



Internet, equality and education

A YouGov survey commissioned by
Computer Systems in Education (CSE)
for Magellan, May 2014

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Foreword

You might not think that ICT is central to education, but just as it is in business, so it is in education. It is the backbone of the operational side of things, and actually in education it is more than that, it is a powerful teaching and learning tool.

But schools face more hurdles than most businesses do in their use and application of IT resources, with the often conflicting demands and needs of legislation, league tables, parents, governors, staff and not least of all children to be met.

Twenty years of work in the education sector supplying networks, hardware, providing support and services and listening to problems generally has given me a thorough understanding of the ICT issues which schools face.

Change has been constant in that time, and of course in our commercial world that is good for business, but last year we saw an opportunity to do something something different, for the good of everyone in education and in the IT market too.

It seemed ridiculous to me that schools were being caught out so badly by the 'device wars,' and also insane that schools, of all places, couldn't make better use of the all the positive aspects of the internet, the rich, often free teaching and learning resources available from it.

Magellan is our response, a system we've been working on for a year.

We have commissioned this research from YouGov to illustrate the problems which schools face, and to help parents and staff feel confident about the use of the internet in schools, particularly cloud computing which seems especially mistrusted or misused, so that it can be used to improve the working lives of teachers, while enriching the education of our children.

Why have we called this report 'Internet, equality and education?' Because Magellan will help to address three issues which the World Bank has identified as crucial to the future of education on a global basis

- *"It is generally believed that ICTs can empower teachers and learners, making significant contributions to learning"*
- *"It is clear that there are equity issues related to the uses of ICTs in education. There is a real danger that uses of ICTs can further marginalize groups already excluded or on the edge of educational practices and innovations. On the other hand, with supportive policies and careful planning and monitoring, ICTs hold out the promise of facilitating greater inclusion of such groups and achievement"*
- *"As new technologies are introduced, it is critical that their cost and impact in various educational situations is thoroughly examined"*

CSE has been dedicated to creating networks; facilitating shared learning, and I hope that Magellan will now provide the ultimate place for support and shared learning to take place.

Gordon Derham, MD, CSE Magellan

Results

Internet and educational engagement

By 2013 the average 12 – 15 year old was spending as much time on the internet as watching TV; an estimated 17 hours a week on each activity, according to Ofcom. Concern about too much “screen time” is widespread.

Does this mean we should make our schools internet free sanctuaries? We asked a range of questions to explore this subject and to identify how valuable an educational tool the internet and its resources is considered to be among teachers.

The following tables show the proportion of teachers that reported that each of the following applied to them or their school or they believed were true for their school.

I would be able to deliver more engaging lessons if everyone could access the internet in class

	Agreed (%)
All teachers	31
Primary	34
Secondary	27
LA maintained	32
Academy	30
Independent	26

I would use the internet in my teaching more but we lack the equipment in my school to give each child fair access

	Agreed (%)
All teachers	33
Primary	36
Secondary	29
LA maintained	34
Academy	29
Independent	30

Using computer devices, of any type in class distracts from teaching and learning

	Agreed (%)
All teachers	10
Primary	7
Secondary	13
LA maintained	9
Academy	15
Independent	13

Would banning all internet access in school for children or students motivate or demotivate you?

	Motivate (%)	Demotivate (%)
All teachers	6	73
Primary	5	77
Secondary	6	69
LA maintained	6	75
Academy	7	70
Independent	5	65

Note, some teachers responded 'it would have no effect'

Teachers clearly value the internet and its resources as a teaching tool. Of course in schools, there can be far more control over time spent online than in a home setting.

The internet is considered especially useful at primary level for helping to deliver a more engaging lesson. Here online teaching resources offer a very practical and effective way to engage with larger class sizes and mixed ability groups.

One very useful function of Magellan is the use of ‘tiles’ which allows the teachers to create and control access to specific sites and information sources of their choice.

Equality of access, BYOD, BEND or bust.

There has been much discussion among educationalists and parents about the concept of a 'Bring Your Own Device' (BYOD) in schools, where children, and staff, are allowed to bring in their own devices from which to work.

An alternative approach is for schools to consider a 'Buy Everyone a New Device' (BEND) strategy. Of course for some schools this is an impossible dream because it could lead almost immediately to a more widely understood phenomena called 'going bust'.

What is the reality in schools, how widespread are these approaches and why are they being considered?

According to Ofcom, 75 per cent of households have broadband access, increasing from 16 per cent ten years ago. Take up of tablets is growing even faster than broadband access did. Almost a quarter of households owned a tablet in Q1 of 2013, compared to eleven per cent in Q1 2012. That figure may have risen to fifty per cent in Q1 2014.

The argument is that because so many children and staff now own their own tablets, it makes sense to allow them in school; learning and work is also said to be quicker where the user is familiar with device.

My school already has a 'Bring your own device' policy or is actively considering one

	Agreed (%)
All teachers	5
Primary	2
Secondary	10
LA maintained	2
Academy	9
Independent	17

It would increase learning if students were allowed to bring in their own devices to work from in class

	Agreed (%)
All teachers	12
Primary	10
Secondary	15
LA maintained	10
Academy	17
Independent	18

If children or students brought in their own devices everyone would benefit overall as we could use our limited resources better

	Agreed (%)
All teachers	10
Primary	7
Secondary	13
LA maintained	8
Academy	13
Independent	17

It would encourage bullying if students were allowed to bring in their own devices to work from in class

	Agreed (%)
All teachers	23
Primary	22
Secondary	25
LA maintained	24
Academy	25
Independent	23

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The potential benefits to be gained from students bringing in their own devices outweighs any possible risks

	Agreed (%)
All teachers	11
Primary	7
Secondary	16
LA maintained	9
Academy	18
Independent	11

I imagine that the majority of the students or children I teach have better laptops, tablets or smart phones than the school has

	Agreed (%)
All teachers	49
Primary	47
Secondary	53
LA maintained	50
Academy	47
Independent	59

Almost half, 49 per cent of all teachers imagine that the majority of the students they teach have better devices than the school, but this doesn't mean the teachers want to see these devices in school.

At present there is no significant appetite for BYOD policies within schools, but rather a concern that it might create more problems than it will solve. Almost a quarter, 23 per cent of teachers, are concerned that a BYOD policy could encourage bullying in schools.

In our experience, in addition to concerns about bullying, the other main concerns with BYOD are that schools are responsible for e-safety; that students can be more distracted with their own devices, and the risk of theft. Two of these problems can be resolved with Magellan, but not theft.

Internet, education and admin

So far we have explored the subject of the ‘internet’ and ‘online resources’ but in fact the latest development of the internet is in cloud computing, where information is stored on remote servers, which is then accessed by the users from their own devices.

Any individual user who has permission to access the server can use the server’s processing power to run an application, store data, or perform any other computing task over the internet or network. We know that nearly all schools now have their own network, which means that schools are well placed to take advantage of cloud computing

But how many teachers understand what ‘the cloud’ can offer and how to use it to best effect?

I can confidently describe what “cloud computing” means to a parent

	Agreed (%)
All teachers	26
Primary	26
Secondary	27
LA maintained	27
Academy	23
Independent	26

The children or students I teach are more adept at accessing online resources and devices than I am

	Agreed (%)
All teachers	25
Primary	20
Secondary	30
LA maintained	24
Academy	25
Independent	29

Would being given training on how to use cloud computing to increase student engagement in class motivate or demotivate you?

	Motivate (%)	Demotivate (%)
All teachers	59	4
Primary	66	2
Secondary	50	6
LA maintained	62	4
Academy	53	6
Independent	51	6

Note, some teachers responded ‘it would have no effect’

These two questions, about the motivating or demotivating affect of cloud computing, are uniquely significant at head teacher and deputy head level. Where on average 59 per cent of teachers would find teaching on how to use cloud computing to increase student engagement in class motivating, this figure rises to 78 per cent of all head teachers and 63 per cent of deputy heads.

Similarly while 64 per cent of teachers would be motivated by training on how to use cloud computing to save time on administrative tasks, it would be motivating to 87 per cent of all head teachers and 75 per cent of deputy heads.

Would being given training on how to use cloud computing to save time on administrative tasks motivate or demotivate you?

	Motivate (%)	Demotivate (%)
All teachers	64	4
Primary	71	3
Secondary	56	6
LA maintained	66	4
Academy	63	4
Independent	55	7

Note, some teachers responded ‘it would have no effect’

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There are also significant differences in this area between primary and secondary school teachers. Few parents realise the amount of administrative and statistical tasks that the average primary school teacher in particular has to carry out, in addition to lesson planning. Basic 'Key Stage' data entry, such as individual assessment and results recording, has to be done on a daily or weekly basis by all teaching staff. Measurements such as sickness and absenteeism are considered key indicators of a school's success by OFSTED and must be recorded daily.

This is where the combination of local networks, with cloud computing and Magellan will be especially effective. SIMS for example is an administrative system used in 80 per cent of schools, but can't be accessed from apple devices. With Magellan it can be accessed and used from any device, and from any location which has internet access.

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Time

A recent survey by the Department for Education (DfE) found that, on average, teachers reported working over fifty hours a week, with primary staff at almost sixty. A majority of teachers said they spent some or most of their time on “unnecessary or bureaucratic” tasks.

The government, among many others, is keen to reduce teachers’ workloads. How can this be achieved? Our YouGov research identified some obvious ways.

It would save hours of my time if I could quickly and securely access school files from home

	Agreed (%)
All teachers	43
Primary	49
Secondary	35
LA maintained	46
Academy	34
Independent	35

I regularly waste time having to log in and out of different computer systems to access the information I need for work

	Agreed (%)
All teachers	38
Primary	37
Secondary	38
LA maintained	38
Academy	35
Independent	44

I would appreciate more training on digital skills

	Agreed (%)
All teachers	47
Primary	55
Secondary	38
LA maintained	51
Academy	38
Independent	42

Being able to use computer systems effectively from any device, at any time, anywhere would be an immediate benefit to teachers, saving them considerable time in their administrative tasks. Teachers recognise this and would value training to give them the necessary skills.

We are confident that Magellan will save each teacher at least 20 minutes of time a week on administrative tasks, given that there are 442,000 full-time equivalent teachers, this represents an enormous time gain across the education sector.

Conclusions

- The internet is highly valued in schools as a constructive aid to teaching and learning.
- It is especially valued among primary schools teachers, where our experience tells us it can have a greater capacity to engage with younger learners, and to be used to ease teachers' administrative workloads.
- Teachers recognise that many of their students, especially older ones at secondary school, may have both better digital skills and better digital devices than the school or the teacher.
- The majority of teachers would be motivated by training in cloud computing skills, but it is an especially motivating subject at head and deputy head level.
- There is low level take up of BYOD policies within schools at present, while there is almost no interest at all in seeing schools become internet free zones.
- With the necessary protection and systems in place, which Magellan offers, the internet, local network resources and cloud computing can offer access to more engaging lessons and save teachers a considerable amount of time.
- Magellan is not an expensive option, at around £1.00 per student per year, it finally offers equality of internet access to everyone in the education market.

Footnotes

Methodology

The research was conducted by YouGov among a sample of 846 teachers in the UK. The field work was conducted between 12th May and 16th May 2014 via an online panel.

The sample was weighted to represent the distribution of all teachers in the UK as recorded by the Department for Education. The results presented throughout this report are based on the weighted sample.

The unweighted and weighted sample is shown below:

	Unweighted	Weighted
Total	846	846
Head teacher	39	51
Deputy assistant / head teacher	80	84
Other SLT Teacher	239	211
Primary	321	465
Secondary	493	358
Local authority maintained school	501	566
Academy	192	148
Grammar	120	103
Independent	106	93

References

1. World Bank "ICT and Education – Key Issues"
<http://web.worldbank.org/>
2. Ofcom Communications Market Report 2013
http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr13/2013_UK_CMR

Magellan from CSE

CSE Education Systems is a specialist supplier of Information and Communication Technology (ICT) to the UK education sector, and is an approved supplier under the DfE ICT Services Framework Agreement. Founded in 1995, CSE has a turnover of £10M per annum and is one of the leading suppliers of IT systems to education in the UK. Based in North Leigh in Oxfordshire, CSE also has offices in Scarborough, North Yorkshire.

MD Gordon Derham was Director of Education at Research Machines before co-founding CSE Education Systems 20 years ago. He says “It was my experience of the problems and frustrations experienced by teachers which motivated me to work on this new software, called Magellan. I was convinced it was possible to make everything work together, for better. And if we can make it work in schools, so that teachers can access different systems quickly and securely, and there can be well managed whole class teaching and access to the internet, why not other sectors too? I know nurses will welcome the time saving and security this system offers.”

The Magellan software designed by CSE provides a way for teachers to access all their resources through one central secure portal, regardless of what type of device they are using, or what system they need to access. Its facilities include:

- **Access to school based applications:** systems such as SIMS which is used in 80 per cent of schools cannot be accessed from apple devices; with Magellan SIMS can be now be accessed from any apple or android tablet or smart phone, plus of course traditional PC's and laptops.
- **Single sign-on:** teachers can set up touch-screen tiles so that they and their class can click straight onto the internet resource or system required, without the need to use search engines, passwords or login, which lose both time and attention in class.
- **Device democracy:** teachers and students can use any device, and see the same screen and share the same functionality regardless of what type of device they have. This means resources can be directed where there is most need, for example offering iPads or laptops to those who don't have one already, rather than restricting all use to ensure equality and fairness.



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