoms and prevention:

- http://www.teach-ict.com/as_a2/topics/health_and_safety/pages/rsi.html?D=d13

QUESTION 2.7

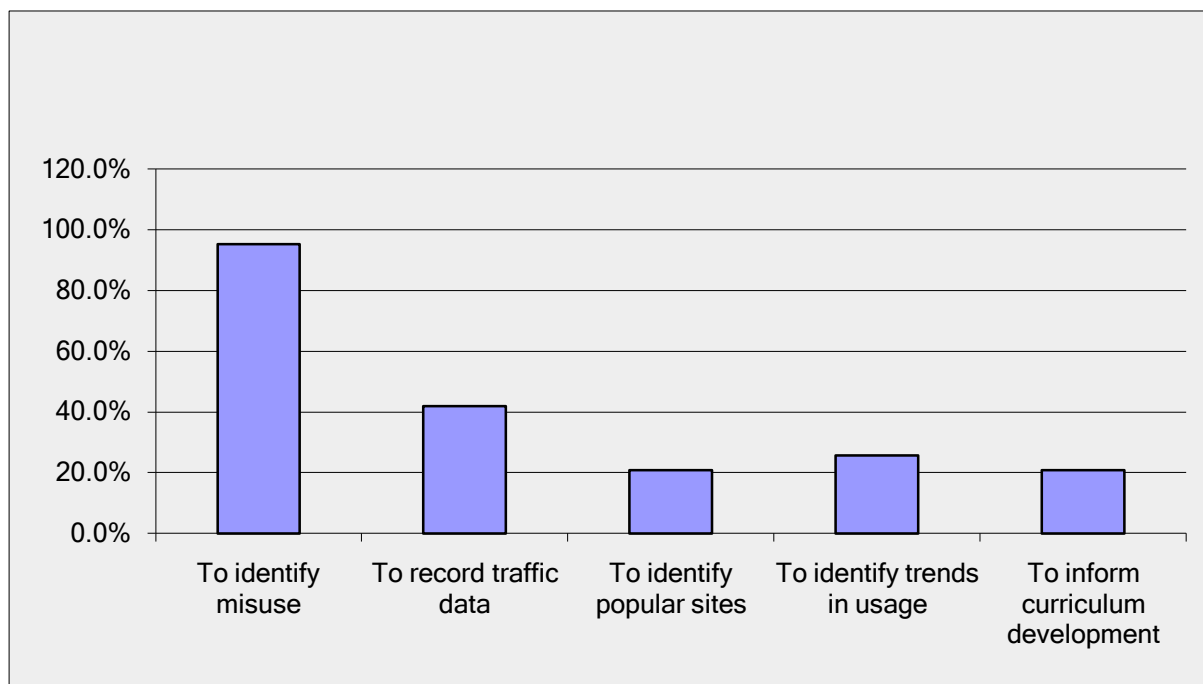
Do you monitor the use of the school computer systems?



Over one quarter of all schools responding to this survey **does not monitor** the use of its computer systems; the same proportion that we reported last year. It remains surprising that so many schools do not monitor usage given potential consequences of misuse.

QUESTION 2.8

Why do you monitor computer use? Check all boxes that apply



The 74% of schools that do monitor computer usage do so for a variety of reasons. As might be expected, the main purpose is to identify misuse such as accessing inappropriate websites. However, less than half of schools that monitor usage do so to record traffic data and less than a third to identify trends in usage. A number of schools reported that monitoring of computer usage was a government requirement in China.

Only 20% of schools in the sample use monitoring to inform curriculum development.

Related Questions

- Should details of computer usage be routinely shared with staff as a way of identifying popular sites used by teachers and students and to inform curriculum development?
- How can we use data on computer usage to inform curriculum development?
- How can student interaction with sites and systems outside the school's own IT system be monitored?

SUMMARY OF MANAGEMENT OF INFORMATION TECHNOLOGY SECTION

The management of IT is a complex and rapidly changing area. It is clear from the survey results that schools are broadly implementing policies to manage this process. One issue for consideration is the

frequency with which a school should review its IT policies and systems from the following perspectives.

- As stakeholders become more closely involved and IT becomes more deeply embedded in the curriculum, will this require more regular updating and monitoring of policies and procedures?
- As opposed to seeing monitoring of IT usage as simply a preventative tool, how could it be used more proactively to enhance IT provision and improve student learning?

Associated Information for this question

Below is a link to a digital strategy for teachers prepared by the Department of Education, Employment and Workplace Relations (DEEWR) as part of the Australian Government's Digital Education Revolution program, with the assistance of all state and territory governments. The following quote is taken from that document.

'Information and communications technology (ICT) provides schools with major opportunities for improving learning, teaching and administration. To benefit from these opportunities, a school must apply ICT resources in a way that supports its educational goals'.

<http://www.deewr.gov.au/Schooling/DigitalEducationRevolution/DigitalStrategyforTeachers/Documents/ICTStratPlanGuide.pdf>

SECTION 3 – IT FACILITIES AND HARDWARE

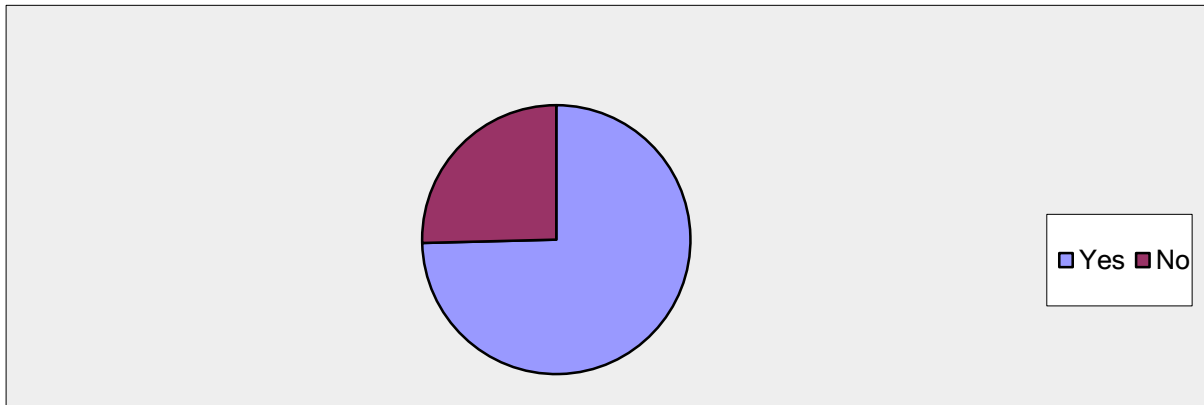
SECTION FOCUS

This section related to the facilities for Information Technology and the hardware to which schools have access. It sought to establish the extent of centralized computer provision within schools and to measure the increase in laptop use.

RESPONSES AND ANALYSES

QUESTION 3.1

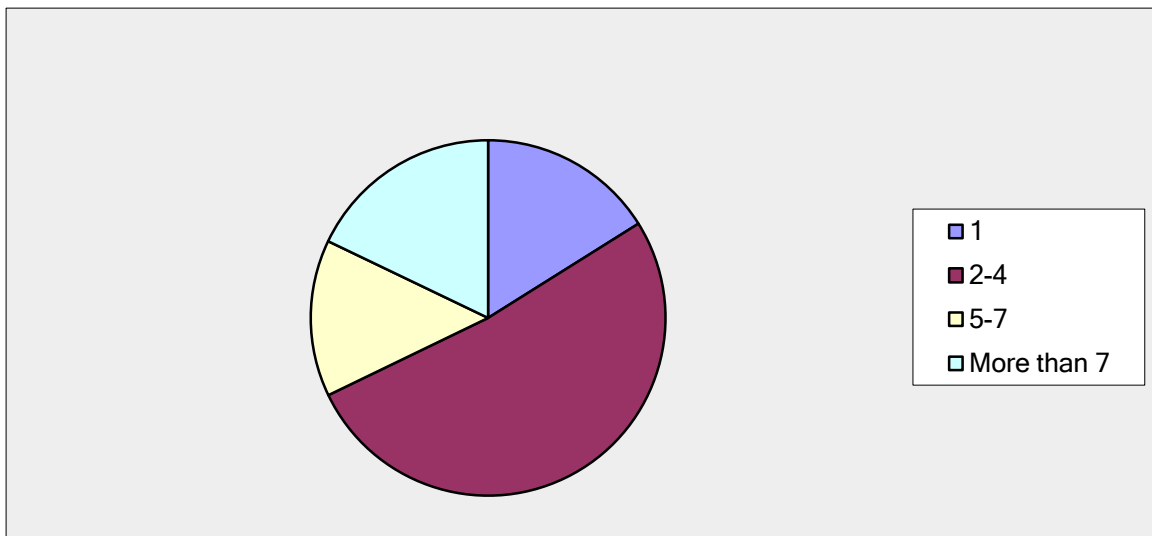
Does every department have access to at least one computer, available for student use, within every teaching room?



Nearly three quarters of all schools in the survey have at least one computer in every teaching room; this is similar to our findings last year.

QUESTION 3.2

How many dedicated computer rooms do you have for multi-departmental use?

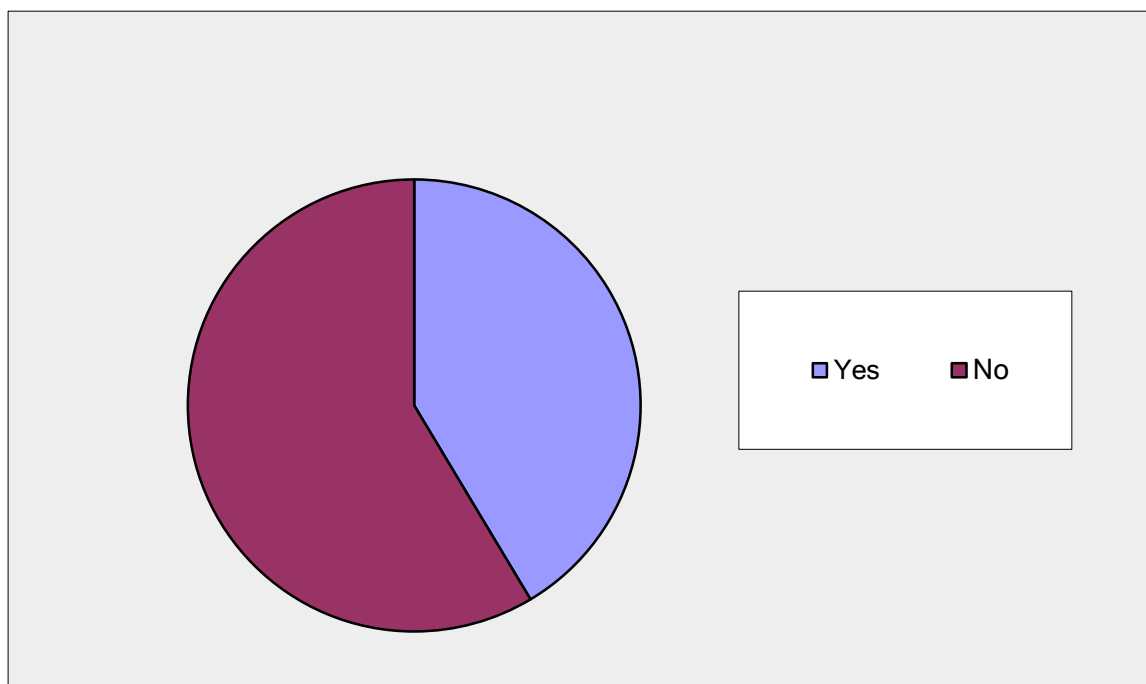


Virtually all schools that responded have at least one dedicated computer room with the majority having between 2- 4 rooms. The number of dedicated computer rooms in schools seems to have increased over the past year.

From the responses to this question and to question 3.1, we can see that computers are both centralized and diffused throughout schools.

QUESTION 3.3

Do you consider your school a "laptop school"?



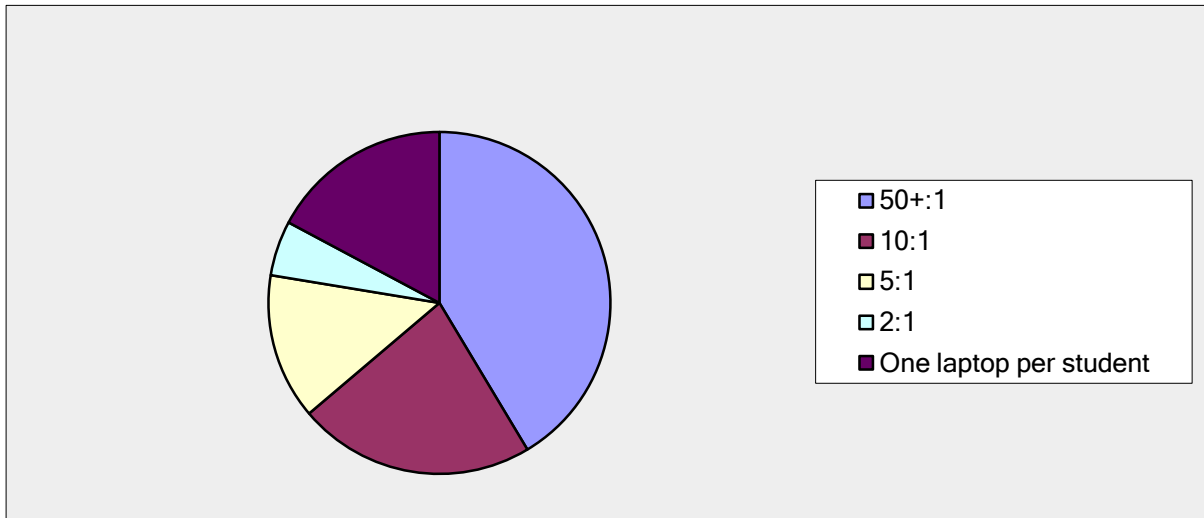
41% of schools responding to the survey consider themselves 'laptop schools'.

This year, we provided respondents the opportunity of defining 'a laptop school'. The responses varied greatly, as one might expect. The selection below illustrates that range.

- *Every student is issued with a laptop that belongs to the school and is set up by the school.*
- *A school where all students have a laptop computer for daily use in the classroom.*
- *We provide high speed wifi in all school areas; students are expected bring their laptop for any assignment.*
- *2 laptop trolleys -> 35 laptops for students' use*
- *Laptops in moving carts that roam as needed*
- *To accommodate classroom usage of computers (we have two dedicated labs and an almost-class set of computers in the library), we have 5 laptop carts (30 laptops and wireless router) available for check-out by teachers. We also have a dedicated laptop for every student in two of our 5th grade classrooms.*
- *Students can use their own laptops if they want.*
- *We have several laptop carts for teacher checkout, for student use. We have 1 desktop computer in every room for teacher use.*

QUESTION 3.4

Within the school, what is your approximate ratio of students per school laptop? Choose the answer which is the closest approximation.

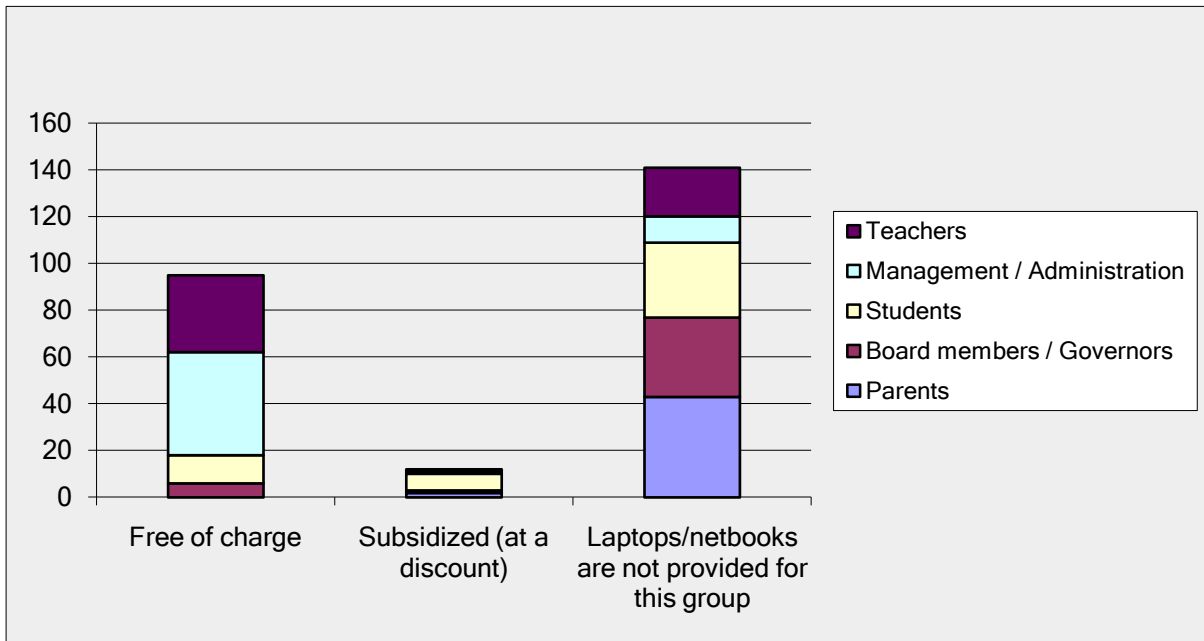


It is interesting to note that over 17% of schools have one laptop per student. Clearly, from this response and from the response to the previous question, many schools are not interpreting the term 'laptop school' to mean that all students have their own personal laptop.

Just over one third of schools have sufficient laptops to share among five or fewer students.

QUESTION 3.5

Do you provide laptops for the following? Check all boxes that apply



These figures are not percentages – they are numbers of responses in each category

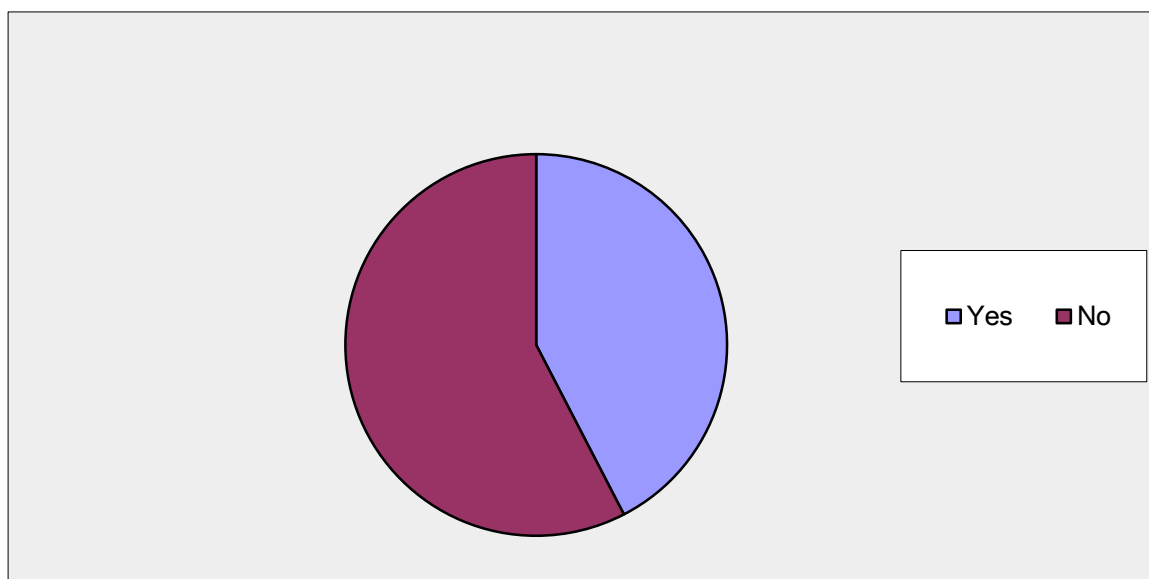
The general comments here are that

- where schools provide laptops free of charge, they do so mainly for administrators
- where schools offer laptops at discounted rates, they do so primarily for students

Schools may consider whether providing subsidized laptops to parents through mass purchase schemes may enhance performance of students who are more supported at home and have access to equipment that might otherwise not have been purchased.

QUESTION 3.6

Do you have interactive whiteboards in the majority of classrooms?



Last year, less than one third of schools responding to the survey have Interactive White Boards (IWBs) in the majority of their classrooms. This year, 42% of schools have them.

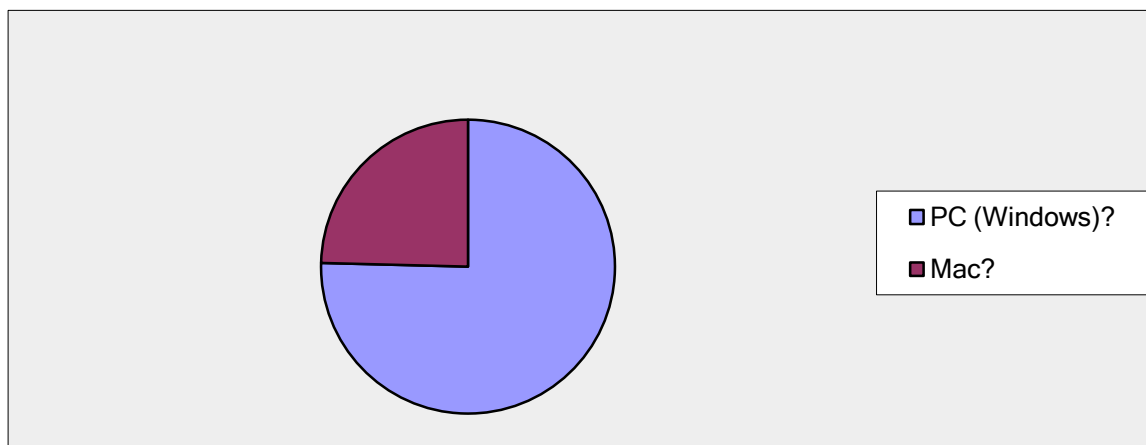
QUESTION 3.7

How satisfied are you with the following

Answer Options	Excellent	Good	Satisfactory	Poor
Download speed	16%	46%	28%	10%
The reliability of your internet connection	19%	43%	28%	10%

These figures are broadly similar to the data we gathered last year. There appears to be a strong correlation between download speeds and the reliability of schools' internet connections.

QUESTION 3.8

Is your school mainly PC, Mac or other?

Unsurprisingly, most schools in the survey use Microsoft Windows; one quarter of schools responding use Apple Macs. Of the very few schools that responded “Other”, three use a combination of Microsoft and Apple platforms. Only two schools mentioned Linux as their operating system of choice.

Related Questions

- The decreasing costs of mobile technologies and the integration of computer systems, is likely to lead to education provision becoming more flexible and personalized. Is your school considering moving provision to mobile technologies, such as laptops and/or netbooks?
- Would free or discounted purchase schemes for students, teachers, parents and other stakeholders support access to IT systems and improve student performance, involvement or engagement in the curriculum?

Associated information

For schools seeking ways of reducing budgets on IT, Linux might be an option. This open-source, free software comes bundled with Open Office suite and, depending on needs, a host of other add-ons including educational software. One popular Linux distribution is called [Ubuntu Education Edition](#), an official version of Ubuntu Linux designed for use in classrooms and schools.

SUMMARY OF IT FACILITIES AND HARDWARE SECTION

Significant variations in relation to hardware acquisitions and policies are evident from the survey. While there are a number of schools who consider themselves ‘laptop schools’, they still represent a minority. The same is true of interactive whiteboard provision with less than a third of schools having them in the majority of their classrooms. Much of this is likely to be related to the total cost of hardware provision – generally the largest proportional cost within a school’s technology budget.

With most schools expressing satisfaction with their download speeds and internet connectivity, is it perhaps time for more emphasis on the function of hardware and whether an examination of functional requirements could help reduce its budgetary impact. For example, does the greater

availability of online curriculum resources mean that mobile devices or smaller netbooks could increasingly be used as an alternative to more conventional higher-specification machines?

Australia seems to be pushing forward with policies promoting access to digital equipment in schools. The following article reports on the development of laptop schools in New South Wales.

- <http://www.futuregov.asia/articles/2011/feb/28/digital-education-revolution-nsw/>

With hardware provision changing rapidly, the survey shows that this is another area which will require regular analysis and review.

SECTION 4 – SOFTWARE AND SYSTEMS

SECTION FOCUS

This section relates to software systems available in schools and examines the extent to which VLEs and MLEs operate within schools, and the software systems incorporated. Questions were asked about training provided to support the effective application of systems and software. In addition questions examined whether that Web 2.0 tools were used in the school and/or departments and if students were actively encouraged to use social networking and mobile technologies as part of the learning and teaching experience.

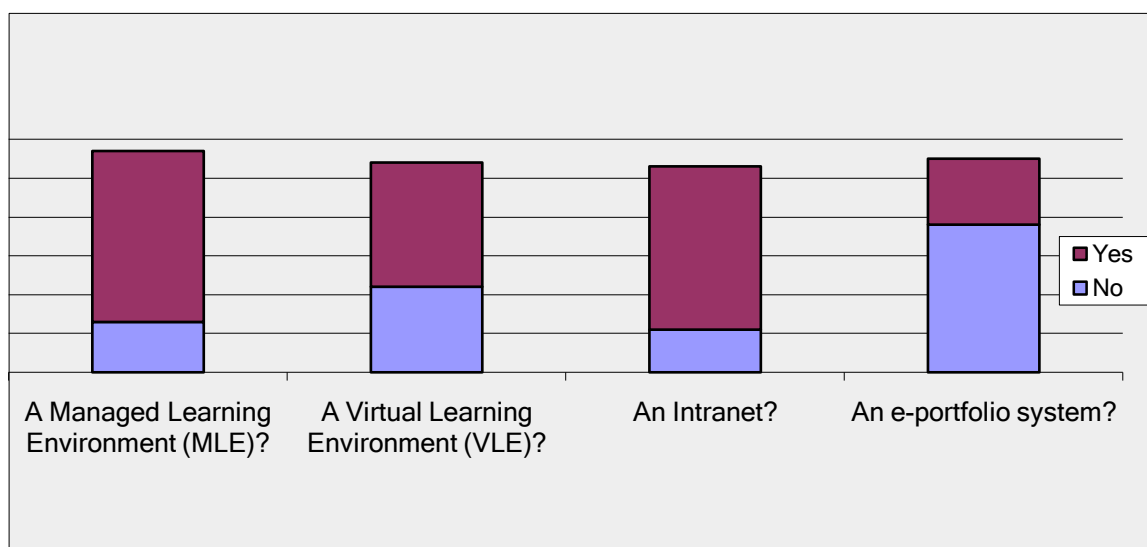
The following are definitions of terms used in the survey

- A **Managed Learning Environment (MLE)** is a software system covering a range of information systems and processes of a school and is used primarily by administrators and teachers.
- A **Virtual Learning Environment (VLE) / Learning Management System (LMS)** is a software system designed to support teaching and learning and is used by students and teachers. A VLE could be part of an MLE.
- An **e-portfolio** is a collection of evidence of learning. Such evidence of achievement may include text, files, images, multimedia, blog entries, and hyperlinks.
- **Open source** refers to software products where the source code is freely available and offered by development communities online. These products come with no warranty but are usually very well tested by development groups. The most renowned open source product is Linux.

QUESTIONS AND ANALYSES

QUESTION 4.1

Does your school have:



The figures here translate into approximately

- eight schools in ten having a school intranet system
- eight schools in ten having a Managed Learning Environment
- six schools in ten having a Virtual Learning Environment
- three schools in ten having an e-portfolio system

These results are very similar to the situation reported last year.

Associated information

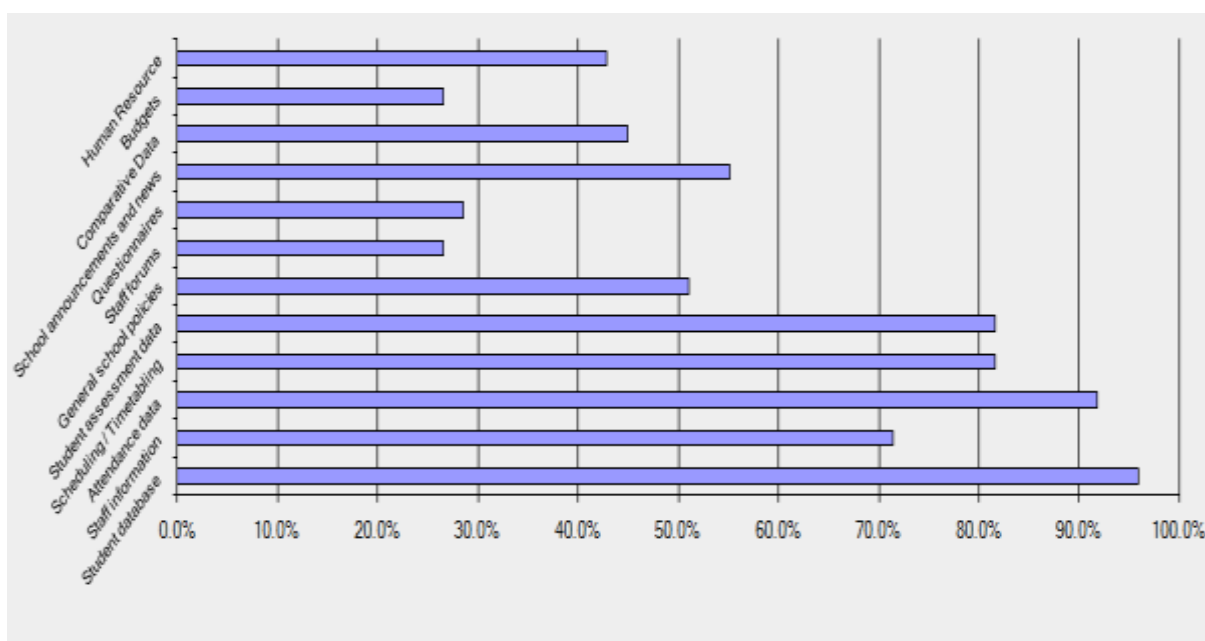
One increasingly popular open source, and flexible, e-portfolio system is [Mahara](#), which has been designed to be integrated with VLE platforms such as Moodle. There is a [demo version of Mahara](#) available where you can experiment to see its capabilities.

For more information on e-portfolios, you may find the following links helpful.

- Informative sites introducing e-portfolios
 - [E-portfolios for starters](#)
 - [E-portfolios – an overview](#)
 - [Effective practice with e-portfolios](#)
- Two YouTube presentations
 - [E-portfolios](#)
 - [What about e-portfolios?](#)

QUESTION 4.2

If you have a MLE (or equivalent system such as an Intranet) please indicate which of the following features this contains. Check all the answers that apply.



The most popular features included in an MLE were:

- a student data base
- attendance data
- timetables/scheduling
- staff information
- student assessment data.

All of these features were included in the MLEs of more than three quarters of respondents. Other popular features were school news features and school policies.

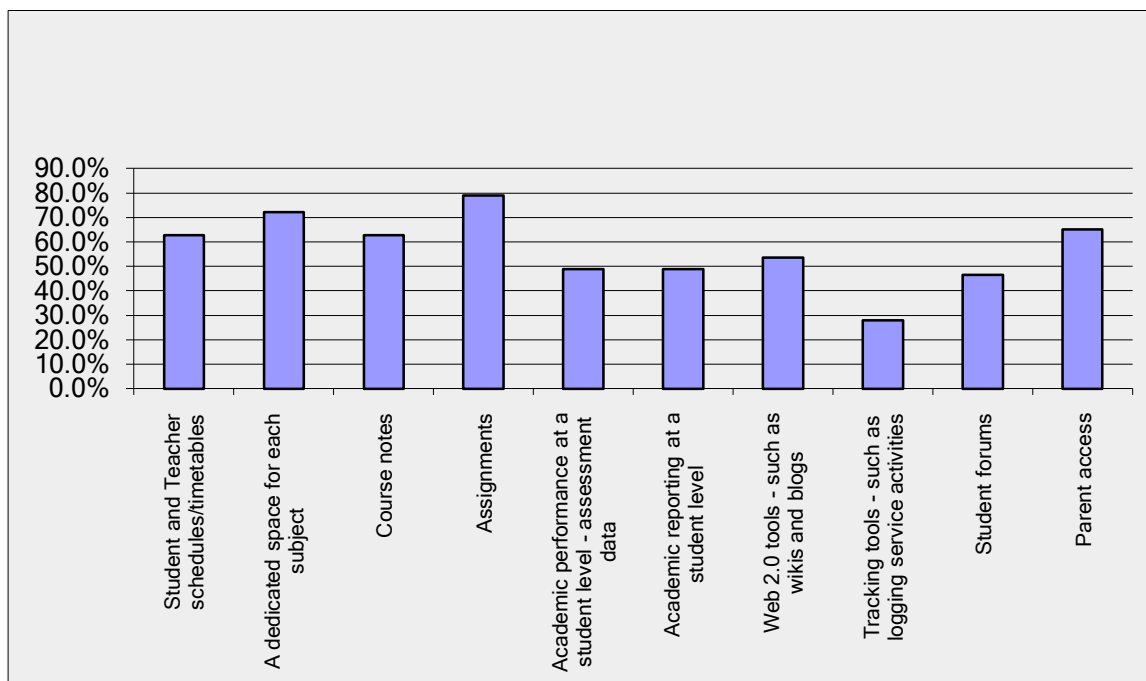
A minority of schools included notices about staff vacancies, comparative data, surveys and staff forums. Just over a quarter of all respondents used their MLEs to hold budget data, although a small number of schools reported that school information, including budget details, was in the public domain and was included on district web pages.

Related Question

- Should your school collect more data on user satisfaction with IT systems and academic programmes, and/or use technology to elicit opinions on school wide issues through surveys and questionnaires?

QUESTION 4.3

If you have a VLE (or equivalent system such as an Intranet) please indicate which of the following features this contains. Check all the answers that apply.



VLEs were predominantly used for

- student assignments
- course notes

- subject information
- scheduling/timetable information
- parent access.

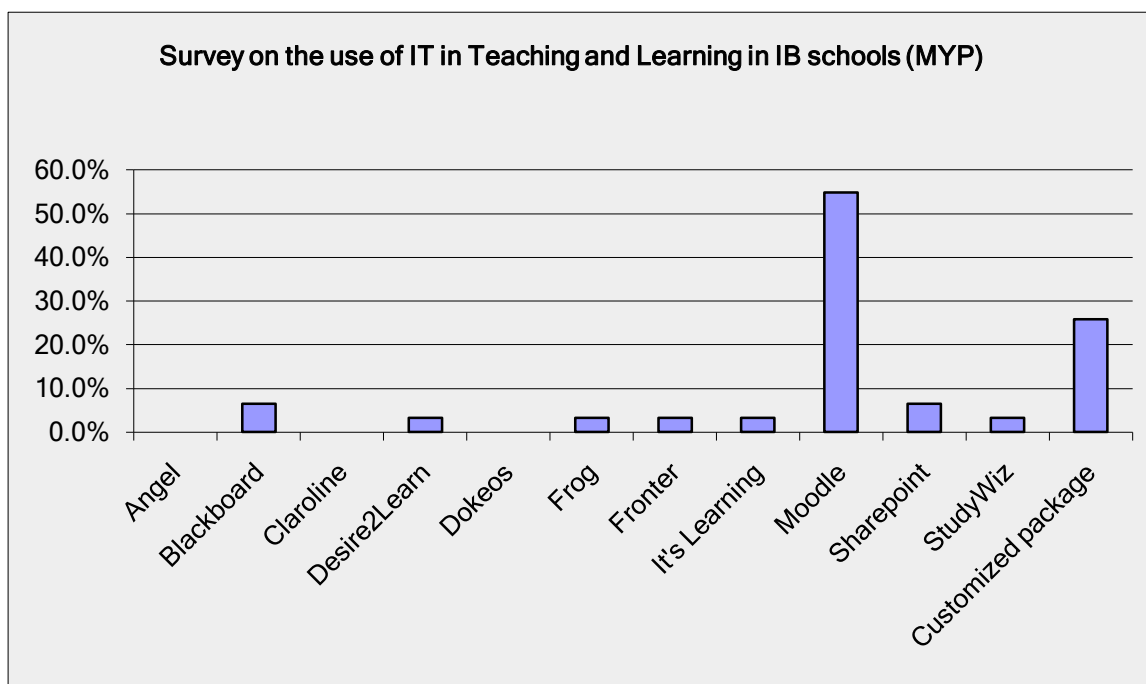
It is also interesting to note that over half of all respondents included some web 2.0 tools on their VLEs, such as wikis and blogs. The number of schools using VLEs for student forums has risen. We also noticed a rise in the use of the VLEs as tracking tools for programme requirements such as Community Involvement.

Related questions

- How can we use the full functionality of our VLE to improve student learning?
- Are all features of our VLE being used by all subject teams – why is this?
- Are Web 2.0 tools such as wikis and blogs being integrated into MYP units of work and being used to develop and support students’ Approaches to Learning skills?
- How can teachers use VLEs to differentiate instruction?

QUESTION 4.4

If you have a VLE, which platform do you use?



The most popular VLE platform was Moodle, with almost four in ten schools possessing a VLE using it. However, customized packages were used by a large number of schools. On further analysis, in many cases these packages were reported to be based on a Moodle platform.

Related Questions

- Moodle appears to be the course management system (CMS) of choice for a large number of schools. If you do not have a VLE at present (or use a proprietary version), should this free, open-source platform be investigated?

- Is teacher expertise adequately employed in the school? For example, are teachers who already use Moodle encouraged to share their knowledge with the rest of the faculty?
- Are there plans in place to develop personalized learning platforms for your students allowing them greater ownership of, and flexibility in, their learning experience?
- If you have an existing VLE, have you investigated and/or planned integration with compatible systems, such as e-portfolios (such as [Mahara](#)), wikis (such as [Wikispaces](#)) and other collaborative options (such as [Google Apps](#))?

Associated Information

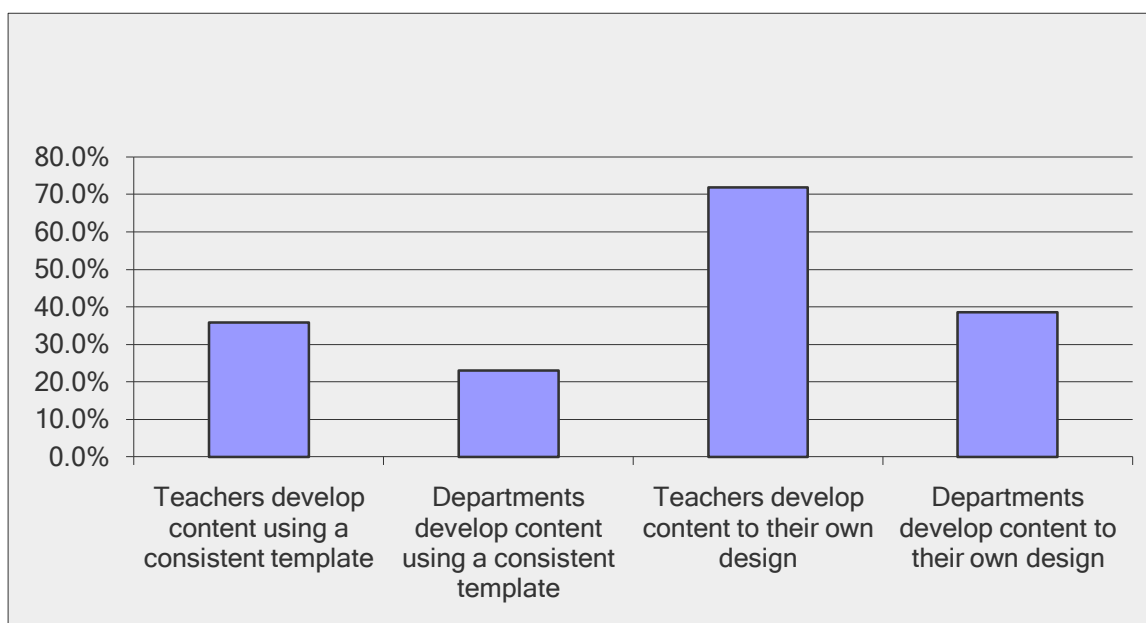
[Moodle](#) is an open source course management system or VLE. The latest version, Moodle 2.0, is more powerful, flexible and user-friendly than the existing version.

For further information on Virtual Learning Environments and their implementation, you may find the following links helpful.

- [Getting started with your learning platform](#)
- [Virtual Learning Environments](#)

QUESTION 4.4A

If you have a VLE (or equivalent system such as an Intranet) please indicate how teaching content is added.



This question was **new to the 2011 survey** and was intended to establish whether there was a consistent approach to uploading materials to a VLE. 72% of schools reported that teachers develop content using their own design, with only 36% of schools developing templates for uploading content.

Associated information

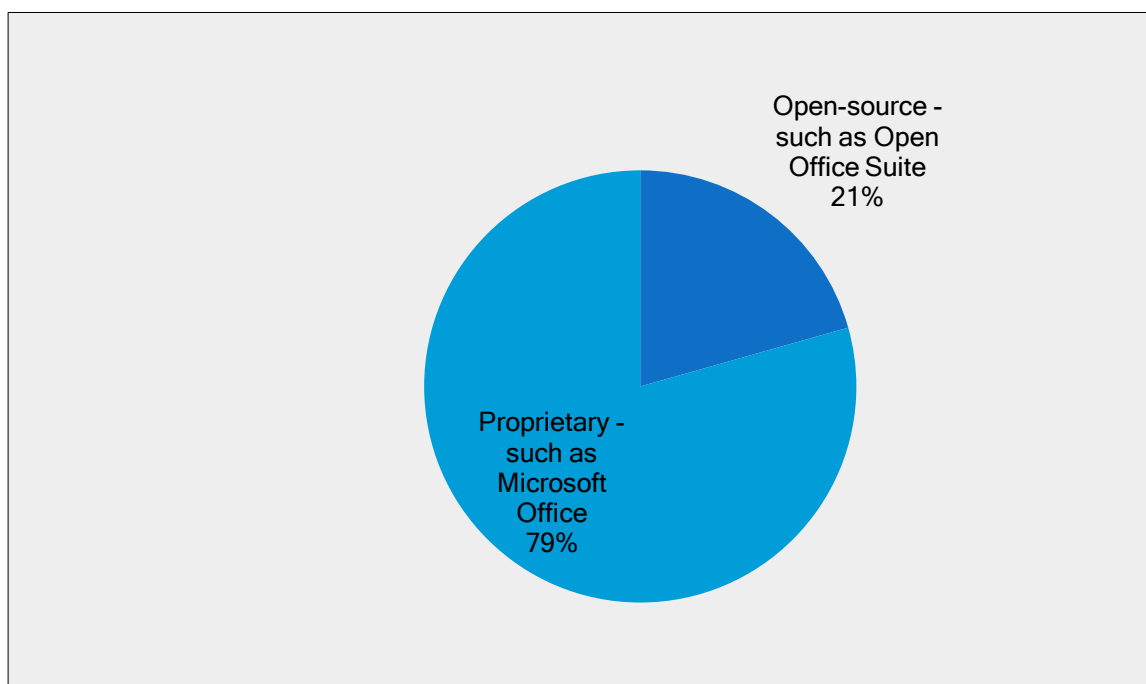
A recent presentation at the 2011 Moodle Moot UK identified that the creation of content is perhaps the most problematic aspect of establishing a VLE in many educational establishments. What tends to happen is that enthusiastic and IT confident departments add content of a suitable nature, whereas other departments may either resist uploading content at all or upload unsuitable materials such as old and poorly presented pdfs, PowerPoints and word documents. Videos of presentations at the 2011 UK Moodle Moot in the University of London can be found through [this link](#). Also, the '[Best Practice in course design video](#)' is extremely useful to provide guidance on course design.

Related Questions

- What is the effect on students of VLE content that is very different in 'look and feel' between teachers and departments?
- Are there clear aims and objectives driving the creation of content?
- How effective is VLE content in supporting learning and teaching objectives?
- Is VLE content different to physical materials used in the classroom?
- Do less-confident teachers require more support and guidance when designing and uploading content and is training available?

QUESTION 4.5

Which types of software does your school use for word processing and for creating spreadsheets, databases and presentations?



A huge majority of schools use Microsoft Office, iWorks or similar commercially available, proprietary software. An increasing number of schools who answered this question use open source applications such as Open Office Suite, although the actual number is still very low.

Very few respondents reported that they were using freely available applications such as [Google Docs](#).

Related questions

- Are subject teams sufficiently aware of developments in web-based and other applications?
- Does your school have any ongoing communication process to inform teachers of such developments?

Associated Information

There is a range of high-quality open-source software worthy of investigation, such as:

- [Open-office](#) – a full office suite designed as an alternative to Microsoft Office
- [GIMP](#) – An image editing package
- [exe learning](#) – an open-source content authoring package
- [Hot Potatoes](#) – authoring web-based games and simulations and free for educational use
- [The Gong project](#) and [WiZiQ](#) – for incorporating voice and web conferencing capabilities into a VLE

For a wider choice of open-source educational applications, [Schoolforge.net](#) is recommended.

SUMMARY OF SOFTWARE AND SYSTEMS SECTION

The use of Managed/Virtual Learning Environments has been a growing trend in schools in recent years and the survey reveals the extent to which this trend has reached a critical mass with 73% of schools having a managed learning environment of some description. The use of open-source tools is a significant proportion of this with over one third of respondents using Moodle.

The use of open-source software for more general purposes has perhaps not reached the same critical mass, with fewer than 10% of schools using open-source office applications.

From current trends, it appears that the use of VLEs and their integration with management information systems and other tools such as e-portfolios is likely to become much more widespread in the coming years.

SECTION 5 – TRAINING

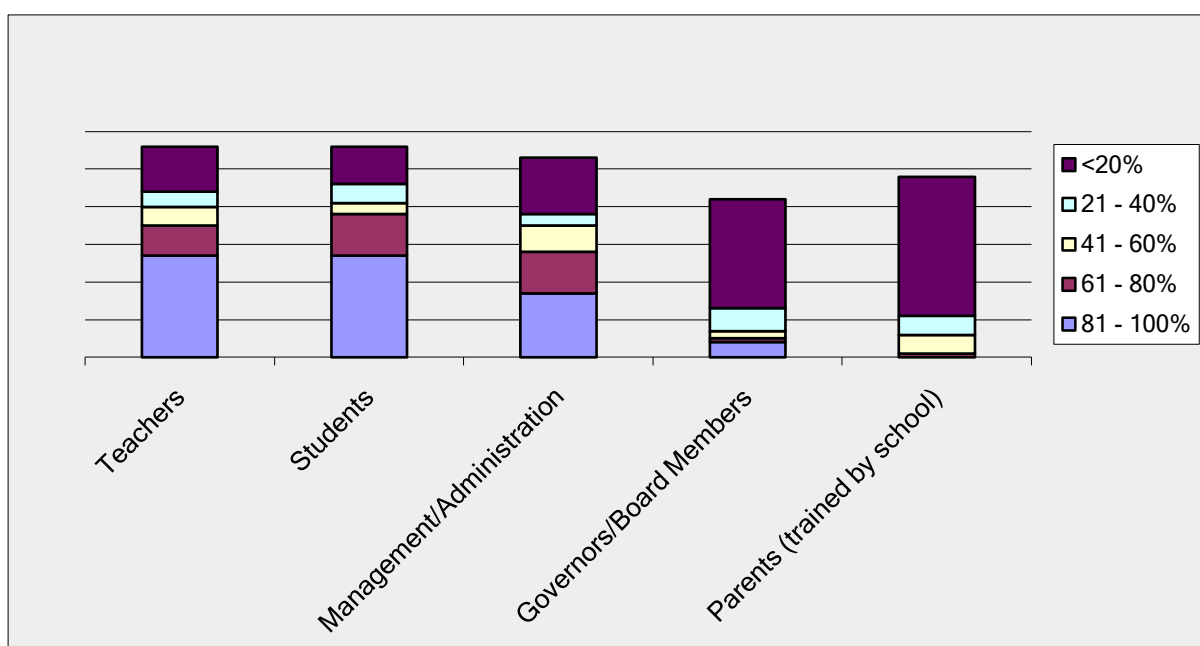
SECTION FOCUS

This section relates to the extent of training in the use of Information Technology, the groups involved and how it is provided.

RESPONSES AND ANALYSES

QUESTION 5.1

Estimate the percentage of those in the following groups who have received IT training over the last three years.



IT training is provided mainly to three groups – students, teachers and administrators/management. Some interesting statistics emerge from these figures: over a 3 year period,

- more than two thirds of schools had trained more than 80% of their students
- almost two thirds of schools had trained more than 80% of their teachers
- just over half of schools had trained more than 80% of administrators/management

Board members and parents rarely received any training in IT by the responding schools, even though over half of them expected parents to use computers in accessing their Virtual Learning Environment.

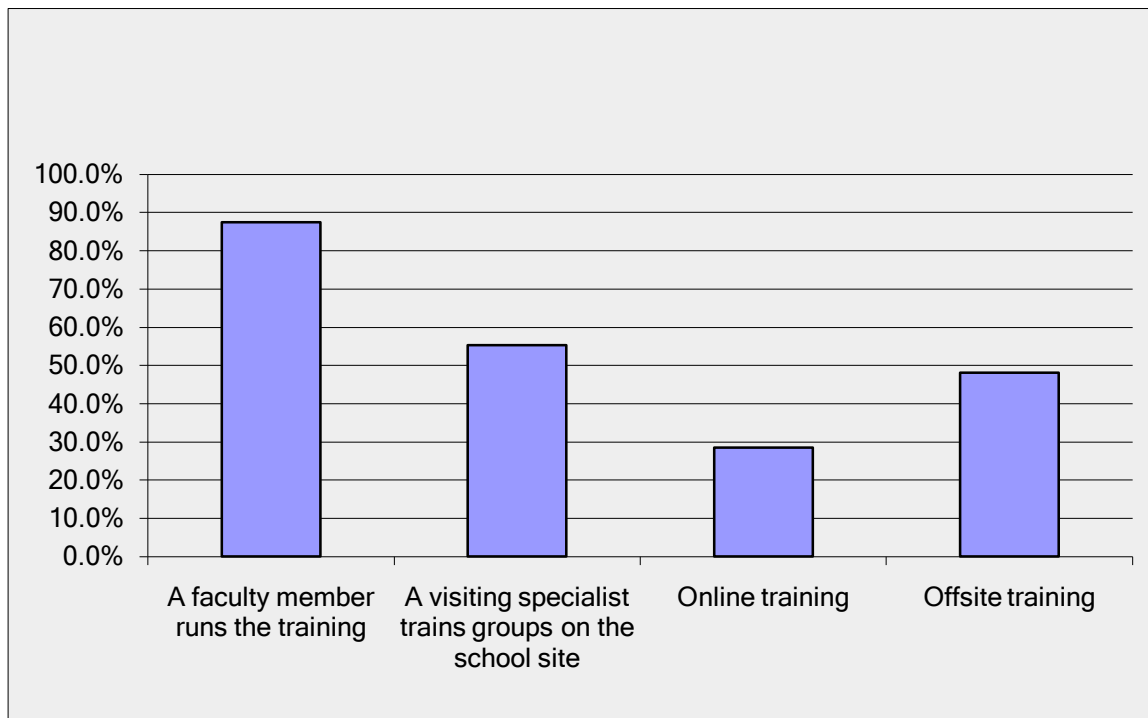
Related Questions

- Would parents benefit from understanding the software systems used by their children in school and would children benefit from parents having this knowledge?

- How can we use technology to increase parental involvement in their children’s learning? For example, should we provide them further training in the use of school software systems? Would parents be willing to pay for their training in the use of school software systems?

QUESTION 5.2

How is IT training provided? Check all the boxes that apply.



Clearly, most schools use a variety of training delivery methods. Most schools who responded used faculty members to conduct IT training. Over half also used external specialists to train groups at school.

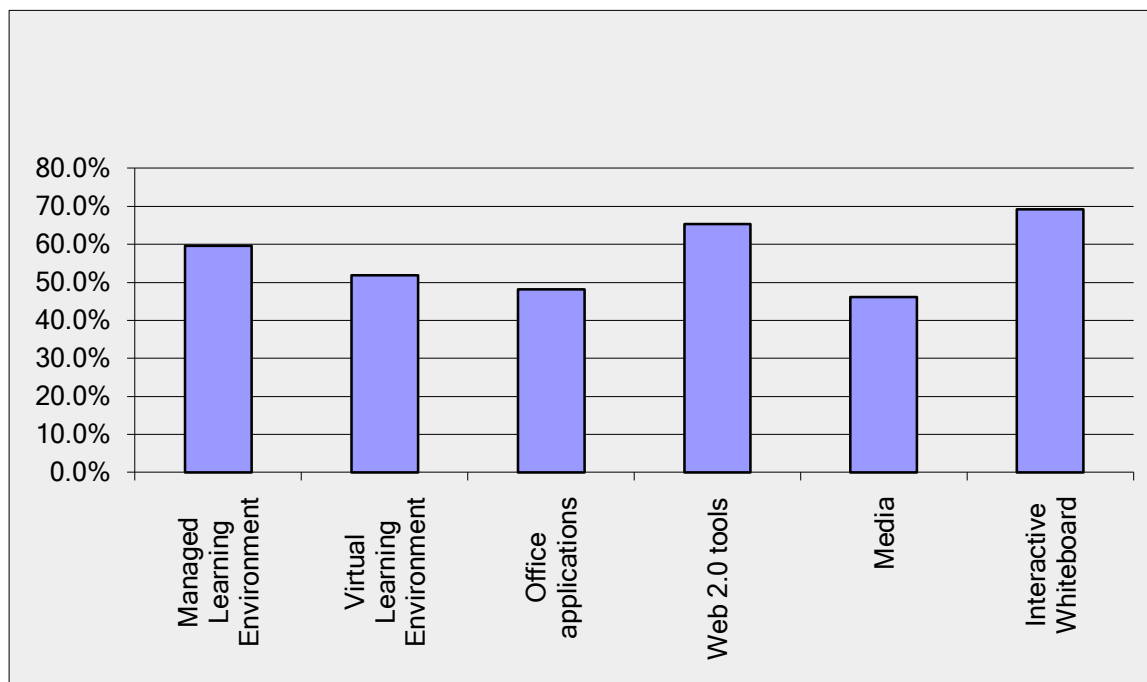
Less than one third of schools had employed some form of online training, whereas almost half had sent staff on courses offsite.

Related Questions

- Would online training provide a more cost-effective, and flexible, training opportunity for staff and students?
- Does the school provide certificates or graduate credit for IT training, which could form part of teachers’ licensing requirements or added to their e-portfolios, résumés or CVs?
- Are trainees required to produce a summary report on their training experience and to feedback what they learned to others through cascade sessions?
- Is the training experience rated? Do participants complete surveys and questionnaires about satisfaction with the training experience and does this feedback go back to the provider?

QUESTION 5.3

Which of the following IT systems and applications have staff been trained to use during the past 3 years? Check all boxes that apply



It is clear from the results that training staff to use IT applications has a high priority with well over half of schools having trained staff to use MLEs, office applications and interactive whiteboards over the last three years. The fact that close to 70% of schools reported that they had run interactive whiteboard training is a significant indicator that the *use* of IWBs is growing.

Another interesting statistic is that almost half of schools responding reported that staff had been trained to use media systems, such as movie making and image editing.

A number of schools reported that they had trained staff in the use of anti-plagiarism tools, such as turnitin.com.

Related Questions

- If your school has invested heavily in the installation of IWBs, have software applications for use with these boards been evaluated and/or purchased, or are teachers expected to develop their own materials? If it is the latter, have staff received adequate training in software development for IWBs?
- Do subject teams share materials produced, or purchased, for IWBs?
- Is teacher training in Information Technology
 - sufficient, planned, targeted and managed?
 - reflected in the increasing use of IT in teaching?
 - leading to improvements in teaching?

- resulting in measurable improvements in learning, such as better student engagement and understanding?
- What are the IT needs of the 21st century teacher, student, parent, administrator and Board member?

Associated Information

Given the rapid developments taking place in the use of managed learning environments, e-portfolios and other tools, a publication that might be helpful in identifying staff training needs and/or carrying out an IT skills audit is the BECTA publication:

- [21st century teacher](#)

(BECTA no longer exists; this is an archived version)

SUMMARY OF TRAINING SECTION

It is encouraging to see from the survey the extent to which schools are offering training to their staff on the use and implementation of IT. In the rapidly changing environment of the Web, training needs will be constantly evolving.

With the growth taking place in online learning opportunities, this is an area for consideration by those managing IT and Continuing Professional Development budgets.

SECTION 6 – INFORMATION TECHNOLOGY IN THE CURRICULUM

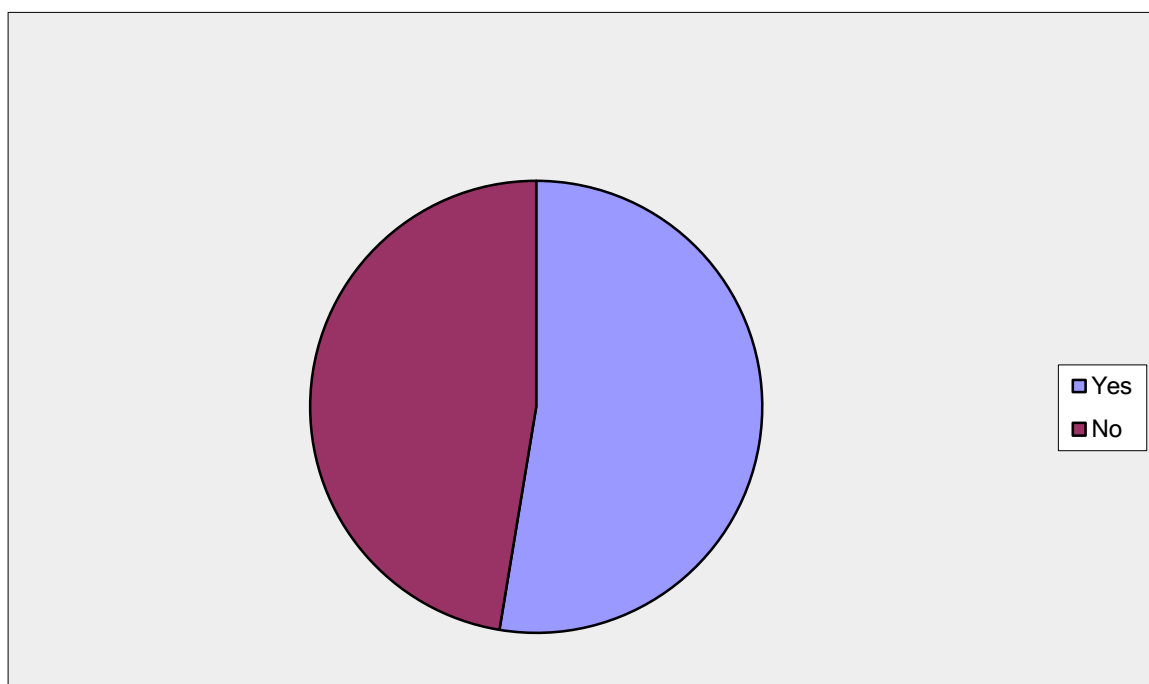
SECTION FOCUS

The questions in this section considered the role of Information Technology in the curriculum. Its particular focus was on the use of Web 2.0 tools.

RESPONSES AND ANALYSES

QUESTION 6.1

Do you use your computer systems to promote or support links with other schools, colleges, communities or employers?



Just over half of schools reported that they were using computer systems for collaboration with other schools and other external groups.

Related Questions

- How can we collaborate with other schools on the development and extension of MYP units of work? How can these collaborations support student inquiry and intercultural awareness?
- Are regional and national grants available to fund any collaborative projects with other schools?

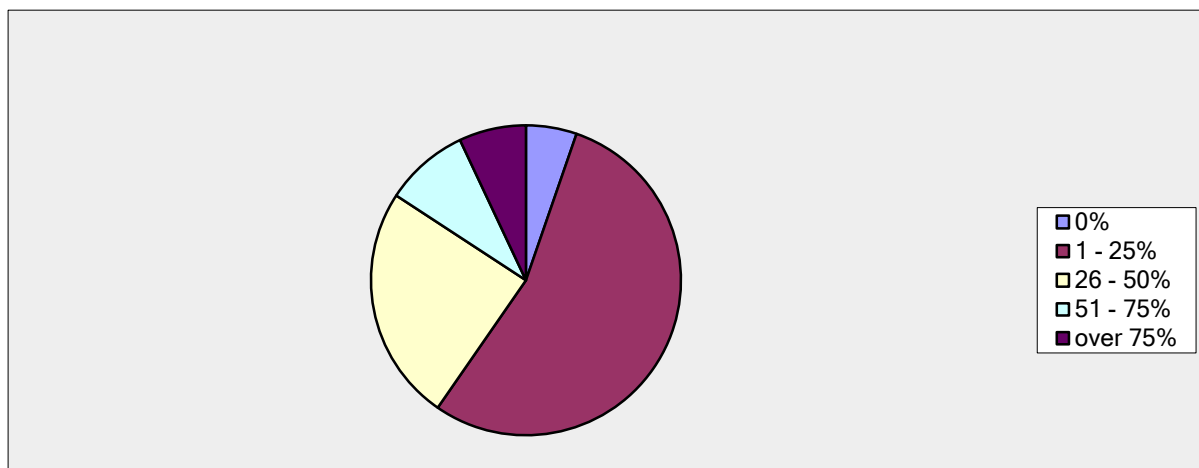
Associated Information

As the use of IT increases, it is expected that collaboration among geographically diverse schools will increase. Moodle 2.0 will, for example, have the ability to act as a Community hub and facilitate collaborative work across different schools, districts, countries and communities.

The [Global Gateway](#) provides a free service for all schools worldwide to find partner schools to develop curriculum projects. The website contains details on [funding possibilities](#), by region and by country, and includes links to specific funding projects such as the [Comenius project](#) for European Union schools.

QUESTION 6.2

Approximately what percentage of departments use Web 2.0 tools (such as Wikis, Blogs and Podcasts) to support student learning?

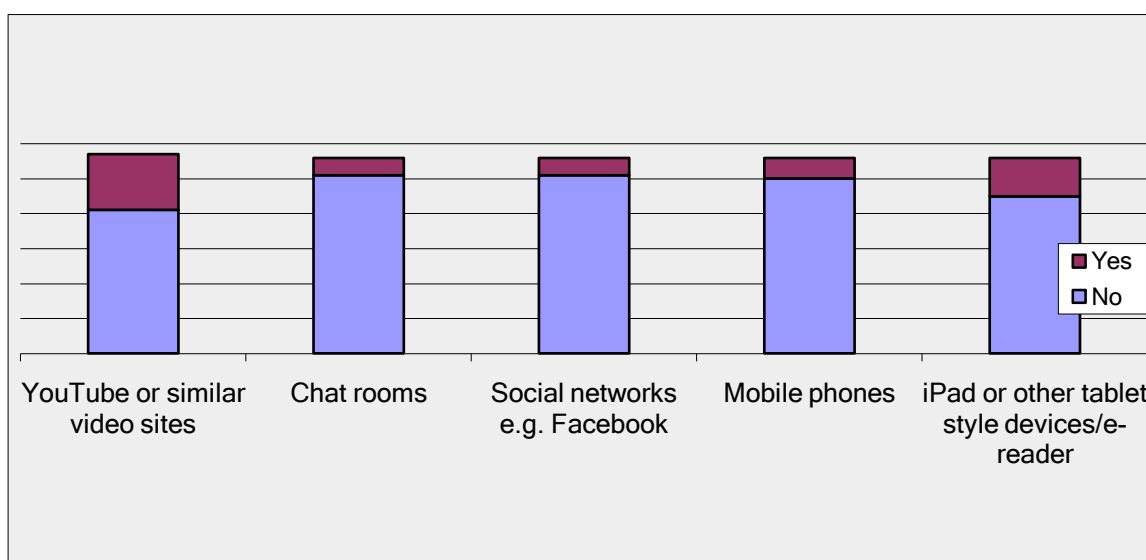


Since last year, the proportion of schools that do not use any Web 2.0 tools to support student learning has fallen from 10% to 5%.

Although the Web 2.0 tools are used in 95% of schools who responded to the question, most schools indicated that they are used by a relatively small number of subject teams. Only 7% of respondents indicated that Web 2.0 tools were used by more than three quarters of departments; even though over half of schools reported that staff had been trained in their use.

QUESTION 6.3

Do you have a policy which encourages the use of the following in teaching and learning?



Student access to social networking, video-sharing websites and mobile technologies is growing rapidly and teachers are increasingly using sites such as YouTube to broaden teaching strategies.

Over one third of schools state that they actively encourage the use of YouTube, but few schools encourage the use of chat rooms, social networking sites or mobile phones in teaching and learning.

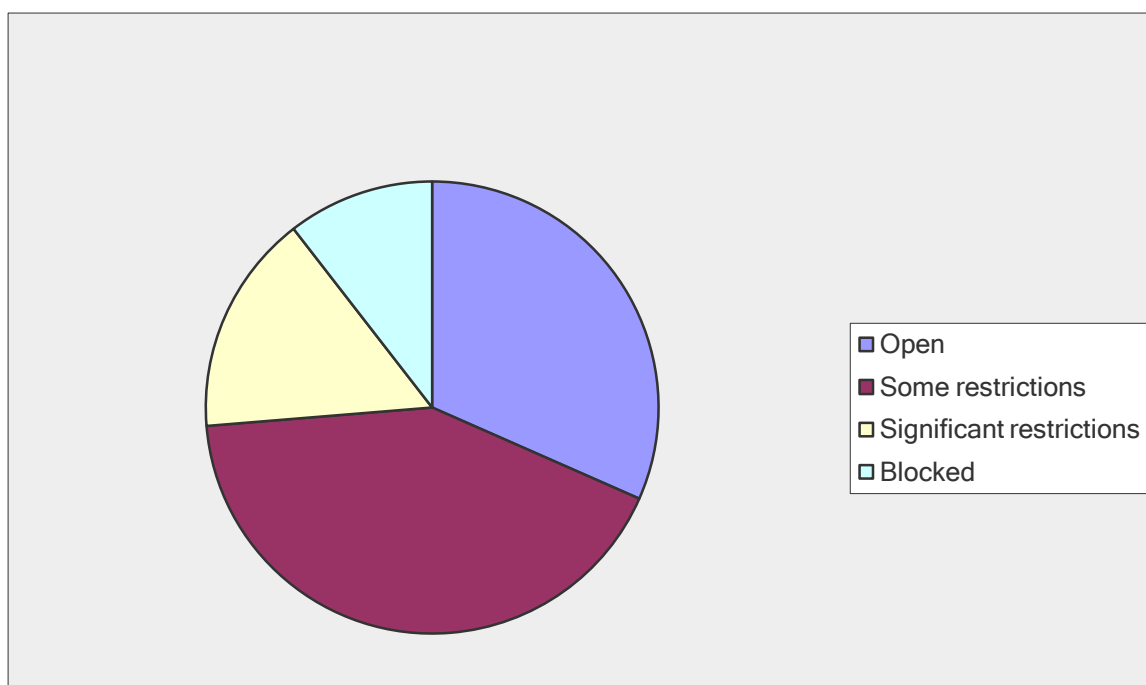
The question on iPad-style devices (e-readers) was new this year. Already, it is clear that e-readers are being employed in the education process with 20% of schools reporting on their use.

Related Questions

- Can social networking sites and mobile technologies be integrated in a responsible and controlled manner into the learning and teaching process to facilitate greater student engagement and interest?
- Mobile phones are becoming ever more powerful and have additional applications beyond the telephone. Should their use in MYP units be actively encouraged?
- Some schools restrict or even ban the use of websites such as YouTube and Wikipedia. Which Approaches to Learning skills will need to be taught to and could be developed by students so that they can use such sites in a responsible, critical and selective way?
- Should your school have e-bulletin boards with RSS feeds from news sites?
- Is there a policy to identify and integrate new technologies in the classroom?

QUESTION 6.4

How would you describe student access from school to sites that could support learning - such as Google, YouTube and Wikipedia?



Almost one third of schools allow open access to websites such as Google, YouTube and Wikipedia to support learning. The majority of schools have some restrictions on access to these sites.

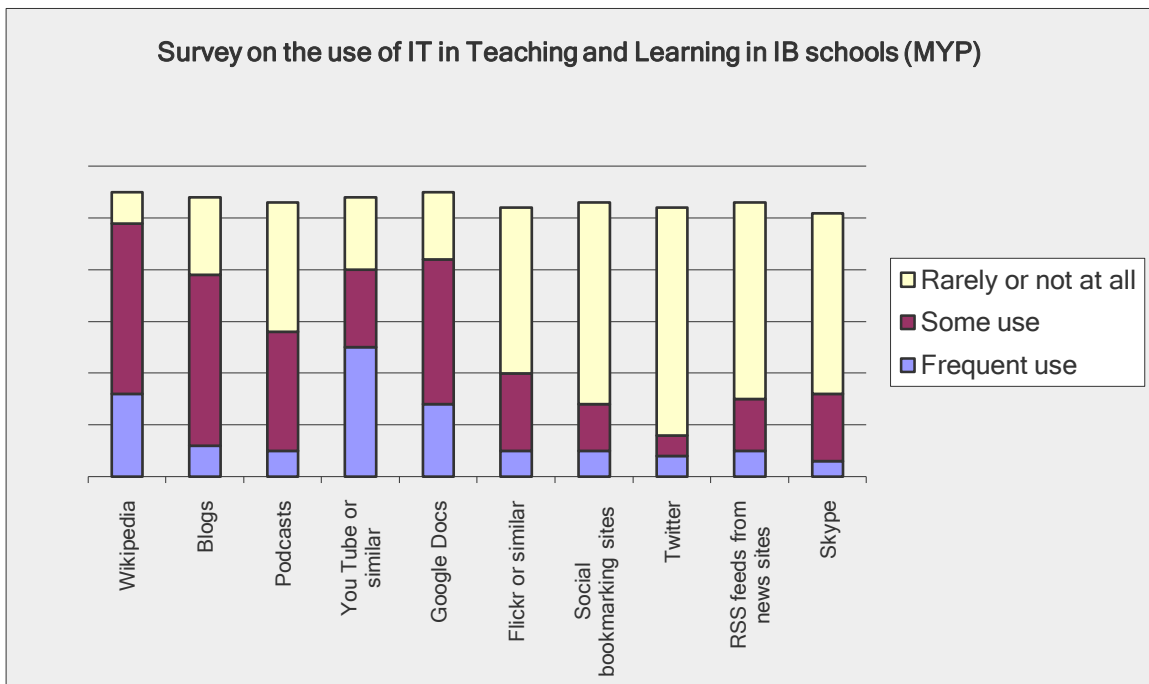
A small number of schools (10%) have access to these sites blocked. Blocking could be the result of school policies or national/regional censorship.

Related questions

- How can sites such as Wikipedia, Google and YouTube support student learning, and in particular contribute to Approaches to Learning skills development?
- How can we provide student training and guidance on responsible, critical and selective use of these sites?

QUESTION 6.5

To what extent are the following Web 2.0 tools used by teachers to support student learning?



Over three quarters of all schools made some or frequent use of Wikipedia, YouTube and GoogleDocs to support student learning. Slightly fewer schools used Blogs and fewer still used Podcasts.

The most significant change from last year is the increase in the number of schools using GoogleDocs.



Most schools do not use or rarely use RSS feeds to capture content and two thirds of schools do not take regular advantage of free telephony services, as provided by Skype for example. Image sharing sites such as Flickr, and social networking sites such as Delicious and Twitter, were rarely used, or not at all.



Related questions

- How can we use RSS feeds to provide up-to-date information to staff and students?
- How will voice over internet protocols (such as Skype or Windows Messenger) support our students in their engagement with MYP units?
- What procedures and systems do we need to promote safe and effective collaboration between students and external 'resources'?
- How can we use social networking tools to develop students' collaboration skills and other aspects of Approaches to Learning?

SUMMARY OF THE INFORMATION TECHNOLOGY IN THE CURRICULUM SECTION

It would seem from the survey that, while there is a high level of awareness of Web 2.0 tools, their use has not yet become completely embedded. This may, to a significant extent, be a transition period while schools rightly consider their value and their pedagogical appropriateness for learning and teaching. This view is perhaps reinforced by the differences the survey reveals in the access schools offer to the different tools.

The survey raises many questions about the control of access to the various Web 2.0 tools. The more immediate ones could be

- To what extent should we be controlling this access?
 - Does this control need to be re-evaluated along with the results from section 2 in relation to the implementation of fair and acceptable use policies?
-

CONCLUDING REMARKS

The survey has painted an interesting picture of the current state of IT in IB Middle Years Programme schools and we hope the survey itself and this report have been valuable to you in the further development of your school's IT strategy. The growing number of schools implementing course management systems (e.g. Virtual Learning Environments) and content management systems for students (e.g. e-portfolios) reveals a changing relationship between the various stakeholder groups in terms of information flow and the management of that information. The management of this process of change and ensuring that all stakeholders have the requisite skills will no doubt be a focus of future strategic implementation of IT.

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Triple A Learning plan to carry out this survey annually to help schools track the changes taking place in IT provision around the world over time and to see the trends in the implementation of online learning technologies.

TRIPLE A LEARNING SERVICES

As well as being a provider of IB-approved online workshops for MYP teachers and Diploma Programme teachers, Triple A Learning offers other services to schools. These include:

- a range of [Blogs](#) written by practicing MYP and DP teachers, moderators and examiners
- [teacher and student resources](#) to complement and expand on our existing online textbooks
- e-learning consultancy services, especially on Moodle installations, faculty training and the creation of Moodle-based content.

Please email us on info@triplealearning.com with any questions you may have.



'Supporting Learning Communities Worldwide through Technology'

APPENDIX

RELATED QUESTIONS TO CONSIDER TO SUPPORT A REVIEW OF IT PROVISION

The following is a summary of all the related questions in this report. The questions are suggested as possible starting points for a review of IT provision and to inform future development. They are not intended to be pejorative in any way about any existing practices mentioned by schools, but put forward as a way to focus discussion about existing and future IT provision.

- How will you use this report in school?
- How can the results and analyses be used to inform developments in teaching and learning?

MANAGEMENT OF INFORMATION TECHNOLOGY

- Are departments, teachers and students consulted in the direction and management of IT provision?
- To what extent might this management structure for IT need to change over time as IT becomes more closely and deeply embedded in the curriculum?
- It seems that schools consider the control and financing of IT systems to belong predominantly to the IT department and senior management. Could this view exclude other user groups who may not have the technical and financial knowledge but may have an informed opinion on the educational effectiveness and future development of systems employed at a subject level?
- If this is the case, could these groups be better involved in the decision-making process?
- Should all users of school IT systems be required to sign a Fair and Acceptable Use policy, irrespective of their status and access?
- Are stakeholders fully engaged in information systems? Are parents and governing boards, for instance, provided with adequate and appropriate access to school and student data?
- Does your school comply with national legislation and industry standards on computer use, especially in relation to students and employees who habitually use display equipment as a significant part of their normal work?
- Should your school address issues of health and wellness when using digital equipment?
- Would your school be liable for any long-term health issues caused by excessive or poor use of digital equipment?
- Should details of computer usage be routinely shared with staff as a way of identifying popular sites used by teachers and students
- How can the school use data on computer usage to inform curriculum development?

- How can student interaction with sites and systems outside the school's own IT system be monitored?
- As stakeholders become more closely involved and IT becomes more deeply embedded in the curriculum, will this require more regular updating and monitoring of policies and procedures?
- As opposed to seeing monitoring of IT usage as simply a preventative tool, how could it be used more proactively to enhance IT provision and improve student learning?

INFORMATION TECHNOLOGY AND HARDWARE

- The decreasing costs of mobile technologies and the integration of computer systems, is likely to lead to education provision becoming more flexible and personalized. Is your school considering moving provision to mobile technologies, such as laptops and/or netbooks?
- Would free or discounted purchase schemes for students, teachers, parents and other stakeholders support access to IT systems and improve student performance and engagement in the curriculum?

SOFTWARE AND SYSTEMS

- Should your school collect more data on user satisfaction with IT systems and academic programmes, and/or use technology to elicit opinions on school wide issues through surveys and questionnaires?
- How can we use the full functionality of our VLE to improve student learning?
- Are all features of our VLE being used by all subject teams – why is this?
- Are Web 2.0 tools such as wikis and blogs being integrated into MYP units of work and being used to develop and support students' Approaches to Learning skills?
- Moodle appears to be the course management system (CMS) of choice for a large number of schools. If you do not have a VLE at present (or use a proprietary version), should this free, open-source platform be investigated?
- Is teacher expertise adequately employed in the school? For example, are teachers who already use Wikis and Moodle encouraged to share their knowledge with the rest of the faculty?
- Are there plans in place to develop personalized learning platforms for your students allowing them greater ownership of, and flexibility in, their learning experience?
- If you have an existing VLE, have you investigated and/or planned integration with compatible systems, such as e-portfolios (such as [Mahara](#)), wikis (such as [Wikispaces](#)) and other collaborative options (such as [Google Apps](#))?
- Are subject teams sufficiently aware of developments in web-based and other applications?

- Does your school have any ongoing communication process to inform teachers of such developments?

TRAINING

- Would parents benefit from understanding the software systems used by their children in school and would children benefit from parents having this knowledge?
- How can we use technology to increase parental involvement in their children's learning? For example, should we provide them further training in the use of school software systems? Would parents be willing to pay for their training in the use of school software systems?
- Would online training provide a more cost-effective, and flexible, training opportunity for staff and students?
- Does the school certificate or provide graduate credit for IT training, which could form part of teachers' licensing requirements or added to their e-portfolios, résumés or CVs?
- Are trainees required to produce a summary report on their training experience and to feedback what they learned to others through cascade sessions?
- Is the training experience rated? Do participants complete surveys and questionnaires about satisfaction with the training experience and does this feedback go back to the provider?
- If your school has invested heavily in the installation of IWBs, have software applications for use with these boards been examined and/or purchased, or are teachers expected to develop their own materials? If it is the latter, have staff received adequate training in software development for IWBs?
- Do subject teams share materials produced, or purchased, for IWBs?
- Is teacher training in Information Technology
 - sufficient, planned, targeted and managed?
 - reflected in the increasing use of IT in teaching?
 - leading to improvements in teaching?
 - resulting in measurable improvements in learning, such as better student engagement and understanding?
- What are the IT needs of the 21st century teacher, student, parent, administrator and Board member?

INFORMATION TECHNOLOGY IN THE CURRICULUM

- How can we collaborate with other schools on the development and extension of MYP units of work? How can these collaborations support student inquiry and intercultural awareness?

- Are regional and national grants available to fund any collaborative projects with other schools?
- Can social networking sites and mobile technologies be integrated in a responsible and controlled manner into the learning and teaching process to facilitate greater student engagement and interest?
- Mobile phones are becoming ever more powerful and have additional applications beyond the telephone. Should their use in MYP units be actively encouraged?
- Some schools restrict or even ban the use of websites such as YouTube and Wikipedia. Which Approaches to Learning skills will need to be taught to and could be developed by students so that they can use such sites in a responsible, critical and selective way?
- Should your school have e-bulletin boards with RSS feeds from news sites?
- How can sites such as Wikipedia, Google and YouTube support student learning, and in particular, contribute to Approaches to Learning skills development?
- How can we provide student training and guidance on responsible, critical and selective use of these sites?
- How will voice over internet protocols (VOIPs such as Skype or Windows Messenger) support students in their learning?
- What procedures and systems does your school need to promote safe and effective collaboration between students and external 'resources'?
- How can your school use social networking tools to develop students' collaboration skills?
- The survey raises many questions about the control of access to the various Web 2.0 tools. The more immediate ones could be
 - To what extent should we be controlling this access?
 - Does this control need to be re-evaluated along with the results from section 2 in relation to the implementation of fair and acceptable use policies?

SUPPLEMENTARY QUESTION

QUESTION 8.1

Are there any IT developments in your school or district, not covered by specific questions in this survey, that you believe would be of interest to other IB schools?

Responses

Use of ePortfolios for students and teachers - teachers as learners and as a part of their appraisal - both essentially use same model

We are deploying IBVC :-)

We have a long distance classroom lab

High Speed internet Video conferencing between schools Click View Television to video streaming Interactive white board

We now use interactive projectors that make interactive whiteboards unnecessary.

Curriculum Mapping

ActlvExpressions

Customized package for virtual learning for MYP students.

We are going through a thorough investigation of the merits of a 1:1 programme.

Student development of e-portfolios using web 2.0 tools. This forms the focus of student led-conferences.

Our school is piloting the use of iPads in a flexible learning environment.

A rolling programme of a data projector in every major classroom supported by a PC

We are introducing 1-1 laptops commencing with Grades 6 and 7, in spring 2013. Prior to that there will be staff training which is seen as crucial to success.