Digital experience insights survey 2018: findings from the pilot of teaching staff in UK further and higher education

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Authors: Helen Beetham, Tabetha Newman and Sarah Knight
I am delighted to share with you the findings from our 2018 insights survey into teachers' digital experience.

This report complements our recent student insights report: Digital experience survey 2018: insights from students in UK further and higher education. It is the first foray into uncovering how teaching staff in colleges and universities really experience their digital environment and although this is a pilot study with a small sample of institutions we think the voices of these teachers deserve to be heard.

The skills needed in the 21st century workforce will be driven by Industry 4.0 with the next industrial revolution fuelled by data and machine learning. In addition to meeting student and staff expectations, education leaders need to be confident that their digital environments can accommodate these technological advances.

Jisc believes that Industry 4.0 cannot truly succeed without a corresponding Education 4.0. Our role is to help colleges and universities make the most of the potential of new and emerging technologies. Our digital experience insights surveys help colleges and universities see their digital environments through the eyes of their learning communities. They provide unique datasets that inform and support initiatives to enhance quality.

Alongside our student survey, the teaching staff survey offers organisations a 360 degree view of digital at their institution as well as highlighting larger sector successes and challenges.

In this pilot year, 15 institutions from England, Scotland and Wales collected data from a total of 1,921 teaching staff representing four colleges and 11 universities with 376 college responses and 1,545 university responses. The findings offer a valuable lens on the key issues college and universities need to consider in building an educational environment which fully realises the potential of digital. Some of the findings highlighted in this report support the work Jisc is already undertaking. For example, the increase in the variety of different apps and tools teaching staff are using with their students outside of their virtual learning environment. This supports Jisc's work in exploring the next generation of digital learning environments.

An area which mirrors the findings of our student report is the need for staff to have regular and ongoing opportunities to develop their digital skills. The colleges and universities that took part in this pilot are among the most committed to the digital development of teaching staff and students. But even here, staff reported a lack of time for innovation, few rewards for digital teaching and few opportunities to be involved in decisions about their digital environment.

More support is needed, particularly for universities, to ensure all staff are informed of their responsibilities in important digital policy areas, for example in relation to accessibility and inclusion and in ensuring students learn the behaviours necessary to keep them safe online. The survey also showed that supporting staff with their health and wellbeing in the digital workplace needs to be a higher priority for both further and higher education.

Jisc is well placed to offer expertise in these areas and address these issues through its building digital capability service.

I encourage senior leaders to take account of the insights gained from this survey and consider how they can work in partnership with Jisc and with their staff, students and leaders to build digital environments and experiences that best prepare our students for an increasingly digital workforce and a successful future.

Paul Feldman
Chief executive, Jisc

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[jisc.ac.uk/blog/the-potential-of-education-4-is-huge-the-uk-must-take-the-lead-now-12-sep-2018](jisc.ac.uk/blog/the-potential-of-education-4-is-huge-the-uk-must-take-the-lead-now-12-sep-2018)
Executive summary

This report follows on from, and accompanies, our digital experience student insights survey 2018 report2.

In 2017-18, a number of UK colleges and universities that were using the Jisc digital experience insights survey were invited to pilot a new survey for teachers. We use the term “teachers” here to refer to staff with a teaching role.

The aim of this new survey was to:

» Provide additional data to organisations alongside data from the insights student surveys
» Explore teachers’ perspectives on the digital environment and on their use of technology to support teaching, learning and assessment
» Encourage teachers to have conversations with students about the effective use of technology and co-developing improvements to the digital environment
» Build a 360 sector view gathering perceptions from both students and staff.

Fifteen further education (FE) and higher education (HE) institutions from England, Scotland and Wales collected data from a total of 1,921 teachers, representing:

» Four colleges and 11 universities
» 376 college responses and 1,545 university responses

In the UK, 1,921 responses were collected:

1,921 responses

19.5% from college teachers

80.5% from university teachers

45% male
56% female
0% other

48% male
51% female
1% other

Gender Spilt

UK participation

4 UK colleges
11 UK universities

A mean average of 94 responses per college and 140 responses per university

2 Digital experience insights survey 2018: findings from students in UK further and higher education (digitalinsights.jisc.ac.uk/our-service/our-reports)
Summary of findings:

This initial pilot suggests:

» Investing in the continuous professional development (CPD) of teachers is important and should address issues such as time, recognition and reward. Teachers in colleges want time set aside to design digital materials, embed new approaches in practice and to collaborate with their colleagues. Staff in universities want more recognition, rewards and time set aside to explore digital teaching, including with colleagues.

» There are issues that relate to the digital environment which need to be addressed. For example: the effective use of virtual learning environments (VLE), teaching rooms that are designed for and support the seamless use of technology, and access to up-to-date and industry standard software.

» Teachers have high aspirations - they want to use more digital and they are more dissatisfied than students (at these specific institutions) with the digital environment.

» Many teachers do not feel well informed about their responsibilities in relation to key digital agendas, for example, accessibility, inclusion, online safety and digital wellbeing, especially in HE.

Theme one: teachers and their digital technology

60% of teachers in our survey described themselves as “among the first” or “early” adopters of digital technologies for teaching.

50% of university and 60% of college teachers responding to the survey had been in their role for longer than ten years.

5% of the college and 4% of the university teachers find assistive technologies vital to their work, while a further 9% in both sectors use it optionally.

There were differences among the college and university staff in our survey about where they preferred to access support with digital issues. College staff strongly preferred to ask their colleagues for help, while university staff were equally as likely to consult online services or (non-teaching) support staff as they were to ask their colleagues.

60% of teachers in our survey found assistive technologies vital to their work, while a further 9% in both sectors use it optionally.

Assistive technology can support all staff, regardless of assessed need.

Make the various support services on offer more visible to new staff by integrating them into the induction process.

College teacher
Improve the VLE and ensure consistent use across departments.

University teacher

Theme two: organisational infrastructure

Most teachers have access to a VLE whenever they need it. A third of college teachers and two thirds of university teachers rely on it for their teaching. However, less than half of college and university teachers find it easy to design and organise VLE materials, and only one in ten use it for collaboration or to try different activities with students.

College teachers had much lower levels of access to key resources than university teachers, especially e-books and e-journals, lecture capture, and a video skills training service such as Lynda.com.

Only around a third of teachers in either sector agreed that the software available was industry standard and up to date. Students were significantly more likely to agree than teachers at the same institution that teaching spaces are well designed and that software is industry standard and up to date.

In teaching rooms, only 18% of college teachers agreed that audio visual (AV) equipment is reliable, or that spaces are well designed for technology use. Less than a third of university teachers agreed that these basic classroom needs are met.

The average (median) rating for digital provision overall was "average" from college staff and "good" from university teachers. Students were significantly more positive than teachers at the same institution about the quality of their digital provision.
Although we believe our respondents are digitally engaged teachers at supportive institutions, their engagement with digital CPD is mixed. Half never read about issues in digital education, almost half never search online for teaching resources, and four in ten never discuss teaching issues online with peers. A significant minority (12% of college and 14% of university teachers) say they never develop their digital teaching skills.

Digital teaching practice is reported to be different in the two sectors. College teachers are much more likely to carry out live polls or quizzes in class than university teachers, and somewhat more likely to create their own learning materials. They also provide more digital feedback. Teaching in a live online environment such as a webinar is more common in university, though still a minority activity.

When asked to name a digital tool or app they found useful, teachers most commonly chose Showbie or Kahoot. Teachers in universities also nominated their VLE, social tools such as YouTube and Twitter, and sharing sites such as Padlet. Teachers preferred live, interactive presentation apps such as Kahoot, Nearpod and Mentimeter to traditional PowerPoint.

When asked how much digital technology they would prefer to use in their teaching, around two thirds of respondents wanted to use it more, and only around 5% wanted to use it less. A comparison of the responses from teachers and students at the same institutions revealed that staff were significantly more likely than students to say that they wanted more digital technology to be used in learning and teaching.

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Provide more scholarly research on the benefits and drawbacks of digital teaching.

University teacher

Theme three: digital teaching

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Provide more scholarly research on the benefits and drawbacks of digital teaching.

University teacher
Theme four: professional development

In their own professional development, teachers tended to agree or be neutral about whether they had been given “guidance on digital skills for teaching”, and “regular opportunities to develop”. They tended to disagree or be neutral about whether they had been given: “time and support for innovation”, “reward and recognition”, and “opportunities to be involved in decision-making”.

College teachers were significantly more likely than university teachers to agree that they had been given guidance about their responsibilities in five key areas of digital policy. For example, only 15% of university teachers agreed they had guidance about assistive technologies, and only 16% agreed they had been given guidance about their responsibilities for student safety online.

College teachers on average (median) tended to agree that they had been given guidance on the digital skills required for teaching, while university teachers tended to give a neutral response.

College teachers on average (median) tended to be neutral about whether they had received time and support to innovate, while university teachers tended to disagree.

Using new technologies and new skills well requires time for them to be developed, reviewed and embedded.

College teacher
What is the digital experience insights service?
The digital experience insights service for FE and HE (previously known as the digital experience tracker) includes a student survey, teaching staff survey, online support, advice and guidance, and templates for reporting the findings to organisational stakeholders. The primary purpose of the insights service is to enable organisations to collect valid, representative and actionable data to support enhancements to the student and teachers digital experience.

Users of the service can:
» Gather evidence from students about their digital experience and compare their data over time
» Gather related evidence from teachers
» Make better informed decisions about the digital environment
» Target resources for improving digital provision
» Plan other research, data gathering and engagement around digital issues
» Demonstrate quality enhancement and student engagement to external bodies and to students themselves
» Engage teachers and demonstrate that their perspective is valued

What is the teaching staff survey?
In 2017-18 a number of organisations that were already using the student survey were invited to pilot a new survey for teachers. The aim of this new survey was to:
» Provide additional data to organisations alongside data from students
» Explore the perspective of teachers on the digital environment and on digital teaching, learning and assessment
» Encourage teachers to have conversations with students about change, rather than seeing student feedback as a critique of their performance as teachers

Participating organisations were already collecting student data and had provided us with organisational data. During this further pilot they:
» Received guidance on implementing the teaching staff survey via the Jisc online surveys platform – including customising, launching, promoting, monitoring, downloading and analysing data
» Received a teaching staff survey template with a number of fixed questions and the option to add customised institutionally specific questions at the end
» Had real-time access to their own teaching staff data
» Were supported by email, a blog and a community of practice mailing list

The data collected by participants has allowed us to present a snapshot of teachers’ perspectives on their digital experience. We have also compared the results with student responses to similar questions and with some of the organisational data we collected at the outset.

The survey instrument
The teaching staff survey is delivered and managed in Jisc online surveys (onlinesurveys.ac.uk), an online survey service specially developed for the UK education sector.

The survey instrument is based around a concise set of questions, developed in consultation with stakeholders. Many of these map to questions in the student survey. This reflects the fact that teachers are users of the same digital environment as students and are also providers or facilitators of students’ digital learning. We also asked about what supported or made it difficult for staff to provide an excellent digital experience to students, reflecting some of the questions we had asked at an organisational level.

The questions are organised into four themes, in parallel to the themes of the student survey:
» Theme one: you and your digital technology
» Theme two: organisational infrastructure
» Theme three: your digital teaching
» Theme four: your professional development

The core question set contains nine questions (mini version) or 16 questions (standard version). Many of these contain separate prompts or sub-questions, making the total number of individual items a maximum of 17 (mini version) or 47 (standard version). All questions were optional so teachers could leave them and move on if they did not wish to answer.

The core questions were locked so that they could be benchmarked across organisations. One page was customisable so that organisations could add in additional questions pertinent to their local needs. These could not be benchmarked.
Participating organisations

Organisations were recruited via an open call to those participating in the student survey and were selected to provide a range of organisational types and UK locations.

A total of 15 organisations ran either the mini or standard version of the teaching staff survey. Demographics were as follows:

- Four colleges and 11 universities
- 1,921 teachers responses across the 15 pilot institutions
- 376 college responses and 1,545 university responses
- Mean average of 94 responses per college and 140 responses per university

These figures represent the maximum number of responses as all questions in the survey were optional.

Is our sample representative?

While this data provides the first insight into college and university teachers’ opinions of digital teaching and learning teachers, it is important to be wary of the representativeness of this nationally for several reasons.

This data comes from a pilot project across only four colleges and 11 universities. Only one college and one university were from Wales. Three universities were from Scotland but no Scottish colleges were involved. Northern Ireland was not represented at all. For the 2018-19 teacher survey we anticipate greater involvement from organisations across the UK.

There is a relatively small sample of individuals, particularly of teachers from further education colleges: 376 college teachers and 1,545 university teachers completed the survey.

In nine cases, institutions used the online survey’s access control system to email the survey link to their staff. This allowed us to quantify the response rate in these institutions. The number of teachers emailed by each institution varied from 50 to 2,779 individuals and the response rate varied from 9% (136 of 1,362 invited) to 71% (50 of 70 invited). This suggests that in some institutions the survey might have been completed only by staff who were interested in digital issues. It may also be significant that 60% of our sample self-identified as “among the first” or “early” adopters of new technologies.

There is a female bias in our university data sample. The latest national university data available (2016-17) identifies 45% of teachers as female (HESA HEIDI+ including both teaching only and teaching and research staff, headcount population). In contrast 51% of our university survey sample were female. This gender difference was not as marked in our college sample. The Education and Training Foundation reported that 53% of college teachers were female in 2016-17, in comparison with the 56% of our responses that were from women.

Comparing student and teacher opinions in each institution

A number of questions were asked in both the student and teachers surveys. In order to compare between teacher and student data we calculated the median average response for teachers and students at each of the 15 institutions that participated in both surveys during 2017-18. We then carried out a matched-pairs non-parametric analysis to compare the average opinions of teachers and students. Individual analyses are summarised at the relevant points in the report.

We note that even where identical questions have been asked of teachers and students, their experiences are likely to be different. Teachers access different digital resources and systems or use them differently. Students experience many different teachers, while teachers rarely experience any teaching other than their own. We are therefore cautious about drawing conclusions from these comparisons.

We were unable to compare the average institution-level opinions of college and university staff because the sample of colleges involved in this pilot was too small (n=4 colleges, n=11 universities). We hope to do this in future years.

3 Higher Education Funding Council (HESA). Heidi Plus is part of a larger project between HESA and Jisc, which aims to improve higher education business intelligence capabilities.
What the data tells us: question-by-question analysis

Theme one: teaching staff and their digital technology

Most of our survey respondents had been in service longer than ten years. 60% considered themselves to be early adopters of digital technology in their professional role. The gender split showed a slight female bias as shown in Table 1 and Table 2.

How long have you worked in a teaching/lecturing role? (Q1)

<table>
<thead>
<tr>
<th>Duration</th>
<th>College teachers</th>
<th>University teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one year</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>1 – 3 years</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>4 – 9 years</td>
<td>26%</td>
<td>24%</td>
</tr>
<tr>
<td>10 years or more</td>
<td>60%</td>
<td>56%</td>
</tr>
</tbody>
</table>

What gender do you identify as? (Q2)

<table>
<thead>
<tr>
<th>Gender</th>
<th>College teachers</th>
<th>University teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>45%</td>
<td>48%</td>
</tr>
<tr>
<td>Female</td>
<td>56%</td>
<td>51%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Which best describes your approach to adopting new technologies for teaching? (Q3)

The question about approach to adopting new technology (see Figure 2) is a broad attitudinal measure and shows a classic attitude bell curve, slightly shifted towards early adopters as we might expect from the way the survey was promoted and delivered. Results appear to be similar across institutions and regardless of sector.

Figure 2: Percentage of college and university teachers who chose each of four statements to describe their approach to adopting new technologies for teaching (n=1913, all respondents)

- I am usually among the first to adopt new technologies: 14.4%
- I tend to be an early adopter where I see clear benefits: 47.8%
- I tend to adopt new technologies at the pace of my peers: 27.5%
- I tend to adopt new technologies after my peers: 10.4%

What the data tells us: question-by-question analysis

It’s not just the facilities, it’s the culture of teaching that needs to change.

University teacher

SECTION 3

It’s not just the facilities, it’s the culture of teaching that needs to change.

University teacher
If you need help with your digital devices or skills, who do you turn to first? (Q4)

There were clear differences between the two sectors in the responses to our survey. Our college staff respondents strongly preferred to ask their colleagues for help with digital issues, while university staff were equally likely to ask colleagues, (non-)teaching support staff, or to consult online services (see Figure 3). These findings may reflect the greater availability of online video skills training services in universities (eg Lynda.com). In our student survey, HE students were much more likely than FE students to turn to these resources. As online video services enter the college market, the picture here may change. The figures for collegial support may also reflect a more collaborative and less competitive culture among teachers in FE.

However, care must be taken in interpreting this data, as the use of “first” may have been taken by some respondents to mean “first in order”, and by others to mean “of first importance”.

A search of feedback from teachers in response to the question “What one thing should we do to improve your experience of digital teaching?” (Q16) yielded seven responses that mentioned support staff and support services, all from HE teachers. These included: “Make the various support services on offer more visible to new staff by integrating them into the induction process”; and “provide a support service that is not overloaded due to staff shortages”. Both college and university staff wanted more opportunities to learn with their immediate colleagues. This is discussed in more detail in Section 4.

In order to explore some apparent differences between teaching staff and student findings, data from this question was examined at a single university where there was a large sample of both respondents (136 teachers and 1,589 students).

We can see from Figure 4 that among both teachers and students the preferred source of support was the people around them (students looking to students, and teachers to colleagues). Another large percentage looked for support online. Then the results diverge, with teachers much more likely to turn to support services.

Only 6% of students at this university looked first to teachers for support with digital issues. Across the whole student survey, we found that FE students saw their tutors as a primary source of digital support but few HE students did so. We concluded that teachers could have a particularly big impact on students’ digital experience in college by providing confident support for students’ daily concerns and queries.

Do you personally use any assistive technologies? (eg screen readers, voice recognition, switches) (Q5)

Respondents were then asked “If yes, has your institution provided you with any support?” Of the eight college staff who said assistive technologies were vital, seven (88%) had received support. Of the 28 university staff in this category, 18 (64%) had received support. The number of institutions and respondents in our sample – especially from the college sector – may be too low for us to draw reliable conclusions (see “Is our sample representative?” on p16), but there is clearly some degree of unmet need here, and a trend for more support to be provided or requested in college settings.

Meanwhile, of the 16 college teachers who used assistive technologies optionally, ten (63%) had received support. Of the 67 university teachers in this category, 25 (37%) were supported. So approaches to accessibility seem to be evolving towards an assumption of choice and adaptability for everyone, regardless of assessed need – but support does not seem to be equivalent across the two sectors.
**Theme two: organisational infrastructure**

As Figure 5 shows, there were large sector differences in reported access to a video-based skills service, lecture capture and e-books or e-journals. Levels of provision overall were lower for FE teachers, with the possible exception of file storage. These findings of relative FE sector deprivation are congruent with our findings from the separate survey of students.

Comparing our teaching staff data with our student respondents nationally, students report lower access to e-books and e-journals. There may be real underlying differences in the level of access afforded to staff and to students, or students may simply be less aware of the resources available to them.

Comparing Figure 6 and Figure 7, the largest difference between college and university lecturers is the percentage who say they rely on the VLE for their teaching. This probably reflects the greater penetration and use of VLEs in the HE sector.

Only 37% of college and 46% of university teachers in the two sectors agreed (23% and 17% respectively disagreed) with the proposition that “it is easy to design and organise course materials” in the VLE. We know from our national student data that the biggest complaint students have about their VLE is difficulty in finding course materials.

We compared the average responses from students and from teachers in the nine institutions that asked this question to both groups. A matched pairs analysis showed a significant difference in mobile access to the VLE, using the average views of students and teachers. At every institution, students were far more likely than teachers to agree that they regularly access the VLE from their mobile device. In fact, the median answer for students was ‘agree’ whereas for teachers it was ‘disagree’. The difference is statistically significant.

These findings are not unexpected: students are likely to be checking the VLE more often than teachers anyway, regardless of what device they use. This does highlight the need for institutions to ensure that all the teaching and learning interfaces they provide are mobile-friendly and that teachers know how to optimise learning materials for mobile viewing.

<table>
<thead>
<tr>
<th>College Teachers</th>
<th>University Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Neutral</td>
</tr>
<tr>
<td>78.9%</td>
<td>84.3%</td>
</tr>
<tr>
<td>My own social media (e.g. Facebook, LinkedIn)</td>
<td>44.6%</td>
</tr>
<tr>
<td>A video-based skills training service (e.g. Lynda.com)</td>
<td>86.9%</td>
</tr>
<tr>
<td>Lecture capture</td>
<td>45.2%</td>
</tr>
<tr>
<td>File storage and back-up</td>
<td>71.1%</td>
</tr>
<tr>
<td>Support for digital media production (e.g. video)</td>
<td>36.8%</td>
</tr>
</tbody>
</table>

Figure 5: Percentage of college and university teachers who have access to different services and media (n=897, standard respondents only)

Figure 6: Percentage of college teachers who responded “agree”, “neutral”, or “disagree” to statements about their VLE (n=172, standard respondents only)

Figure 7: Percentage of university teachers who responded “agree”, “neutral”, or “disagree” to statements about their VLE (n=716, standard respondents only)

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**How much do you agree with the following statements about your virtual learning environment (VLE)? (Q6)**

<table>
<thead>
<tr>
<th>College Teachers</th>
<th>University Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>Neutral</td>
</tr>
<tr>
<td>77.2%</td>
<td>37.7%</td>
</tr>
<tr>
<td>It is easy to design and organise course materials</td>
<td>36.9%</td>
</tr>
<tr>
<td>I regularly use it for student collaboration</td>
<td>34.5%</td>
</tr>
<tr>
<td>It encourages me to try different activities</td>
<td>33.5%</td>
</tr>
<tr>
<td>I regularly access it on a mobile device</td>
<td>26.7%</td>
</tr>
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</table>

**How much do you agree with the following statements about your virtual learning environment (VLE)? (Q7)**

Comparing Figure 6 and Figure 7, the largest difference between college and university lecturers is the percentage who say they rely on the VLE for their teaching. This probably reflects the greater penetration and use of VLEs in the HE sector.

From the college and university teachers in the two sectors agreed (23% and 17% respectively disagreed) with the proposition that “it is easy to design and organise course materials” in the VLE. We know from our national student data that the biggest complaint students have about their VLE is difficulty in finding course materials.

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We compared the average responses from students and from teachers in the nine institutions that asked this question to both groups. A matched pairs analysis showed a significant difference in mobile access to the VLE, using the average views of students and teachers. At every institution, students were far more likely than teachers to agree that they regularly access the VLE from their mobile device. In fact, the median answer for students was ‘agree’ whereas for teachers it was ‘disagree’. The difference is statistically significant.

These findings are not unexpected: students are likely to be checking the VLE more often than teachers anyway, regardless of what device they use. This does highlight the need for institutions to ensure that all the teaching and learning interfaces they provide are mobile-friendly and that teachers know how to optimise learning materials for mobile viewing.

These figures are for all respondents, including staff who may not have good access to the VLE (see our analysis of Q6). Further analysis, selecting only those respondents who chose ‘yes I do have access to the VLE whenever I need it’ shows that a slightly larger proportion of these staff agree with each of the statements, as we might expect. Either way, the trend remains: the percentage of HE teachers agreeing that they rely on the VLE is still notably higher than the percentage of FE staff, as is the percentage accessing it on a mobile device.

\[ \text{Wilcoxon Matched Pairs test: } n=9, \text{ Test statistic } = 36.00, \text{ p}=0.009 \]
More college than university lecturers say that they use the VLE for student collaboration, and that it encourages them to try different activities. The figure is not high for either sector, suggesting that routine access to a VLE is not in itself enough to get all staff using the full range of activities that it affords.

VLE terms appeared in both the free text questions asked of staff. In Q12a about "really useful" apps and tools for teaching, VLEs were nominated by university staff, but less often than free apps such as Showbie and Kahoot. They were not mentioned by college staff.

In response to Q16 “What one thing should we do to improve your digital teaching experience”, five FE staff and 71 from HE discussed their VLE. All five of the FE responses concerned better training and support, while the HE responses were split between requests for better support and requests for a better, more up to date or more integrated VLE platform:

» “Provide training when implementing new systems. The introduction of [named VLE] last year was a disaster”

» “Improve the VLE and ensure consistent use across departments”

» “Better integration between the specialist tools I use in teaching and the VLE”

» “Time and mentoring to look at current [VLE] site and make suggestions”

» “Focus less on novel approaches and more on ease of use for basic technologies like the VLE”

There were also some suggestions that the biggest improvement would be not to require use of the VLE at all:

» “I routinely get students saying they aren’t coming in but will catch up on [named VLE]”

» “Rather than imposing new media on staff, such as [named VLE], inform yourselves whether these are worth the effort”

» “Lose [named VLE]. It’s a straitjacket and it is very hard to navigate without a mouse”

How much do you agree with the following statements? (Q8)

Both university and college teachers were equivocal about the quality of digital facilities and teaching spaces in their organisation. The median response was “neutral” to every one of these statements (see Figure 8 and Figure 9).

Fewer than one in five college teachers agreed that AV equipment and teaching spaces were fit for use, while two in five disagreed. University staff were somewhat happier, which accords with our national student feedback about the relative quality of university and college provision.

Access to current software, digital media production and online submission systems were similar in colleges and universities. Only around a third agreed that the software available was industry standard and up to date.

We compared the average response from students and teachers at institutions that had asked them both to respond to the following prompts:

» Teaching spaces are well designed for digital technology use (both staff survey versions)

» The software available is industry standard and up-to-date (standard staff survey only)

We found a statistically significant difference between staff and student opinion of teaching spaces: students were more likely to agree that spaces were well designed than teachers.6

We also found a statistically significant difference between staff and student opinion of software: students are also more likely to agree that it is industry standard and up to date.6

Figure 8: Percentage of college teachers who responded “agree”, “neutral”, or “disagree” to statements about digital facilities (n=369, standard respondents only)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV equipment is reliable and easy to use</td>
<td>18.2%</td>
<td>45.3%</td>
<td>36.6%</td>
</tr>
<tr>
<td>Teaching spaces are well designed for digital technology use</td>
<td>17.8%</td>
<td>45.6%</td>
<td>36.5%</td>
</tr>
<tr>
<td>The software available to teach with is industry standard and up-to-date</td>
<td>35.6%</td>
<td>43.8%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Digital media production facilities (eg video) are available if I need them</td>
<td>39.1%</td>
<td>43.7%</td>
<td>17.2%</td>
</tr>
<tr>
<td>I am able to create and manage online assessments</td>
<td>50.0%</td>
<td>32.6%</td>
<td>17.4%</td>
</tr>
</tbody>
</table>

Figure 9: Percentage of university teachers who responded “agree”, “neutral”, or “disagree” to statements about digital facilities (n=1548, all respondents)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>AV equipment is reliable and easy to use</td>
<td>30.1%</td>
<td>39.8%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Teaching spaces are well designed for digital technology use</td>
<td>27.2%</td>
<td>42.0%</td>
<td>30.8%</td>
</tr>
<tr>
<td>The software available to teach with is industry standard and up-to-date</td>
<td>35.6%</td>
<td>43.8%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Digital media production facilities (eg video) are available if I need them</td>
<td>39.1%</td>
<td>43.7%</td>
<td>17.2%</td>
</tr>
<tr>
<td>I am able to create and manage online assessments</td>
<td>56.5%</td>
<td>28.8%</td>
<td>14.6%</td>
</tr>
</tbody>
</table>

5Wilcoxon Matched Pairs test: n=15, Test statistic = 0.00, p<0.014
6Wilcoxon Matched Pairs test: n=9, Test statistic = 0.00, p<0.014
In free text responses to the question “What one thing should we do to improve your experience of digital teaching?”, 27 college and 95 university teachers (10% and 8% respectively) made comments about teaching spaces and their facilities:

- "Ensure that digital teaching resources actually work in the lecture environment"
- "Provision of TEAL [technology-enhanced active learning] rooms for my teaching"
- "The physical spaces for teaching digitally could be improved [with] temperature control, better layouts"
- "Ensure hardware installed in teaching spaces is capable of operating new software"
- "Involve teachers in decisions about technology in teaching rooms, for a start"

Other suggestions included: “good colour correct digital projection and fast PCs”; “laptops, tablets and other equipment needed for a fully immersive digital classroom”; “enable showing videos from DVDs in all teaching rooms”; “larger screens in teaching rooms”.

20 college and 79 university lecturers (7% of each) mentioned up-to-date software as a priority:

- "Up-to-date software in all classrooms, at all levels"
- "Make sure all staff computers are capable of running the latest software"

In our student survey, one of the most common requests (in free text responses to the question “what one thing should we do to improve your digital learning experience?”) was also for software to be brought up to date. Three college and 35 university teachers talked about online assessment and feedback:

- "Provide more grader-friendly online assessment tools eg for reading materials at a decent resolution"
- "Roll out e-assessment and feedback with software you can annotate"

Teachers were asked to rate the quality of their organisation’s digital provision (eg software, hardware and the online learning environment) using a Likert-scale of adjectives derived from the system usability scale7. Percentage summary results are shown in Figure 10.

When we compared the average opinions of students and staff in the same institutions we found a statistically significant difference in their ratings of institutional infrastructure: students were more positive than teachers8. When we compared the opinions of college and university staff at an individual level (n=375 college teachers, n=1540 university staff) we found this suggests a trend for university teachers to rate digital infrastructure as less satisfactory than college teachers9.

When we compared the average opinions of college and 51% of university teachers rated their organisation’s digital provision as better than average: “good”, “excellent” or “best imaginable”

- 44% of college and 16% of university teachers rated their organisation’s digital provision as worse than average: “poor”, “awful” or “worst imaginable”
- 23% of college and 16% of university teachers rated their organisation’s digital provision as worse than average: “poor”, “awful” or “worst imaginable”

The average (median) rating for institutional digital provision was “good” from university teachers and “average” from college staff.

![Figure 10: Percentage of college and university teachers choosing each of seven options on a scale to rate the quality of digital infrastructure (n=1915, all respondents)](https://uxpajournal.org/wp-content/uploads/pdf/JUS_Bangor_May2009.pdf)

The aim of this adjective scale is to create something that is more interesting and holds more meaning to people than a 1-10 scale. For the original open source reference for this work - and a copy of the SUS statements - please see https://uxpajournal.org/wp-content/uploads/pdf/JUS_Bangor_May2009.pdf.

Wilcoxon Matched Pairs test: n=15, Test statistic = 0.00, p=0.007

Kruskal-Wallis test: df=1, test statistic = 9.65, p=0.002
As part of your teaching practice, how often do you carry out the following activities? (Q10)

Teachers were asked how often they carry out four digital teaching activities and could answer weekly or more, monthly or less, or never. Percentage summary results are shown in Figure 11 and Figure 12.

### Theme three: digital teaching

These show that 37% of college teachers use a digital system to provide personalised feedback to their students weekly or more, compared with only 20% of university teachers. Teaching in a live online environment such as a webinar remains a minority activity, never carried out by 80% of university staff or by 86% of college staff. The other three activities are carried out, on average, monthly.

College teachers carry out live polls or quizzes in class significantly more often than university teachers. More than 30% do this weekly or more, compared with university teachers (less than 10% weekly or more and 54% never). These results are borne out by feedback from college students themselves, who overwhelmingly cited polls and quizzes as examples of useful digital activities they had undertaken.

Qualitative feedback in response to the question “What one thing should we do to improve your digital teaching experience?” found that college teachers were far more likely to ask for support with creating digital teaching materials. For example: “Give us time to develop and plan effective digital resources!”

While the question prompts were not strictly the same, we compared the average response from teachers to the live polls and quizzes prompt, with the average response from students at the same institution to the following prompt “How often do you use a polling device or online quiz (to give answers in class)?” Here we found a statistically significant difference. Individual teachers rarely said that they use polls or quizzes in class (the median average for the matched pairs was “never”), but students said that they experience polls or quizzes monthly. The difference may simply be due to students experiencing a variety of teachers, a few of whom may be using polls regularly.

### Figures

**Figure 11:** Percentage of college teachers who carried out various teaching activities “weekly or more”, “monthly or less” or “never” (n=175, standard respondents only)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weekly or more</th>
<th>Monthly or less</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carry out live polls or quizzes in class</td>
<td>30.6%</td>
<td>46.8%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Teach in a live online environment eg a webinar</td>
<td>12.6%</td>
<td></td>
<td>86%</td>
</tr>
<tr>
<td>Create learning materials in a digital format (not just text or PowerPoint)</td>
<td>28.5%</td>
<td></td>
<td>42.6%</td>
</tr>
<tr>
<td>Use a digital system to give personalised feedback</td>
<td>37.4%</td>
<td></td>
<td>35.1%</td>
</tr>
</tbody>
</table>

**Figure 12:** Percentage of university teachers who carried out various teaching activities “weekly or more”, “monthly or less” or “never” (n=884, standard respondents only)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weekly or more</th>
<th>Monthly or less</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carry out live polls or quizzes in class</td>
<td>9.4%</td>
<td>36.8%</td>
<td>53.7%</td>
</tr>
<tr>
<td>Teach in a live online environment eg a webinar</td>
<td></td>
<td>17.5%</td>
<td>82.5%</td>
</tr>
<tr>
<td>Create learning materials in a digital format (not just text or PowerPoint)</td>
<td>18.1%</td>
<td></td>
<td>38.3%</td>
</tr>
<tr>
<td>Use a digital system to give personalised feedback</td>
<td>20.4%</td>
<td></td>
<td>57.8%</td>
</tr>
</tbody>
</table>

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10Kruskal-Wallis: df=1, test statistic = 72.68, p<0.001
11Wilcoxon Matched Pairs test: n=9, Test statistic = 0.00, p=0.0251
How much would you like digital technologies to be used in your teaching practice? (Q11)

Teachers were asked how much they would like digital technologies to be used in their teaching practice, and could answer more than, the same as, or less than they are now. Results are summarised in Figure 13.

» Results from college and university teachers were similar

» 65% of college respondents and 61% of university respondents felt that technology should be used more

» 31% of college respondents and 34% of university respondents felt that technology should be used about as much as it is currently

» Less than 4% of college respondents and around 5% of university respondents felt it should be used less

We then compared the average response from teachers with the average response from students at the same institution, where they had been asked the matching question: “How often would you like digital technologies to be used in your learning?” The response options were the same: on average, students wanted digital technology use to remain at its current level in their learning, while on average teachers wanted digital technologies to be used more often in their teaching practice. This difference was statistically significant.

We recognise that this finding runs counter to a familiar narrative of digitally confident students pushing their reluctant teachers to adopt more digital approaches. However, there is already plenty of research to challenge this narrative (recently summarised by Kirschner and De Bruyckere, 2017). We are interested to explore this finding further.

As a professional educator, how often do you carry out the following activities? (Q12)

Teachers were asked how often they carried out four digital activities as part of their professional development, and could answer weekly or more, monthly or less, or never. Percentage summary results are shown in Figure 14 and Figure 15.

The mode response to our earlier question on technology adoption was “I tend to be an early adopter [of new technologies for teaching]”. But about half of our respondents (49% of college and 44% of university teachers) never search online for teaching resources and about four in ten (40% and 38%) never discuss teaching issues online with peers. College teachers discuss with peers more frequently than university teachers (college staff 25% “weekly or more” and 35% “monthly or less”, compared with university staff 16% and 46% respectively).

We also found that:

» Only 11% read about issues in digital education on a weekly basis

» 12% of college and 14% of university teachers never develop their digital teaching skills

Figure 13: Percentage of college and university teachers who preferred digital technologies to be used in their teaching practice “more than”, the “same as” or “less than” they are now (n=1903, all respondents)

Figure 14: Percentage of college teachers who carried out various professional development activities “weekly or more”, “monthly or less” or “never” (n=368, standard respondents only)

Figure 15: Percentage of university teachers who carried out various professional development activities “weekly or more”, “monthly or less” or “never” (n=1527, all respondents)

1 Wilcoxon Matched Pairs test: n=15, Test statistic = 78.05, p=0.001
Make sure that CPD and staff development days focus on creating work relevant to my course, not just show off techniques that I am subsequently never given time to implement.

College teacher

Please give an example of a digital tool or app you find really useful in your job role (Q12a)

Teachers were asked to name a digital tool or app they found useful in their job role. The most popular choices for college and university staff were the same: Showbie and Kahoot (see Figure 16 and Figure 17). These two free apps completely dominated responses from FE, while teachers in universities also nominated their VLE (Blackboard, Moodle, Canvas etc), social tools such as YouTube and Twitter, and sharing sites such as Padlet. Traditional PowerPoint was nominated by some teachers in both sectors but was less popular than live, interactive presentation apps such as Kahoot, Nearpod and Mentimeter.

Figure 16: Word cloud showing word frequency of “really useful” digital tools and apps chosen by college teachers (n=133)

Figure 17: Word cloud showing word frequency of “really useful” digital tools and apps chosen by university teachers (n=571)
Theme four: professional development

How much do you agree that your organisation provides you with digital continuous professional development (CPD) support? (Q13)

Teachers were asked how much they agreed that their organisation provided them with five different types of support for their digital professional development. They could answer agree, neutral or disagree in each case. Percentage summary results are shown in Figure 18 and Figure 19.

In both sectors, staff tended to agree or be neutral about whether they had been given: “guidance on digital skills for teaching” and “regular opportunities to develop”. They tended to disagree or be neutral about whether they had been given: “time and support for innovation”, “reward and recognition”, and “opportunities to be involved in decision-making”.

There was a significant difference in the opinions of college and university teachers about whether they had received “guidance on the digital skills you are expected to have”. College teachers’ median average response was to agree they had been given guidance, while university teachers’ median response was neutral. This suggests university teachers could be offered more guidance about the digital skills they need.

There was also a significant difference in the opinions of college and university teachers about whether they had received “time and support to innovate”. The college staff median average was neutral, while university teachers tended to disagree. We find confirmation of both these results in the free text responses from college and university staff (see Section 4).

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14Kruskal-Wallis df = 1; test statistic = 34.5, p<0.001
15Kruskal-Wallis df = 1; test statistic = 18.78, p<0.001
When we compared the average responses of students and staff in the same institutions we found no statistically significant difference in their reported opportunities to develop digital skills, or to be involved in decisions about digital services. The average response to these two questions was neutral from both students and teachers, suggesting that more could be done to support personal digital skills development and to involve students and teachers in the decision-making process.

How much do you agree that you are informed about your responsibilities with regard to the following? (Q14)

Teachers were asked how much they agreed that their institution informed them about their responsibilities in five areas of digital policy. They could answer agree, neutral or disagree. Percentage summary results are shown in Figure 20 and Figure 21.

There are two critical findings here. First, college teachers were significantly more positive in response to all five statements than university teachers. This suggests that there is a real need to provide university teachers with more guidance about digital aspects of their role.

Second, there is a generally low level of confidence in all these areas of professional accountability. Particularly striking is the percentage of HE staff who were unsure of their responsibilities in relation to assistive technologies (85%) and student safety online (84%).

Participants in this pilot study were universities with a commitment to engaging their teachers on digital issues. We have no reason to think that teachers at other universities would consider themselves better informed.

College teachers were significantly more confident than university teachers that they had been given guidance on their responsibilities for digital issues.

---

**Table:**

<table>
<thead>
<tr>
<th>College Teachers</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing learner data securely</td>
<td>78.9%</td>
<td>31.4%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Digital copyright and licensing</td>
<td>14.9%</td>
<td>43.3%</td>
<td>17.8%</td>
</tr>
<tr>
<td>Assistive and adaptive technologies</td>
<td>77.5%</td>
<td>42.3%</td>
<td>29.1%</td>
</tr>
<tr>
<td>Ensuring students behave safely online</td>
<td>66.4%</td>
<td>34.0%</td>
<td>14.5%</td>
</tr>
<tr>
<td>Your health and wellbeing in the digital workplace</td>
<td>41.7%</td>
<td>42.9%</td>
<td>15.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University Teachers</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing learner data securely</td>
<td>36.5%</td>
<td>40.0%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Digital copyright and licensing</td>
<td>39.9%</td>
<td>40.0%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Assistive and adaptive technologies</td>
<td>14.5%</td>
<td>40.5%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Ensuring students behave safely online</td>
<td>16.3%</td>
<td>38.6%</td>
<td>45.1%</td>
</tr>
<tr>
<td>Your health and wellbeing in the digital workplace</td>
<td>18.8%</td>
<td>38.3%</td>
<td>42.8%</td>
</tr>
</tbody>
</table>

---

16 Digital skills: Wilcoxon Matched Pairs test: n=15, Test statistic = 12.00, p=0.739; Digital services: Wilcoxon Matched Pairs test: n=15, Test statistic = 0.00, p=0.083

17Kruskal-Wallis d.f=1, test statistic = 101.7(statement a), 12.3(statement b), 40.8(statement c), 188.7(statement d), 60.1(statement e), in all cases p<0.001
Teachers were asked to rate the quality of their organisation’s support for digital aspects of their role, using a Likert-scale of adjectives derived from the system usability scale18. Percentage summary results are shown in Figure 22.

» 46% of college and 38% of university teachers rated their organisation’s support for developing digital aspects of their role as better than average: “good”, “excellent” or “best imaginable”

» 21% of college and 26% of university teachers rated their organisation’s support for developing digital aspects of their role as worse than average: “poor”, “awful” or “worst imaginable”

The average (median) rating for institutional digital provision was “average” from both university and college teachers. So, the higher rating that HE staff gave to their digital infrastructure disappeared when the same staff were asked to rate support for their digital professional development.

Our student survey asked students to rate their overall digital learning experience on the same seven-point scale. Further research could investigate whether teachers’ rating for their digital support is related to students’ rating for their digital learning experience at the same institution.

Overall, how would you rate the support you receive from your organisation to develop the digital aspects of your role? (Q15)

We need an organisational approach to incorporating the use of digital technologies into the curriculum where suitable and where it will enhance learning and teaching.

College teacher
What the free text data tells us

What one thing would improve your experience of digital teaching? (Q16)

At the end of the survey, 279 college and 1,128 university teachers took the time to answer this question. This represents 74% (FE) and 73% (HE) of the full sample. Some wrote long, considered responses with several suggestions for improvement. Many of these responses concern local issues and they are of greatest value to the institutions that ran the survey. Figure 23 and Figure 24 show the frequency of words used in responses.

Responses were analysed using Nvivo software, first with a weighted word count of terms to group responses into common themes. Short and long context word searches were used within those themes to code further, and to identify indicative quotes. Long responses were often coded more than once. A snapshot of key themes is presented here. The counts and percentages associated with each theme are the number of responses that included that code.

![Figure 23: Word cloud showing frequency of words used when responding to the question “what one thing would improve your experience of digital teaching?”, college teachers (n=279)](image)

![Figure 24: Word cloud showing frequency of words used when responding to the question “what one thing would improve your experience of digital teaching?”, university teachers (n=1128)](image)

### Time

Both college and university teachers highlighted the need for more time for their professional development (98 responses coded from college respondents and 329 from universities, or 35% and 28% of responses respectively). Looking at the coded responses in more detail, college teachers were most likely to ask for:

- Time to “practice new skills,” generating the “confidence” needed to try things in the classroom: “give us time to actually learn how to use technology well in order for us to be confident to use it in class. I would love to make my lessons / assessments more enjoyable for my learners with the use of technology!”
- Time to reflect and “digest” new ideas: “using new technologies and new skills well needs time to be developed, embedded and reviewed”
- Time to develop digital teaching materials: “have inset days focused on actually creating work for my course, not just showing off techniques that I am subsequently never given time to implement”
- Time to explore new systems and approaches for themselves: “innovate”, “experiment” and “investigate”, “without the pressure of being in a classroom type environment, without measured outcomes - just time to practice and explore”
- Time to work with and alongside other teachers eg in curriculum teams or small groups: “set up a few hours for staff to have training in teams as part of inset days - to meet the needs for their courses”

Timing and timetabling were critical issues for FE staff, while university teachers were concerned about competing demands and workload pressures. For them, “time” meant workload allocation:

- “Is designing and refining innovative teaching factored into our workloads?”
- “Identify time on workloads for digital updating and training”
- “Workload is so cluttered during term time that developing new digital teaching practice in response to student feedback during the semester itself is difficult/impossible”

Like college staff, university teachers knew how they would spend any extra time they were allocated:

- Time to “research”, “experiment” and “try” new approaches: “I have seen software that I want to use but I just haven’t had time to trial it and embed it into my teaching”
- Time to “assimilate”, “develop meaningfully” and “engage” with digital teaching, “not just training”; “give us more time to enable us to be creative in developing new approaches”
- Time to prepare digital teaching/learning, including online marking and feedback: “teaching prep is not just lecture prep time – developing good digital learning materials takes time and effort”; “provide more time for online marking”
- Time to work with colleagues, especially colleagues in the same subject area: “time for us to attend workshops to learn together and time to implement things and discuss them as a faculty”
The next most coded issue for college teachers (58 references or 21%) was training. More training was requested, more regularly, and with better follow-up. Small group or one-to-one opportunities and live, hands-on opportunities to practice were particularly important.

Timing was often mentioned as an issue: training should be “regular”, in “allocated” time (eg inset), and “convenient”. Current support was characterised as “when we hit a problem”, or conversely: “we seem to cram several new technologies into one session and you just get confused”

» Provide time and follow up support to use - one training session is insufficient - there is never any follow up

» Not just shown in a rushed CPD session but having a hands-on opportunity to practice

There were observations that training needs to be at times to suit part-time as well as full-time staff and should be regular rather than in a block at the start or end of the teaching year. Training also needs to be tailored to need:

» Recognise that one size does not fit all - talk to me about what would work - differentiate training

» I can’t remember the last time I was on a digital training day to answer my questions

The training-teaching distinction seems related to the different perceptions that college and university staff had of their time. University teachers did not on the whole ask for timetabled training but for room to develop new practices, in their own time and on their own terms. However, they also complained (as in the quotes above) about a lack of clarity in what was expected of teachers, suggesting that more structured training opportunities might also be welcome:

» Offer clearer support to develop digital teaching

The phrase “digital teaching” elicited some negative reactions, recorded under “organisational and culture” below.
Technologies and systems

Comments on the supporting infrastructure were the next most numerous: 53 college and 193 university responses (19% and 17%) concerned the impact of technology itself on teaching practice. While one or two insisted that “it’s not about the technology” (“allow staff to focus on teaching/pedagogy” – university teacher), many more took the view that, in fact, “good quality, up to date, fit-for purpose (for the subject area) technology should be the main focus of our digital practice” (university teacher).

Software and hardware needed to be made more “up to date”, “reliable”, “accessible”, “mobile”, “suitable” and “relevant to our needs”. Systems and platforms should also be “up to date” and “mobile friendly”; also “stable”, “integrated”, “joined up” and “user friendly”. The most negative words used across all teachers responses related to infrastructure. Words connected with investment (money, resources etc) were also often used when talking about these issues.

College teachers were particularly likely to complain about a lack of access to specialist software:

- “Greater flexibility to install or trial software on my own PC”
- “Recognise specialist needs of different subjects and support industry-standard software”

University teachers were more likely to comment on university systems. They felt, first, that systems should be better integrated:

- “Ensure all the systems work and talk to each other”
- “Ability to integrate Blackboard with platforms that partner universities’ overseas use”
- “Invest in developing and integrating things”

Second, they wanted clear guidance and training. This ties in with our finding that university teachers are less informed about the digital skills they need (Q13).

- “State more clearly what is expected of staff in terms of college systems”
- “We simply need basic plus advanced training in the current systems, from induction for new staff to regular reminders for current staff”

And third, they wanted a clear rationale for system changes:

- “Staff are reluctant to get to know new software if we fear that in two years’ time the university will no longer support it”
- “Choose a platform that actually works and stick with it”
- “It’s hard enough to find the time to learn the new tools while also doing the eight thousand other things we’re required to do, let alone learn a new one every few years”
- “Stop changing the digital systems so often!”

It may be that this resistance to changing systems was related to a lack of consultation, which emerged strongly from the university teachers’ input.

- “Don’t randomly introduce new systems that we have no option but to comply with without any consultation”
- “Listen to staff in regard to purchasing new technology”
- “Talk to lecturers about what they need before imposing digital systems on them”

Help and support

27 responses from college and 213 from university teachers (10% and 19%) were broadly coded as requests for help or support. IT and technical support teams were the most often specified. A lack of technical support or back-up led to a lack of confidence with trying new approaches.

- “I feel there is a lack of IT staff to support the teachers and delays in digital and technical support can discourage the full use of technology” (college teacher)
- “Academics should be focused on producing good teaching materials, not working out how to use software and troubleshooting technical issues” (university teacher)

‘Learning mentors’ were mentioned in a college context. There were a handful of mentions for technology-enhanced learning (TEL) support, learning technology and educational technology. These teams were generally respected for their expertise but also described as “stretched”, “underfunded”, “unavailable” and short of that most precious resource, “time”.

- “Give ed tech staff more time to support academic staff and share their expertise with us” (university teacher)
- “Learning technology staff are required who have the time to listen to our teaching needs” (university teacher)
- “Academic development [staff] are very helpful but there are only two of them” (university teacher)
- “The TEL team are fantastic and hold so much knowledge/ideas/creativity but where is the institutional backing?” (university teacher)
- “Have enough people in IT and [educational development] with the required expertise” (university teacher)
Some staff were interested in more communal approaches. Two college responses and 28 from university staff mentioned “sharing”, whether of “ideas”, “skills”, “best practice”, “how others have solved issues” or “innovations”:

» "Develop supportive communities of interested staff" (university teacher)

» "Sharing best practice with peers" (college teacher)

» "Academics should be focused on producing good teaching materials, not working out how to use software and troubleshooting technical issues" (university teacher)

» "Collaborative working across modules and departments to support colleagues in developing innovative approaches" (university teacher)

» "Current knowledge is based on informal discussion with colleagues" (university teacher)

Not coded as help and support, but clearly relevant to it, four college and 24 university responses concerned the need for practical, real-world examples that could be applied immediately into practice:

» "Provide hands-on sessions with actual practice and real examples of benefits of using tech" (university teacher)

» "Improve the range of context-specific examples" (university teacher)

» "Come and show us, with examples relevant to our course" (college teacher)
Classrooms and facilities

27 responses from college and 95 from university teachers (10% FE and 8% HE overall) concerned classrooms, lecture rooms, and associated facilities.

College teachers felt that their digital teaching would be improved by investment in general classroom hardware:

» "Better classroom hardware in all classrooms"
» "Laptops, tablets and other equipment needed for a fully immersive digital classroom"

University teachers were more likely to ask for specialist facilities such as digital labs and workshops, and specialised technology-enabled active learning (TEAL) classrooms.

» "Dedicated IT rooms (2x60-seat) with Linux, specialised software for bioinformatics, statistics etc"  
» "Facilities and space to hold webinars and record video"  
» "Good colour correct digital projection and fast PCs"

There was a strong sense of ongoing investment, especially in lecture capture, which allowed university teachers to focus on the quality and variety of provision rather than basic access:

» "Continue to upgrade IT in lecture/seminar rooms"
» "Lecture spaces that allow a mix of digital and traditional provision in the same room"
» "Provide lecture capture in all teaching spaces"
» "Larger TEAL rooms able to cope with the demand and the range of class sizes"
» "Ensure that digital teaching resources actually work within the lecture environment"

Laptops, tablets and other equipment needed for a fully immersive digital classroom.  
University teacher

Organisation and culture

Finally, a small number of teachers (36), mainly HE, mentioned organisational culture as an issue. Suggestions covered reward and recognition:

» "Reward those that apply new technologies in their teaching" (university teacher(s))  
» "Recognise the digital aspect of my role" (university teacher(s))

Whole-organisation approaches:

» "We need an organisational approach to incorporating the use of digital technologies into the curriculum where suitable and where it will enhance learning and teaching" (university teacher)  
» "It's not just the facilities, it's the culture of teaching that needs to change" (university teacher)  
» "Pursue more strongly the culture of digital and online learning" (college teacher)

And proper teacher consultation:

» "Consult BEFORE implementing change - not inform afterwards" (university teacher)  
» "Have more planning and notification - don't just give us three days to respond to major changes" (university teacher)  
» "Listen to staff when they criticise central provision and change what they do" (university teacher)

In this category we coded a number of dissenting voices (24, all in HE). Most of these were complaining not about digital teaching per se but (again) about a lack of consultation and choice:

» "Not insist on lecture capture, online assessment, online feedback, online marking etc – these should be a personal choice of the lecturer"
» "Recognise the pitfalls of the standardisation of digital teaching"
» "I believe there is a place for digital teaching [but] it has come to dominate the learning environment to the detriment of both staff and students"

In summary of the organisational messages from teachers, we have chosen these two:

» "Ask staff to participate in decisions"
» "Please value teaching itself more, whether digital or not"
This staff digital experience insights survey comes at the end of our three-year pilot project. In September 2018 we moved to full operation of the digital experience insights service for students and staff.

This publication accompanies our report on the digital experience insights survey 2018: findings from students in UK further and higher education. It brings the voice of teachers into the picture and extends our understanding of the experience of students and staff, providing a richer, 360 degree perspective.

Future publications

A series of follow-up briefings on both the student and staff findings will be published. These will provide further commentary around key themes identified in the reports of interest to leaders, teachers and students. There will also be a publication that describes how organisations have used insights to support the development of their digital strategies and environment to better meet the expectations of their students.

You can find out more about the service and discover how you can gain a greater insight into what your staff and students think about their digital learning and teaching experiences at digitalinsights.jisc.ac.uk
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