

Digital experience insights survey 2019: findings from teaching staff in UK further and higher education

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Foreword



I am delighted to share with you the findings from the 2019 Jisc digital experience insights survey of teaching staff in UK further and higher education (FE and HE). The survey attracted 6,534 responses from 61 organisations who shared their experiences of using technology to support their teaching.

At a time when technology is transforming how we live, work and learn, this report provides vital new insights into how teaching staff across UK colleges and universities are using technology in their teaching and professional lives and how they are being supported to do so by their organisation.

It is well known that the UK has a digital skills gap¹ so it's encouraging that survey responses show teaching staff are highly committed to ensuring their teaching practices prepare students for their future careers – the majority of which will involve technology. Comparing responses from this survey² to responses in Jisc's equivalent 2019 student survey reveals that, in some cases, teaching staff expectations exceed those of their students and they are less satisfied.

However, the report does call into question how well supported staff are in developing their own digital skills with only around a third of FE and HE teaching staff reporting they have regular opportunities to develop their digital skills. Even fewer agreed that they receive CPD support and guidance about the digital skills they are expected to have as teachers When you consider the pace at which technology evolves, it's imperative that teaching staff are fully equipped with the knowledge and support to navigate an ever-changing digital landscape. I want this report to stimulate discussion across education, industry and government about how teaching staff can be further supported and inspired to develop their digital practices and the exponential evolution of workplace demands.

In my role as Chair of the Independent Commission on the College of the Future and former Chair of Edinburgh College Board of Management, I have seen the powerful ability of technology to transform teaching, learning and student support. It is clear that the developing demands of teachers and lecturers means that there is a need to systematically and continuously update staff knowledge and skills, including regular exposure to up to date working practices in industry and digital advancements in teaching. If we listen and respond to the challenges that staff face now, their voices can help shape the digital experience for future staff and learners. This report plays an important role in highlighting what is working well and where colleges and universities need to improve their use of technology to support teaching and learning. It also surfaces the barriers and blockers that teaching staff feel impede their digital ambitions. The data will help colleges and universities understand how best to support staff with their digital skills and practices, which are critical to ensuring students are taught and trained with the skills and approaches that the workplace of the future requires.

With diminishing resources and the financial pressures faced across the tertiary education sector, giving staff enough time to innovate, be creative and develop their practice is increasingly challenging. This is especially important when you consider that the majority of students look to their tutors and lecturers for support in using technology in their learning.

Jisc is working with colleges and universities to help them prepare for the transformation that is needed to harness the opportunities of technology, under its Education 4.0 vision. I call on all colleges and universities to review the invaluable data this survey provides and collaborate with Jisc to develop transformative digital strategies, environments and capabilities to deliver a world-class student experience for all. Most importantly, we need to ensure we continue to inspire and support the sector's most valuable asset – our teaching staff.

Professor Ian Diamond, Chair, Independent Commission on the College of the Future

¹ Gov.uk (2019). Realising the potential of technology in education: a strategy for education providers and the technology industry. [online]. Gov.UK. Available at: gov.uk/government/publications/realising-the-potential-of-technology-in-education

² Langer-Crame, M. et al (2019). Digital experience insights survey 2019: findings from students in UK further and higher education. Jisc [online]. Available from: <u>digitalinsights.jisc.ac.uk/our-service/our-reports</u>





Introduction

A clear picture of the digital experience of teaching staff in UK colleges and universities is now available and it is encouraging to find that teaching staff are mainly positive about the use of digital technologies in their work. Many would like to use it more.

More than 6,500 teaching staff from 61 organisations have shared details of the technologies and the digital infrastructure they use, as well as their digital teaching and professional development practices. When you combine the experiences of staff with the voices of more than 29,500 students from our 2019 student insights survey³, a rich and comprehensive dataset emerges.

At an organisational level, this data is invaluable in informing and driving change. It establishes a baseline position, signposts where investment in digital transformation is needed and provides dynamic evidence to inform strategic and operational decisions and support monitoring processes.

At a national level, analysis of the anonymised data collected by colleges and universities allows us to gain a broader picture of student and teaching staff digital experiences and to observe this over time. This evidence-based research highlights issues of national concern and enables us to respond promptly to sector needs.

This report gives a summary of the key findings as well as a detailed question-by-question analysis. Further analysis in section four compares the findings from the 2019 teaching staff survey with those of the 2019 student survey on the two main attitudinal questions and reveals areas of common experience as well as some areas of difference. Unsurprisingly, it also highlights differences in practice and experience between FE and HE sectors.

³ Langer-Crame, M. et al (2019). Digital experience insights survey 2019: findings from students in UK further and higher education. Jisc [online]. Available from: digitalinsights.jisc.ac.uk/our-service/our-reports

- While there are many positive findings in this report, there are also areas of concern:
- » Access to digital services and resources is generally good but a small proportion of teaching staff in both sectors report that they do not have this access
- » Low numbers of teaching staff say that they collaborate with their peers or use online collaboration within their teaching – yet this is common practice in the modern workplace
- » Teaching staff are generally less satisfied than students with the teaching spaces, software and equipment available to them
- Not all teaching staff feel well informed in relation to their digital responsibilities in several key areas of practice (secure management of student data, digital copyright and licensing, assistive and adaptive technologies, safe online behaviour and digital wellbeing)
- » Few teaching staff agree that they receive reward or recognition when they develop the digital aspects of their role. Levels of satisfaction in terms of continuous professional development and support for digital skills development are also low



Technology is now a seamless part of our everyday lives, and teaching and learning practices should reflect this. Employers certainly no longer see digital skills as optional⁴. Baseline digital skills are an essential requirement for many job roles and digital skills gaps are a concern for employers⁵. The digital capabilities of teaching staff impact on the overall student experience. Further analysis of the 2019 student and teaching staff survey datasets reveals that, within the same organisation, there is a positive statistical correlation between student ratings for the quality of digital teaching and learning on their course and the level of support that teaching staff say they receive to develop the digital aspects of their role. This highlights the value of investment in the digital development of teaching staff.

Substantial numbers of teaching staff would like to use technology more than they are currently doing and many see themselves as early adopters when the benefits of digital practices are clear. Many teaching staff want a better quality digital environment and cite digital infrastructure and lack of facilities as barriers to improving digital teaching and learning.

There are new challenges and opportunities for colleges and universities as we enter the fourth industrial revolution or Industry 4.0. The effect of the opportunities generated by new technologies and fusions of technologies, combined with the unprecedented speed of change, is transforming the way businesses operate as well as how we conduct our daily lives. Digital transformation is necessary to survival – we must embrace digital to serve the best interests of individuals, the UK economy and society as a whole. This is equally critical for education and is why Jisc has been developing ways to support a corresponding Education 4.0 and identify how best we can support members to realise their ambitions and meet the needs of students and staff.

Colleges and universities can rise to the complex challenges identified in this report and make the most of the opportunities that lie ahead by using the data provided by the digital experience insights service alongside the tools, resources and guidance from our building digital capability service⁶. Both services provide wraparound support that includes advice, guidance, consultancy, two meet-ups a year, training and consultancy to help members on their journey – a journey that of necessity will continue to evolve to reflect technological advancements and the changing needs of industry.

Key statistics



⁶ Building digital capability service: digitalcapability.jisc.ac.uk

⁴ Burning Glass (2019). No longer optional: employer demand for digital skills. Department for Digital, Culture, Media and Sport. Available online at: gov.uk/government/publications/current-and-future-demand-for-digital-skills-in-the-workplace

⁵ The Open University (2019). Bridging the digital divide. The Open University. Available online at: <u>open.ac.uk/business/bridging-</u> the-digital-divide



Theme one: teaching staff and their digital technology

Facts and figures





Our key messages

Teaching staff are mainly positive about use of digital technologies in teaching

Teaching staff in both sectors are most likely to think of themselves as early digital adopters when the benefits are clear, or at least think of themselves as keeping up with their colleagues. Organisations should recognise these broadly positive attitudes and focus on removing barriers that impede adoption.

Support for digital practice comes mainly from colleagues

Teaching staff, especially those in FE, get most of their digital support from other teaching colleagues. Organisations need to better understand the value of peer networks in building capacity. The role of specialist support staff is key in HE although less acknowledged in FE; this may be because specialist support is less available in some settings. The use of online resources is growing, and improved access to on-demand video/interactive online training resources might encourage more staff to use them. 13

Assistive technology is mainstream

Noticeable numbers of teaching staff use assistive or adaptive technologies, either regarding them as vital or as an optional choice. FE teaching staff are more likely to say they received support than those in HE. As devices and software become adaptive by design, the boundary between mainstream and assistive technology is becoming less clear. All teaching staff benefit from guidance on how they can choose and adapt digital tools to meet their personal needs. Fewer HE teaching staff than FE reported that support was provided - it is unclear whether this means they were not offered support or that they did not need it. A lack of support could impact on how teaching staff perform their roles and how well they are able to support students to use assistive technologies. All users have a right to reasonable adjustments under the Equalities Act 2010.

Theme two: organisational infrastructure

Facts and figures



3% of FE teaching staff said they had no access to any of seven digital resources listed (reliable wifi; a virtual learning environment (VLE); e-books and e-journals; file storage and back-up; own social media; video-based skills training; lecture capture). Only 1% of HE teaching staff said the same When teaching staff were asked if they regularly accessed the VLE on a mobile device, the average response at organisational-level was 'disagree'; when students were asked the same question the average organisationallevel response was 'neutral'



Our key messages

Teaching staff want a better quality digital environment

Digital infrastructure and lack of facilities are still a barrier to improving digital teaching and learning. Legacy equipment, out of date software and poor integration of software/services were all cited as barriers by teaching staff. It is also important to consider learning space design – the physical space should support the seamless use of technology within the learning environment.

Staff in FE are more likely to identify poor infrastructure as a barrier to developing their digital teaching practice and to report lower levels of access to digital resources than their HE colleagues. (Note: discrepancies in access to lecture capture should be viewed with caution as this may highlight differences in teaching practice rather than lack of access.)

Reliability of wifi has been a concern since our first pilots in 2017 and continues to be an issue, especially for FE teaching staff and students.

On average, teaching staff are more critical than students of software, in terms of it being up to date and industry standard. Teaching staff may have more opportunities than students to know how things could be better, so it is important to involve teaching staff in discussions and initiatives to improve the digital environment.

⁷ Langer-Crame, M. et al (2019). Digital experience insights survey 2019: findings from students in UK further and higher education. Jisc [online]. Available from: <u>digitalinsights.jisc.ac.uk/our-service/our-reports</u>

Teaching staff need to understand how students access content

Students are more likely than teaching staff to access their VLEs via mobile devices. This is likely to be driven by the tasks students and staff undertake via mobile devices and their choices about the most appropriate device for any given task. Users of mobile devices are likely to be using smaller screens and less effective keyboards, and may have concerns about download times and data costs. Teaching staff and learning design teams need to be aware of different user needs and ensure that VLEs are accessible and mobile optimised.

The VLE is increasingly diverse

This year's qualitative student data⁷ showed universities starting to offer VLE/learner management system (LMS) functions as part of a student portal or app, with various other services bundled in. At the same time, FE colleges are using more slimmed down, activity-focused learning environments/platforms such as Google Classroom and Showbie. Qualitative data from the teaching staff survey reflected this divergence, with more HE teaching staff relying on the VLE for their teaching and more FE teaching staff using it for student collaboration and innovative learning. Organisations may wish to consider focusing support on specific functions rather than the current platform or configuration of services.

Theme three: digital teaching

Facts and figures



FE teaching staff, in general, carry out digital teaching activities more often than those in HE. The percentage carrying out each activity 'weekly or more' were:



FE teaching staff carry out a variety of digital development activities more regularly than those in HE. The percentage carrying out each of these 'weekly or more' were:



87% of FE and 74% of HE teaching staff never teach in a live online environment and 52% of FE and 54% of HE teaching staff never discuss teaching issues with peers online

66% FE Substantial numbers of teaching staff would like digital technologies to be used more than they are now in their teaching practice (FE: 66%, HE: 62%). However, when asked a similar question, students indicated they were happy with the current level of use



Our key messages

Teaching staff need to be confident in a range of digital activities

The digital teaching activities we described – including activities in the VLE question – are, on average, undertaken regularly (ie weekly or more) by around a quarter to a third of our respondents. Many teaching staff never undertake these digital activities with their students at all. We need to understand more about why this is. Meanwhile, our activity list suggests a baseline that teaching staff could master before moving on to a more varied range of digital teaching practices:

- » Set collaborative work in an online or virtual learning environment
- Create/curate their own digital teaching materials (over and above use of Word or PowerPoint)
- » Use polling or quizzing student survey responses show that FE students in particular find these engaging
- Incorporate the giving of digital feedback to students (in any format) as a regular part of assessment and feedback practices

Support digital content creation, especially at small scale

Nearly 80% of FE teaching staff create content in digital formats, and 70% do so in HE. Fewer than 40% of teaching staff in either sector say they have access to media production facilities. Since students are demanding more and better digital content, especially for revision, organisations should consider investing more in supporting teaching staff to create learning content in digital formats.

Teaching online is currently a minority activity that requires time and consideration to develop and scale up

A fraction of our respondents regularly teach in a live online environment, though associated activities such as giving digital feedback and setting up collaborative activities are done more often. Many universities and colleges are not pursuing this agenda at the moment. However, if they want to move into providing more online courses, or offering live online options within blended courses, they will need to invest in building the relevant experience and expertise.

Theme four: professional development

Facts and figures Teaching staff in FE were much more likely than their colleagues in HE to say that they had been informed about their responsibilities in key areas such as managing student data securely and digital intellectual property rights (IPR)

The organisational median average rating for the support that teaching staff receive from their organisation to develop the digital aspects of their role was 'average'. This contrasts with the organisational median average response from students who, when asked to rate the quality of digital teaching and learning on their course, rated it as 'good'

Further analysis found that within the same organisation, there is a positive statistical correlation between student ratings for the quality of digital teaching and learning on their course and the level of support that teaching staff said they receive to develop the digital aspects of their role.



Only 14% of FE teaching staff and 9% in HE agreed that they receive reward or recognition when they develop digital aspects of their role

Only 15% of FE teaching staff and 13% in HE agreed that they have time and support to innovate

Over a third of teaching staff agreed that they have regular opportunities to develop their digital skills (FE: 36%, HE: 34%) but a quarter of both FE and HE teaching staff disagreed. The majority gave a neutral response



33% of FE teaching staff and 27% in HE agreed that they receive guidance about the digital skills they are expected to have as a teacher

Only 26% of FE teaching staff and 16% in HE agreed that they are informed about their responsibilities in relation to assistive and adaptive technologies



Our key messages

Staff need to know their investment in digital teaching will be rewarded

While many organisational strategies state the value of digital learning and teaching, most teaching staff find developing their digital practice to be unrewarded, unsupported and costly in terms of their own time. While long-term career rewards may require structural change (such as fellowships and the embedding of HR processes and professional development reviews), short-term benefits are easier to offer, such as allocated time for training/continuous professional development (CPD), increments for taking on digital roles and responsibilities, and celebratory events that acknowledge achievements.

Professional development must be timely and sustained over time

The correlation between teaching staff feeling well supported to develop the digital aspects of their roles and higher levels of student satisfaction with the quality of teaching and learning highlights the value of investment in digital CPD.

More CPD and training are key to improving teaching staff confidence and expertise. But too often teaching staff are offered single sessions with no follow-up or support. This may be enough to grasp the basics but it does not allow staff to explore how new techniques can be applied in practice. It is not enough to provide resources and opportunities – there needs to be encouragement, recognition and motivation. Approaches that harness peer support are an effective strategy here, especially when this is built into organisational culture and modelled by senior managers.

Provide focused CPD in multiple formats

Teaching staff are willing to engage with new technologies but they want the experience to be of practical value, relevant to their disciplines and focused. Not all teaching staff ask for the same development opportunities: some are happy to update their skills independently and make use of the wealth of online resources available, while others want one-to-one guidance to get 'up to speed'. Many want to explore new tools in an environment where they have the security of trying (and possibly failing in a safe space) with hands-on support, the opportunity to discuss teaching issues with colleagues, and to be able to take away actionable outcomes. Sessions should be varied, scholarly and engaging.

Students are also a part of this relationship and student-staff partnership initiatives can be a powerful driver for change and support across the organisation.

Staff need support to meet their legal responsibilities in relation to assistive and adaptive technologies

The Public Sector Bodies (Websites and Mobile Applications) (No 2) Accessibility Regulations 2018 mean that UK organisations have a responsibility to support staff with ensuring all their digital practices are accessible and inclusive.

What is the digital experience insights service?

See the digital experience through the eyes of your students and staff

The digital experience insights surveys allow organisations to collect valid, representative and actionable data from their students and staff about the digital environment they offer and to understand how digital technologies are used in learning and teaching as well as across the organisation.



The start of your journey

The survey findings support a process for engaging all users in shaping the digital experience and environment at your college or university. They are an invaluable way of informing and driving change for your organisation, providing data that contributes to digital strategies and helps to secure return on investment. Use the surveys to gather baseline information and to measure and evidence change as digital development initiatives evolve.

Framing the bigger picture

The anonymised data collected in the surveys allows us to gain a national picture of student and staff digital experiences and to monitor this over time, showing progress and highlighting issues of national concern. This evidence-based research enables us to respond promptly to sector needs.

Key elements of our digital experience insights service:

- Questions that focus on the digital experience and cover issues that are important to students and staff
- Copies of the survey templates so that you can find out more about the experiences of students, teaching staff and professional services staff and how they use your digital environment
- The option to add some questions of your own to help you explore organisation-level issues
- Guidance on all aspects of implementing the surveys, analysing data and sharing findings
- Support at every step of your insights journey (email, mailing list, start-up guidance)
- » Real-time access to your own data
- » Sector benchmarking data
- » Results templates for you to populate with the data you gather. These help you to summarise and share your findings with management teams, students and staff
- Annual reports that highlight national and sector issues
- » Membership of an active and vibrant community of practice with two events each year

Additional resources and future publications

In addition to the 2019 student digital experience insights report⁸, we have developed the following further resources based on the 2017–2018 survey findings:

- NUS roadmap for supporting students to improve their digital experience at university and college (based on our previous Jisc NUS student experience benchmarking tool)
- » Report: Exploring the student digital experience: student, staff and organisational factors
- Report: Using persona analysis to compare student social behaviours with institutional digital provision: a pilot study
- » Briefing papers for senior leaders: Enabling an excellent student digital experience:
 - » For senior leaders in further education
 - » For senior leaders in higher education

These provide valuable additional insights and are designed to support organisations to use their own data and the national report to make a difference to the teaching and learning they offer.

The findings from our 2019 pilot survey for professional services staff will be published later this year. Comparing the opinions of students, teaching staff and professional services staff will allow organisations to gain a deeper understanding of how students and staff use and benefit from the digital environment provided and where improvements can be made.

Explore our growing collection of case studies (digitalinsights.jisc.ac.uk/case-study-listing) to see how other organisations are making the most of the digital experience insights service.

You can find out more about the insights service and download the reports and resources from our website **digitalinsights**. **jisc.ac.uk**

⁸ Langer-Crame, M. et al (2019). Digital experience insights survey 2019: findings from students in UK further and higher education. Jisc [online]. Available from: <u>digitalinsights.jisc.ac.uk/our-service/our-reports</u>

The teaching staff survey

The teaching staff survey became part of the full digital experience insights service following a successful pilot in 2017–18. The aim is to:

- Provide additional data to organisations alongside the data they capture from students
- Explore the perspective of teaching staff on the digital environment and on digital teaching, learning and assessment
- » Encourage teaching staff to have conversations with peers and students about change, rather than seeing student feedback as a critique of their performance as teaching staff

The survey instruments

All of our surveys are delivered and managed in Jisc online surveys (<u>onlinesurveys.ac.uk</u>), a service specially developed for the UK education sector.

The survey instruments are based around concise question sets that have been developed in consultation with the sector. Many of the questions map across the different surveys. This reflects the fact that teaching staff are users of the same digital environment as students and are also providers or facilitators of students' digital learning. In this survey, we also asked about what supported or made it difficult for teaching staff to provide an excellent digital experience to students.

The questions are organised into four themes. In the teaching staff survey, these align to the four parallel 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

Two versions of the teaching staff insights survey template are available for the following groups:

- » Further education (FE) teaching staff
- » Higher education (HE) teaching staff

Welsh translations of each version are also available.

The core question set contains 18 questions. Many of these include separate prompts or sub-questions, making a maximum total of 48 individual items. All questions were optional so teaching staff 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.

Response rates

All closed questions had a non-response rate of 2% or lower, other than the five questions about virtual learning environments VLEs (Q9) which had, on average, a 14% non-response rate. For the VLE questions we explicitly asked users to leave them blank if they were unsure. The increase in the use of locally named portals suggests that this question may need to evolve next year.

The low non-response rate indicates that the question set is robust overall and that teaching staff find it interesting and worth answering.



"As a college we need to provide an opportunity to highlight and share the use of digital technology that is being used to enhance learning, teaching and assessment."

FE teaching staff

Participating organisations

A total of 61 organisations ran one of the versions of the insights surveys (HE or FE teaching staff) and collected at least five responses. Of these 61 organisations, 10% had also taken part in last year's (2017-18) pilot.

Thirty-five were from FE or sixth form colleges and 26 were from HE. This represents participation from approximately 12% of UK FE/sixth form colleges and 16% of UK HE organisations. A list of these organisations can be found in Appendix 1 at the end of this report.

The mean average ± standard deviation of respondents was 107 ± 89 per organisation. Eighteen of the 61 organisation contributed fewer than 50 responses and six contributed more than 250 (compared to two last year).

The smallest FE or sixth form college had 54 teaching staff employees; the largest had 805. On average, participating colleges had a mean \pm standard deviation of 265 \pm 178.

The smallest participating university had 60 teaching staff in total; the largest had 2,655. On average, participating universities had a mean \pm standard deviation of 1127 \pm 756 teaching staff.

On average, universities collected responses from around 17% of their total teaching staff population, while FE and sixth form colleges collected responses from around 42% of their total teaching staff population.

Table 1: The number of each type of organisation

Organisation type	Number of each type involved in this project
University	26
FE college	31
Sixth form college	4
Total	61

Table 2: Survey type respondent descriptions

Insights survey type	Learner group description
FE	Teaching staff working in a FE/sixth form college
HE	Teaching staff working in a university/HE organisation



Table 3: The number of teaching staff responses and participating
 organisations per UK nation

UK nation

England

Scotland Wales

Northern Ireland

Total

per insights survey type

Insights survey type FE ΗE Total

Participating teaching staff

Providers chose how they recruited teaching staff participants, with guidance from the service team.

No of responses	% responses	No of organisations
4,767	73.0%	45
535	8.2%	4
1,146	17.5%	10
86	1.3%	2
6,534	100%	61

 Table 4: The number of organisations and teaching staff responses

No of organisations	No of responses	% responses
35	3,049	46.7%
26	3,485	53.3%
61	6,534	100 %

Is our sample representative?

For the teaching staff-level analysis we have treated the entire population of responses from each sector as a sample in its own right. We then investigated how representative it is likely to be of the sector overall by comparing the sample with national teaching staff data (where available).

The Higher Education Statistics Agency (HESA) estimates that the UK HE teaching staff population size is in the region of 161,165 in 2017–18 and the Department for Education (DfE) estimates FE teaching staff numbers at 58,312 in 2017–18 (only England and Wales data available for the latter).

When we look at data across the four nations of the UK, the FE data in this report over-represents teaching staff in Wales and underrepresents those in England (Table 5).

The HE teaching staff data in this report slightly over-represents teaching staff in Scotland and slightly under-represents those in England (Table 6).

When we look at the data by gender, the HE teaching staff data in this report over-represents female teaching staff and underrepresents male teaching staff (Table 7). Note there was no equivalent gender data available for FE teaching staff at the population level.

Table 5: A comparison of the total number of FE teaching staff in England and Wales against the insights sample

	Total FE teaching staff population ⁹	FE insights survey 2018/19	Observation
England	91%	69%	Insights data over-represents FE teaching staff from Wales
Wales	9%	31%	

Table 6: A comparison of the total number of HE teaching staff across the four UK nations against the insights sample

	Total HE teaching staff population	HE insights survey 2018/19	Observation
England	83.4%	78.4%	Insights data
Scotland	10.1%	13.2%	slightly over-
Wales	5.0%	6.5%	Scotland and
Northern Ireland	1.4%	1.8%	slightly under- represents England

Table 7: A comparison of the national UK HE teaching staff data for gender in comparison with the insights sample

	HE teaching staff population	HE insights survey 2018/19	Observation
Male	54.5%	45.5%	Insights data over-represents women and under-
Female	45.5%	53.5%	
Other	0%	1.0%	represents men

Uses and limitations of this data

This report contains a question-by-question summary of all the higher and further education teaching staff-level data. The purpose of doing so is to allow all teaching staff voices to be heard.

The data is not weighted to match the national teaching staff population (eg by gender) and therefore we advise against comparing at the level of individual percentage points across the years, especially as the questions and answer options have changed slightly between the years.

Additionally, different organisations have taken part in the survey year-on-year, so we advise against making direct comparisons across the years even when the question wording is exactly the same. A more valid use of these findings would be to compare the experiences of further against higher education teaching staff this year.

In order to compare between sectors and the 2019 student report¹⁰, where relevant the data was then grouped by organisation and analysed statistically.

A number of questions were asked in both the student and teaching staff surveys. The results from this comparative analysis on the two attitudinal questions can be found in section four. To ensure we had valid data for all the more indepth statistical tests carried out in section four comparing teaching staff working in FE and HE sectors, we only included organisations that had samples of at least 100 teaching staff (this figure is very similar to the required sample size based on the sector median average for both FE and HE). The final dataset contained 27 organisations (11 in FE and 16 in HE – see Appendix 2 available to download from digitalinsights.jisc.ac.uk). This also ensured we were able to eliminate outliers in the data.

For the analysis comparing teaching staff and students in section four we only compared scores for teaching staff and students at the same organisation. Again, to ensure we had reliable data we only included organisations that had samples of at least 100 teaching staff and 300 students (figures that reflect a valid sample size from our participating organisations and which are also very similar to the required sample size based on the sector median average for both FE and HE). The final dataset contained 14 organisations (six in FE and eight in HE – see Appendix 2 available to download from digitalinsights.jisc.ac.uk).

Charts and tables in this report may have totals that do not add up to 100% due to rounding to whole percentages.

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



30 Theme one: teaching staff and their digital technology

- 34 Theme two: organisational infrastructure
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- 48 Theme four: professional development

Theme one:

Teaching staff and their digital technology

Do teaching staff personally use assistive technologies (and if 'yes' has their institution provided support to use them)? (Q4 and Q5)

Teaching staff were asked whether they used assistive technologies (eg screen readers, voice recognition, switches). They could choose to answer 'yes (vital to my work)', 'yes (optional choice)' or 'no'. Percentage summary results are shown in Figure 1. For those who said 'yes', they were then asked if their organisation provided them with any support to use assistive technologies (Figure 2).

- » The numbers of teaching staff in FE and HE who considered assistive technologies to be vital (FE: 6%, HE: 5%) or said that they were an optional choice were similar (FE: 11%, HE: 10%)
- Of those who reported needing » or choosing to use assistive technology, 76% of FE and 60% of HE teaching staff said that their organisation provided support to use them. 24% of FE and 40% of HE teaching staff said they were not supported



6%





76% of FE and 60% of HE teaching staff said that their organisation provided support to use assistive technology



Figure 2: The percentage of FE and HE teaching staff who said their organisation provided them with support with assistive technologies or, conversely, did not



How do teaching staff approach the adoption of new technologies? (Q6)

Teaching staff were asked what best described their approaches to adopting new technologies for teaching. They could only choose one answer. Results are summarised in Figure 3.

- » The most popular response for FE and HE teaching staff was that they tended to be early adopters when they saw clear benefits (FE: 43%, HE: 48%). The second most popular response for FE and HE teaching staff was that they tended to adopt new technologies at the pace of their peers (FE: 31%, HE: 32%)
- » FE teaching staff were slightly more likely than HE teaching staff to say they were usually among the first to adopt new technologies (FE: 14%, HE: 11%) and also to say they tended to adopt new technologies after their peers (FE: 12%, HE: 10%), although the percentages for both were relatively low compared to the two middle answer options



Where do teaching staff go for digital support? (Q7)

Teaching staff were asked who supported them most to use digital technologies in their teaching and were allowed to select one of four options. Percentage summary results are shown in Figure 4.

- » The most likely source of digital support for teaching for both FE and HE teaching staff was teaching colleagues; over half of FE teaching staff selected this option (FE: 55%, HE: 33%)
- » HE teaching staff were a lot more likely to turn to support staff compared to FE teaching staff (FE: 14%, HE: 31%)
- HE teaching staff were slightly more likely to turn to online videos and resources compared to FE teaching staff (FE: 27%, HE: 32%)
- » Both FE and HE teaching staff were least likely to turn to family and friends for digital support for their teaching (FE: 5%, HE: 4%)
- » There was a significant difference between HE and FE teaching staff¹¹ in terms of who they turned to the most for digital help and support for their teaching. More FE teaching staff chose to go to their teaching colleagues than the analysis predicts and more HE students approached support staff in comparison to the analysis prediction

"Keep being there as a support it is impossible to keep on track and up to date with everything so keep us updated and promote the various new digital opportunities available to us - thank you."

HE teaching staff



Figure 4: The percentage of teaching staff who identified who or what most supported them to use digital technology in their teaching (they could choose only one answer)



¹¹ df=3, chi square = 397.39, p<0.001



Theme two:

Organisational infrastructure

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Which of these do teaching staff have on-demand access to at their organisation? (Q8)

Teaching staff were asked which of seven named resources and services they had access to whenever they needed them at their organisation. They could select more than one answer. Percentage summary results are shown in Figure 5.

- » 70% of FE teaching staff and 84% of HE teaching staff said they had access to reliable wifi
- » For FE teaching staff, file storage/ backup (83%) and a virtual learning environment (67%) were the most available resources and services while lecture capture (7%) and video-based skills and training (17%) were the least available
- » For HE teaching staff, e-books and e-journals (90%), a virtual learning environment (85%) and file storage/ back-up (82%) were the most available resources and services while video-based skills training (35%) was the least available
- The largest differences between FE and HE teaching staff were lecture capture (FE: 7%, HE: 65%) and e-books and e-journals (FE: 57%, HE: 90%)
- » 3% of FE teaching staff said they had no access to any of the digital resources listed (only 1% of HE teaching staff said the same)



70% of FE teaching staff and 84% of HE teaching staff said they had access to reliable wifi

Figure 5: The percentage of FE and HE teaching staff who said that they had access to different types of digital resource/service at their organisation whenever they needed them (they could select more than one option)







3% 1%

FE



"Make things more compatible with what students access at home. The website and software students access at home are not compatible with on campus provision and this impacts on students' ability to work effectively."

FE teaching staff



How much do teaching staff agree with these statements about their VLE? (Q9)

Teaching staff were asked how much they agreed with five statements about their VLE. They could choose to 'agree', remain 'neutral' or 'disagree'. Percentage summary results are shown in Figure 6 and Figure 7. Where a comparison was possible, the organisational median average differences between teaching staff and students is shown in Table 8.

- » Only 44% of FE teaching staff agreed that they relied on their VLE for their teaching, compared to 73% in HE
- » Around half of FE and HE teaching staff agreed that they found it easy to design and organise course materials on their VLE (FE: 48%, HE: 49%)
- » 36% of FE and 27% of HE teaching staff agreed that they regularly used their VLE for student collaboration. Substantial numbers of teaching staff disagreed (FE: 30%, HE: 41%) with a higher dissonance among HE teaching staff
- » Similarly, 36% of FE and 24% of HE teaching staff agreed that their VLE encouraged them to try different activities. 27% of FE and 39% of HE teaching staff disagreed. Again, the dissonance among HE teaching staff was greater
- The numbers of teaching staff who regularly accessed their VLE using a mobile device were comparatively low (FE: 22%, HE: 18%). Substantial numbers disagreed with this statement (FE: 53%, HE: 63%). When teaching staff were asked if they regularly accessed the VLE on a mobile device, the organisational median average response was 'disagree'; when students were asked the same question the organisational median average response was 'neutral'

FE teaching staff

Figure 6: The percentage of FE teaching staff who 'agreed', had a 'neutral' opinion or 'disagreed' when asked about various aspects of their VLE experience

I rely on the VLE for my teaching



 Table 8: Investigating the organisational median average differences between teaching staff and students

	Organisational median average for teaching staff	Organisational median average for students
I regularly access the VLE on a mobile device	Disagree	Neutral
I rely on the VLE for my teaching/coursework	Agree	Agree

HE teaching	staff			
Figure 7: The percentage of HE teaching staff who 'agreed', had a 'neutral' opinion or 'disagreed' when asked about various aspects of their VLE experience				
I rely on the VL	E for my teac	hing		
	73%		17% 10%	
It is easy to des	sign and orga	nise course	materials	
49%		32%	20%	
I regularly use i	t for student	collaboratio	n	
27%	32%		41%	
It encourages me to try different activities				
24%	37%		39%	
I regularly acce	ss it on a mo	bile device		
18% 199	%	63%		
Agree	Neutral	Disag	Iree	



How much do teaching staff agree with these statements about their digital infrastructure? (Q10)

Teaching staff were asked how much they agreed with five statements about their digital infrastructure. They could choose to 'agree', remain 'neutral' or 'disagree'. Percentage summary results are shown in Figure 8 and Figure 9. Where a comparison was possible, the organisational median average differences between teaching staff and students is shown in Table 9.

- Slightly fewer FE teaching staff than HE agreed that audio visual equipment was reliable and easy to use (FE: 38%, HE 43%)
- A sizable percentage of teaching staff disagreed when asked if teaching spaces were well designed for digital technology use (FE:36%, HE: 30%)

- Around a third of teaching staff agreed that the software available to teach with is industry standard and up to date (FE: 32%, HE: 35%).
 However nearly three in ten FE teaching staff disagreed with the statement (FE: 27%, HE: 19%)
- Teaching staff were slightly more positive about digital media production facilities. Nearly four in ten agreed that these facilities were available when they needed them (FE: 38%, HE: 39%)
- More HE than FE teaching staff agreed that systems for online marking and giving feedback were easy for them to use (FE: 30%, HE: 42%)
- When teaching staff were asked if the software available to teach was industry standard and up to date, the organisational median average response was 'neutral'. However, when students were asked if the software on their course was industry standard and up to date, the organisational median average response was 'agree'

FE teaching staff

Figure 8: The percentage of FE teaching staff who agreed, were neutral or disagreed when asked about various aspects of their digital infrastructure experience

Audio visual equipment is reliable and easy to use

38%	42%	19%
00/0	- TZ /0	1270

Teaching spaces are well designed for digital technology use

25% 39% 30%
25% 39% 30%

The software available to teach with is industry standard and up to date

32%	41%	27%
-----	-----	-----

Digital media production facilities (eg video) are available if I need them

38%	429	%	20%
The system for a is easy for me to	online marking a o use	ind giving	feedback
00	100		070



Table 9: Investigating the organisational median average differences between teaching staff and students

Teaching spaces are well designed for digital technology use (teaching staff)/the technologies we use (students)

The software available to teach with (teaching staff)/used on my course is industry standard and up to date (students)



Organisational median average for teaching staff	Organisational median average for students
Neutral	Neutral
Neutral	Agree

How do teaching staff rate the quality of their organisation's digital provision overall? (Q11)

Teaching staff 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 scale¹². Percentage summary results are shown in Figure 10.

- The organisational median average for teaching staff is 'good', which was the same response from students when asked the same question
- 51% of FE and 58% of HE teaching staff rated their organisation's digital provision as above average (choosing to rate it as either 'good', 'excellent' or 'best imaginable')
- 16% of FE and 14% of HE teaching staff rated it as below average (choosing either 'poor', 'awful' or 'worst imaginable')
- The digital infrastructure mean average rating per organisation ranged from 2.58 to 4.33, with an average of 3.48



of teaching staff rated their organisation's digital provision as above average

Figure 10: The rating scores from FE and HE teaching staff when asked how they rated the quality of their organisation's digital provision (including software, hardware, and learning environment)



¹² 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 <u>uxpajournal.org/wp-content/</u> <u>uploads/pdf/JUS_Bangor_May2009.pdf</u>



Theme three:

Digital teaching



How often do teaching staff carry out a range of digital activities as part of their teaching practice? (Q12)

Teaching staff were asked how often they carried out four elements of digital teaching practice. They could choose 'weekly or more', 'monthly or less' or 'never'. Percentage summary results are shown in Figure 11 and Figure 12.

- » Across all four statements, very few teaching staff carried out the digital teaching practices on a weekly or more basis. The most common response across all but one statement was that they carried out the teaching practices on a monthly basis or less
- Very few teaching staff, in either FE or HE, taught in a live online environment such as a webinar. 87% of FE and 74% of HE teaching staff said they never did this
- 35% of FE teaching staff said they created learning materials in a digital environment on a weekly or more basis. This fell to 24% for HE teaching staff
- » More FE than HE teaching staff used a digital system to give personalised feedback on a weekly or more basis (FE: 28%, HE: 20%). Similarly, more FE than HE teaching staff carried out live polls or quizzes in class on a weekly or more basis (FE: 23%, HE: 11%)





give personalised digital feedback live polling or quizzing:



E 20% FE 23% HE 11%

More FE than HE teaching staff used a digital system to give personalised feedback and carry out live polling or quizzing on a weekly or more basis



How much would teaching staff ideally like digital technologies to be used in their teaching practice? (Q13)

Teaching staff were asked how much they would ideally like digital technologies to be used in their teaching practice and could respond 'more than they are now', 'the same as they are now' or 'less than they are now'. A percentage summary is shown in Figure 13. The organisational median average differences between teaching staff and students is shown in Table 10.

The percentages responding between FE and HE teaching staff were broadly similar:

- Approximately two thirds of teaching staff said that they would like more use of digital technologies than is currently used in their teaching practice (FE: 66%, HE: 62%)
- Around a third of teaching staff preferred the use to be the same as now (FE: 31%, HE: 33%)
- » Very few said they would like less use (FE: 3%, HE: 5%)
- When teaching staff were asked how much they would ideally like digital technologies to be used in their teaching practice, the median average response at an organisational level was 'more than they are now'. However, when students were asked how much they would like digital technologies to be used on their course, the median average response was 'the same as they are now'

Figure 13: The percentage of HE and FE teaching staff who, when asked ideally how much would they like digital technologies to be used in their teaching practice, responded more, the same as or less than they are now



Table 10: Investigating the organisational median average differences between teaching staff and students

	Organisational median average for teaching staff	Organisational median average for students
How much would teaching staff ideally like digital technologies to be used in their teaching practice (teaching staff)/how much would students like digital technologies to be used on their course (students)	More than they are now	The same as they are now

How often do teaching staff carry out a number of specific digital activities as part of their professional educational practice? (Q14)

Teaching staff were asked how often they carried out four types of digital activities as professional educators. They could choose 'weekly or more', 'monthly or less' or 'never'. Percentage summary results are shown in Figure 14 and Figure 15. No similar questions were asked in the student survey

- » FE teaching staff were more likely to carry out all four digital activities on a weekly or more basis compared to HE teaching staff
- » 59% of FE teaching staff said they searched online for digital teaching resources on a weekly or more basis compared to 45% of HE teaching staff

FE teaching staff

Figure 14: The percentage of FE teaching staff who chose 'weekly or more', 'monthly or less' or 'never' when asked if they carried out four different digital activities as part of their professional practice as educators

Search online for digital teaching resources

59%	35%	5%
-----	-----	----

Discuss teaching with peers via an online network or forum

16% 32%	52%
---------	-----

Read up on issues relating to digital education



- » More than half of teaching staff in both FE and HE said they never discussed teaching with peers via an online network or forum (FE: 52%, HE: 54). Only a small proportion did this on a weekly or more frequent basis (FE: 16%, HE: 11%)
- » Around three in ten teaching staff said they never read up on issues relating to digital education (FE: 31%, HE: 30%). However, more than half said they did do this on a monthly or less basis (FE: 52%, HE: 56%)
- Although some teaching staff develop their digital teaching skills (either formally or informally) on a weekly or more basis (FE: 24%, HE: 17%), the majority do this less frequently on a monthly or less basis (FE: 65%, HE: 69%)

HE teaching staff

Figure 15: The percentage of HE teaching staff who chose 'weekly or more', 'monthly or less' or 'never' when asked if they carried out four different digital activities as part of their professional practice as educators

Search online for digital teaching resources



Examples of digital tools or apps teaching staff found really useful in their job roles (Q14a)

A total of 4,427 open ended responses were received to the question 'Please give an example of a digital tool or app you find really useful in your job role'. A randomised sample of 10% of the responses were analysed (n=443 total, n=209 HE, n=234 FE) in order to understand the key tools and apps that teaching staff find most useful.

More than 190 individual tools or apps were mentioned, highlighting the huge range of software and tools available. The cited tools or apps varied and included, among other things, interactive learning platforms, VLEs, social media, Microsoft tools, organising software, presentation software/ tools, assignment management, subject specific tools/apps and video tools.

FE teaching staff

Figure 16: A word cloud illustrating the frequency of terms used by all FE teaching staff who responded to the question 'Please give an example of a digital tool or app you find really useful in your job role'



HE teaching staff

Figure 17: A word cloud illustrating the frequency of terms used by all HE teaching staff who responded to the question 'Please give an example of a digital tool or app you find really useful in your job role'





Within FE, Kahoot (n=37) and Google products (n=32) dominated responses of apps/tools mentioned, indicating these have a strong impact in this sector. Showbie (n=16) and YouTube (n=13) also received more than 10 responses.

When looking at groups of similar tools, interactive learning/game-based tools (eg Kahoot, Socrative, Quizlet), VLEs (eg Moodle, Blackboard, Canvas) and Microsoft tools got the largest number of grouped mentions within FE. Within HE there were four individual tools that received 10 responses or more. These were Padlet (n=16), Kahoot (n=13), Google (n=10) and Poll Everywhere (n=10). VLEs were the next most cited tool.

When looking at groups of similar tools, interactive learning tools (eg Kahoot, Socrative, Quizlet), VLEs (eg Moodle, Blackboard, Canvas) and social media (eg YouTube, Twitter, WhatsApp) got the largest number of grouped responses.



How much do teaching staff agree that their organisation provides them with support for various aspects of their digital practice and continuous professional development (CPD)? (Q15)

Teaching staff were asked if their organisation provided them with CPD support for various aspects of their digital practice. They could choose 'agree', remain 'neutral' or 'disagree'. Percentage summary results are shown in Figure 18 and Figure 19. Where a comparison was possible, the organisational median average differences between teaching staff and students are shown in Table 11.

Theme four:

Professional development



"The main barrier to support my digital teaching practice is time. CPD training is very good but the opportunity to follow this up with practical development to embed the skills in my practice is lost among the many other demands on my time. I would love oneto-one development time with support staff to help - not just an hour after a CPD event in a group of up to 25 others."

FE teaching staff

The differences in the percentages who agreed to the five statements, between FE and HE teaching staff, were relatively small:

- Few teaching staff agreed they received reward or recognition when they developed digital aspects of their role (FE: 14%, HE: 9%). Substantial percentages disagreed with this statement (FE: 39%, HE: 52%)
- Similarly, small percentages of teaching staff agreed that they had time and received support to innovate (FE: 15%, HE: 13%) and the majority disagreed (FE: 48%, HE: 57%)
- » Approximately a third of teaching staff agreed that they received guidance about the digital skills they were expected to have as a teacher (FE: 33%, HE: 27%), most gave a neutral response (FE: 46%, HE: 44%) and sizeable numbers disagreed (FE: 21%, HE: 30%). More HE teaching staff disagreed with this statement than agreed
- Over a third of teaching staff agreed that they had regular opportunities to develop their digital skills (FE: 36%, HE: 34%) but a quarter of both FE and HE teaching staff disagreed. The majority gave a neutral response
- » Very few teaching staff agreed that they had the opportunity to be involved in decisions about digital services (FE: 15%, HE: 14%) and many disagreed (FE: 41%, HE: 46%)
- » Both teaching staff and students, at an organisational level, were on average (median) likely to respond 'neutral' when asked if they either had regular opportunities to review and develop their digital skills or had the opportunity to be involved in decisions about digital services



Substantial numbers of teaching staff feel they do not have the time and support to innovate





FE teaching staff

Figure 18: The percentage of FE teaching staff who chose 'agree', 'neutral' or 'disagree' when asked if their organisation provided them with digital CPD support

Guidance about the digital skills you are expected to have as a teacher



HE teaching staff

Figure 19: The percentage of HE teaching staff who chose 'agree', 'neutral' or 'disagree' when asked if their organisation provided them with digital CPD support

Guidance about the digital skills you are expected to have as a teacher

27%	44%		30%	
Regular opportunities to develop your digital skills				
34%	4	1%	25%	
Time and support to innovate				
13% 3	1%	57%		
Reward/recognition when you develop digital aspects of your role				
9% 3	9%	52	%	
Opportunity to be involved in decisions about digital services				
digital services	5			
14%	40%	4	6%	
14%	40%	4	6%	

Table 11: Investigating the organisational median average differences between teaching staff and students

	Organisational median average for teaching staff	Organisational median average for students
How much do you agree that your organisation provides you with regular opportunities to develop your digital skills (teaching staff)/I have regular opportunities to review and update my digital skills (students)	Neutral	Neutral
How much do you agree that your organisation provides you with the opportunity to be involved in decisions about digital services (teaching staff)/learners are given the chance to be involved in decisions about digital services (students)	Neutral	Neutral

How well informed do teaching staff feel in relation to their digital responsibilities? (Q16)

Teaching staff were asked if they were informed by their organisation about their responsibilities in five areas of practice. They could choose to 'agree', remain 'neutral' or 'disagree'. Percentage summary results are shown in Figure 20 and Figure 21. Where a comparison was possible, the organisational median average differences between teaching staff and students is shown in Table 12.

Across all five areas of practice, FE teaching staff were more likely to agree that they were informed about their responsibilities compared to HE teaching staff:

- FE teaching staff were much more likely to agree than their HE colleagues that they were informed about their responsibilities in regard to ensuring students behave safely online (FE: 60%, HE: 18%). While only 8% of FE teaching staff disagreed with this statement, 40% of HE teaching staff disagreed that they had been informed
- » Similarly, when asked about their responsibilities with regard to their health and wellbeing in the digital workplace, FE teaching staff were also much more likely to agree than their HE colleagues (FE: 40%, HE: 20%) and those that disagreed were fewer in FE (FE: 18%, HE: 40%)
- » Only 26% of FE and 16% of HE teaching staff agreed that they were informed about their responsibilities in relation to assistive and adaptive technologies. These differences align with the findings in Q5 in relation to organisational support with assistive technologies, where substantial numbers of staff said their organisation had not provided any support with assistive technologies (FE: 24%, HE: 40%)

- Around three-quarters of FE teaching staff (77%) agreed that they were informed about their responsibilities in regard to managing learner data securely – this fell to 59% for HE teaching staff
- Approximately half of teaching staff agreed that they were informed about their responsibilities in regard to digital copyright and licensing (FE: 56%, HE: 48%)
- When teaching staff were asked if they felt they were informed of their responsibilities with regards to ensuring students behave safely online, the organisational median average response was 'neutral'. However when students were asked if their organisation helped them stay safe online, the organisational median average response was 'agree'



FE teaching staff

Figure 20: The percentage of FE teaching staff who chose to 'agree', remain 'neutral' or to 'disagree' when asked if they felt they were informed about their responsibilities with regard to five statements of digital practice

Managing learner data securely



HE teaching staff

Figure 21: The percentage of HE teaching staff who chose to 'agree', remain 'neutral' or to 'disagree' when asked if they felt they were informed about their responsibilities with regard to five statements of digital practice

Managing learner data securely



Table 12: Investigating the organisational median average differences between teaching staff and students

	Organisational median average for teaching staff	Organisational median average for students
Do you agree that you are informed of your responsibilities with regards to managing learner data securely (teaching staff)/the institution protects my data privacy (students)	Agree	Agree
Do you agree that you are informed of your responsibilities with regards to ensuring students behave safely online (teaching staff)/ the institution helps me stay safe online (students)	Neutral	Agree

How do teaching staff rate the support they receive from their organisation to develop the digital aspects of their role? (Q17)

Teaching staff were asked to rate the support they received from their organisation to develop the digital aspects of their role. This was done using a Likert scale of adjectives derived from the system usability scale¹³. Percentage summary results are shown in Figure 22.

» The median average rating for the support teaching staff received from their organisation to develop the digital aspects of their role was 'average' for both FE and HE teaching staff

Figure 22: The rating scores from FE and HE teaching staff when asked to provide an overall quality rating for the support they received from their organisation to develop the digital aspects of their role



- » Under half of teaching staff rated their organisation's support to develop the digital aspects of their role as above average and a substantial proportion rated it as below average:
 - **»** 45% of FE and 41% of HE teaching staff chose to rate it as either 'good', 'excellent' or 'best imaginable'
 - » 19% of FE and 23% of HE teaching staff chose to rate it as either 'poor', 'awful' or 'worst imaginable'
 - » The mean average rating on this question per organisation ranged from 3.03 to 4.37, with an average of 3.69

¹³ 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 <u>uxpajournal.org/wp-content/</u> uploads/pdf/JUS_Bangor_May2009.pdf

What one thing should their organisation do, or do better, to support their digital teaching practice? (Q18)

A total of 4,491 open-ended responses were received to the free text data question 'What one thing should our organisation do or do better to support your digital teaching practice?' A randomised sample of 10% of the responses was analysed (n=449 total, n=246 HE, 203 FE) in order to understand the broad themes surrounding how to better support teaching staff with digital teaching practice. Percentage summary results for these broad themes are shown in Figure 23 and Figure 24. Findings suggest that personal confidence and knowledge are key to the implementation of digital teaching practice. Teaching staff need to feel knowledgeable and motivated to try out new digital teaching practices and their efforts need to be supported by organisational infrastructure and guidance. The key barriers that are preventing this were spread across several categories, three of which dominated the majority of responses for both sectors:

- » Software, infrastructure and systems
- » Training and CPD
- » Time and timetabling



FE teaching staff

Figure 23: Themed analysis of FE teaching staff responses when asked what one thing their organisation should do, or do better, to support their digital teaching practice

Software, infrastructure and systems



27%
Time and timetabling
25%
Help and support
10%
Organisation and culture
5%
Other and miscellaneous comments



Teaching

"In the 'classroom' the use of digital technologies inevitably requires different interactions, relationships and expectations for tutors and students. After more than ten years teaching at the university there are times recently when I have felt completely deskilled."

HE teaching staff

HE teaching staff

Figure 24: Themed analysis of HE teaching staff responses when asked what one thing their organisation should do, or do better, to support their digital teaching practice

Software, infrastructure and systems

23%

Training/CPD

20%

Time and timetabling

19%

Help and support

18%

Organisation and culture

9%

Other and miscellaneous comments

7%

Teaching

4%

"We need more tutoring from digital industry professionals and ongoing support after."

FE teaching staff

Digital infrastructure and environment

Comments suggested that poor investment and lack of compatibility in supporting technology, software and systems was limiting the ability and confidence of teaching staff to try out and implement digital teaching practices:

- » Lack of technological investment to support digital teaching practice was clearly an issue in both FE and HE. Legacy equipment and poor supporting infrastructure were cited as key barriers. Slow, antiquated equipment and connections limited progress in this area
- » For FE, access to equipment was also a key issue. Provision of computers in classrooms and learning environments was often felt to be lacking or variable. Teaching staff requested an increase in the volume of computers and other hardware available for use
- » Access to reliable and relevant software was also often cited as a barrier across both sectors, with slow, unreliable or out of date software adding another layer of effort for teaching staff
- » HE staff also commented on improvements to the VLE, particularly regarding compatibility with other systems. This highlights the importance of full integration among critical systems involved in supporting digital teaching practice
- Other comments around technology and systems covered consistency in systems across campus/teaching facilities, ensuring new technologies were appropriate and keeping up with the volume of new technologies

"The computer infrastructure is so unreliable at my organisation that I couldn't even fill in this survey on my work computer – I've had to use my own personal device. My organisation will never be a leader in digital technologies in teaching until it can manage to maintain an even vaguely usable IT infrastructure."

HE teaching staff

"Please provide staff and students with updated, reliable, fast and efficient computers, laptops and iPads as they are very slow."

FE teaching staff

"Software is often clunky and difficult/inefficient to use which is a big disincentive for some possibilities." HE teaching staff

"Support integration of Moodle with examination databases."

HE teaching staff

"VLE integrated with Web 2.0 technology applications." HE teaching staff

Training/CPD

Feeling confident enough to implement digital teaching technologies and ways of working was clearly critical for teaching staff. A lack of relevant, actionable training and CPD opportunities were cited as key barriers to this:

- » Offering more training and CPD opportunities in a range of formats was identified as a key area for improvement, for both FE and HE – providing teaching staff with the time to learn and improve so they could gain the confidence required for the classroom. A single training session, with no further support or follow-up sessions, was not deemed sufficient to support the transition from theory to implemented practice
- Ensuring that the training offered is relevant and actionable, and that it allows practitioners to understand the different tools available and how these could be implemented, was also identified as a key area for improvement
- Teaching staff in HE required greater access to hands-on training that supports the practical application and embedding of new digital teaching tools and practices within a learning environment

"Increase frequency and availability of training for digital tools."

HE teaching staff

"I would like to have more regular training."

FE teaching staff

"Developing skills in using digital technologies, supporting lecturers to effectively embed the use of digital technologies in their learning and teaching practice, and providing support for cultural change."

HE teaching staff

"Promote, contribute to and invest in subject specific CPD."

FE teaching staff

"It would be good to have some technical support in the classroom the first time you trialled something new, such as a class polling exercise such as Mentimeter. The other option would be to 'rehearse' getting something new organised with support. One of the reasons many tutors don't trial new technologies is that they are afraid they will not be able to manage/deliver them in front of students, and that this will impact adversely on the learning experience and also create embarrassment. It is not enough to be given instruction on how to use new technology, we need to be able to try it out in a situation where we can either fail and it won't matter, or where we have some support 'on the day', as it were...."

HE teaching staff

Time/timetabling

Teaching staff identified time pressures and busy teaching schedules as things that prevented them from making headway in using digital technologies. Lack of time allocated to explore and experiment with different technologies prior to going 'live' in a teaching situation was regarded as a critical barrier to implementation – teaching staff did not feel sufficiently knowledgeable to trial new technologies or digital teaching practices:

- » A large number of responses under this theme in both FE and HE indicated that teaching staff were looking for more time and support to be allocated, to help them to transition the learning and practising of new digital skills into confident teaching practice
- Lack of time to experiment, explore and try different things out was also cited as a key problem
- In line with the above, lack of time to develop supporting materials and resources for digital teaching were also noted as a problem, particularly in FE
- Other key areas for improvement were around help and support, particularly in HE (more support, relevant discipline specific support and sharing of good practice) and organisational culture (strategic direction/ guidance, engagement/consultation of teaching staff and reward/recognition in HE)
- » These findings are backed up by other research:
 - The Association of Colleges in its College IT and Digital Technology Survey 2018¹⁴ identified practitioner skills and confidence with technology (93%) and practitioner lack of time to learn new skills (77%) as the top two most selected barriers to making more use of education technology
 - The UCISA 2019 Digital Capabilities Survey Report¹⁵ identified the top six barriers for students and staff as: lack of money (93%); lack of time (93%); departmental culture (88%); lack of support staff (79%); and lack of awareness of available support (79%)

"More time in the role to develop digital enhanced ideas." HE teaching staff

"Allocate time where applications can be used and practiced before using them in the classroom." FE teaching staff

"Allow for more time (eg a one-day workshop) to focus on developing digital teaching practice. If this is perceived as an 'extra', it may be challenging for teaching staff members to allocate time to improve their digital teaching knowledge and practice, on top of having to deal with compulsory activities linked to their role."

HE teaching staff

"Give us time during CPD days to explore digital teaching options and share ideas within our teams." FE teaching staff

"It's difficult to find the time to develop new ideas as the semester progresses – I tend to have to think everything through in summer and put into place – so not very reactive if something interesting comes up."

HE teaching staff

"Allow time and support away from teaching to be given opportunities to enhance, develop and prepare digital resources as its always in my own time – or I am unable to attend training due to teaching commitments."

FE teaching staff

"Time to learn how to use them, test them and build them into teaching."

HE teaching staff

¹⁴ Corke, D. (2018). Digital Technology Survey 2018. Association of Colleges. Available from: <u>aoc.co.uk/about-colleges/research-andstats/surveys-and-research/aoc-surveys</u>

¹⁵ UCISA digital capabilities group (2019). The 2019 Digital Capabilities Survey Report. UCISA. Available from <u>ucisa.ac.uk/digcap</u>



Additional detailed analysis

Comparing teaching staff attitudes between sectors

We compared the attitudes of teaching staff on the two seven-point attitudinal questions to see if there was a statistically significant difference in the mean average scores between the FE and HE sectors. The two attitudinal questions were:

- » Q11 Overall, how would you rate the quality of this organisation's digital provision (software, hardware, learning environment)?
- » Q17 Overall, how would you rate the support you receive from your organisation to develop the digital aspects of your role?

To test for significance we used an independent samples t-test (two-tailed) on the mean average scores for both FE and HE across both questions. The final dataset contained 27 organisations (11 in FE and 16 in HE – see Appendix 2 available to download from digitalinsights.jisc.ac.uk).

There was no significant difference between the mean average scores for FE and HE sectors (based at the organisational level) for the two attitudinal questions (p>0.5 for both questions). We can therefore conclude that there is no statistical difference in the opinions of HE and FE teaching staff when it comes to their ratings of digital provision and support for their digital development.

Differences by gender, time in post and time at organisation

We have looked at whether three variables had a significant effect on responses to the two seven-point scale attitudinal questions (Q11 and Q17) from the teaching staff insights survey. The variables were:

- » Gender
- » How long staff have worked in a teaching/ lecturing role
- » How long they have worked at their current organisation

The hypothesis is that certain groupings may be more excluded from the digital environment in their organisations compared to others and may give lower rating scores to the two attitudinal questions.

Mean scores for all groups, by FE and HE, for Q11 and Q17 can also be found in Appendix 3 (available to download from digitalinsights. jisc.ac.uk).

All results were analysed at the individual teaching staff level and analysis was carried out using a Kruskal-Wallis non-parametric test to identify statistically significant differences between responses (eg male versus female), within each sector.

Gender

The hypothesis is that certain gender groups may be more excluded from the digital environment in their organisations compared to others and may give lower rating scores to the two attitudinal questions.

The gender category 'other' was excluded from the analysis due to its small sample size.

For HE teaching staff, women were shown to have a significantly more positive satisfaction rating compared to men in relation to their organisational digital provision (Q11)¹⁶. In contrast, for FE teaching staff there was no effect of gender on the average organisational digital provision rating.

For either HE or FE teaching staff, there was no effect of gender on the average rating for the support they received from their organisation to develop the digital aspects of their role (Q17).

It's difficult to say whether the statistically significant difference found is organisational or whether they are societal in relation to gender (or both). Further analysis of the teaching staff survey will be needed to explore these findings in more detail.

¹⁶ Kruskal-Wallis (df=1, p<0.005)

Time in role

This guestion had four response categories:

- » Less than one year
- One to three years
- Four to nine years
- » Ten years or more

The Kruskal-Wallis tests for statistical differences in the different combination of pairs of response categories.

In a pairwise analysis for HE teaching staff, those who had been working for ten years or more in their teaching/lecturing role were significantly less likely, compared to the other groups, to rate their organisational digital provision highly¹⁷. Additionally, those who had been working for four to nine years in their teaching/lecturing role were significantly less likely, compared to those who had been working less than one year, to rate their organisational digital provision highly¹⁸.

For FE teaching staff, those who had been working less than a year in their teaching/lecturing role were significantly more likely, compared to other groups, to rate their organisational digital provision highly¹⁹. Additionally, those who had been working for one to three years in their teaching/lecturing role were significantly more likely, compared to those who had been working ten years or more, to rate their organisational digital provision highly²⁰.

¹⁷ Kruskal-Wallis (df=3, p<0.005) – (pairwise 'less than a year' vs 'ten years or more' p<0.005, 'one to three years' vs 'ten years or more' p<0.005 and 'four to nine years' vs 'ten years or more' p<0.005)

¹⁸ Kruskal-Wallis (df=3, p<0.005) - (pairwise 'less than a year' vs 'four to nine years' p<0.05) ¹⁹ Kruskal-Wallis (df=3, p<0.005) – (pairwise 'less than a year' vs 'ten years or more' p<0.005, 'less than a year' vs 'four to nine years' p<0.005 and 'less than a year' vs 'one to three years' p<0.05)

²⁰ Kruskal-Wallis (df=3, p<0.005) – (pairwise 'one to three years' vs 'ten years or more' p<0.005)

Looking at the rating scores for Q17, there was no statistically significant difference between the length of time teaching staff in HE had worked in their teaching/lecturing role as to the rating they gave for the support they received from their organisation to develop the digital aspects of their role.

For FE teaching staff, the only difference was that those who had been working less than a year in their teaching/lecturing role were significantly more likely, compared to those who had worked in their role four to nine years or ten years or more, to rate more highly the support they received from their organisation to develop the digital aspects of their role²¹.

It appears that length of time teaching staff had worked in their teaching/lecturing role did have a significant effect on their rating of organisational digital provision (Q11) but less so on their rating of the support they received from their organisation to develop the digital aspects of their role (Q17). Further analysis of the teaching staff insights survey will be needed to explore these findings in more detail.

How long they have worked at their current organisation

This question had the same four response categories as the previous section:

- » Less than one year
- » One to three years
- » Four to nine years
- » Ten years or more

Again, pairwise Kruskal-Wallis tests were carried out on the response categories.

In a pairwise analysis for HE teaching staff, those who had worked at their current organisation for a shorter period of time were more likely to rate their organisational digital provision (Q11) highly, compared to those who had worked there for a longer period²². For FE teaching staff the same was also true²³.

Looking at the rating scores for Q17, those teaching staff in HE who had been working less than a year at their current organisation were significantly more likely, compared to other groups, to rate more highly the support they received from their organisation to develop the digital aspects of their role²⁴. Additionally, those who had been working for one to three years at their current organisation were significantly more likely, compared to those who had been working there ten years or more, to rate highly the support they received²⁵. For FE teaching staff, the findings were very similar²⁶.

Therefore it appears that the length of time teaching staff had worked at their current organisation did have a significant effect on their rating of organisational digital provision (Q11), as well as the rating of the support they received to develop the digital aspects of their role (Q17), with those who had worked shorter amounts of time at their current organisation giving significantly more positive ratings in general. Again, further analysis of the teaching staff insights survey will be needed to explore these findings in more detail.

Comparing teaching staff and student attitudes at the same organisation

We compared the attitudes of teaching staff and students at the same organisation on the two seven-point attitudinal questions to see if there is a correlation in the scores given at the organisational level.

To test for the correlation we used a Pearson's correlation test on the mean average scores for both FE and HE at the organisational level, comparing scores for teaching staff and students at the same organisation. To ensure we had reliable data, we only included organisations that had samples of at least 100 teaching staff and 300 students. The final dataset contained 14 organisations (six in FE and eight in HE – see Appendix 2 available to download from **digitalinsights.jisc.ac.uk**).

Based on a two-tailed significance test, it was found that there is a strong positive correlation in the responses from teaching staff and students at the same organisation²⁷ (see Figure 25 scatterplot) when asked 'overall, how would you rate the quality of this organisation's digital provision (software, hardware, learning environment?' This suggests that an organisation where teaching staff rate the organisational digital provision highly is normally one where the students rate it highly as well (and vice versa). We can therefore conclude that the question is a robust measure of the true nature of the student and teaching staff experience of digital provision.

²¹ Kruskal-Wallis (df=3, p<0.005) – (pairwise 'less than a year' vs 'four to nine years' p<0.005 and 'less than a year' vs 'ten years or more' p<0.005)

- ²² Kruskal-Wallis (df=3, p<0.005) (pairwise 'less than a year' vs 'four to nine years' p<0.005 and 'less than a year' vs 'ten years or more' p<0.005, 'one to three years' vs four to nine years' p<0.005 and 'one to three years' vs 'ten years or more' p<0.005)
- ²³ Kruskal-Wallis (df=3, p<0.005) (pairwise 'less than a year' vs 'four to nine years' p<0.005 and 'less than a year' vs 'ten years or more' p<0.005 and 'one to three years' vs 'ten years or more' p<0.01)
- ²⁴ Kruskal-Wallis (df=3, p<0.005) (pairwise 'less than a year' vs 'one to three years' p<0.01, 'less than a year' vs 'four to nine years' p<0.005 and 'less than a year' vs 'ten years or more' p<0.005)
- ²⁵ Kruskal-Wallis (df=3, p<0.005) (pairwise 'one to three years' vs 'ten years or more' p<0.005)

²⁶ Kruskal-Wallis (df=3, p<0.005) – (pairwise 'less than a year' vs 'four to nine years' p<0.01, 'less than a year' vs 'ten years or more' p<0.005 and 'one to three years' vs 'ten years or more' p<0.05)

²⁷ Pearson's Correlation = 0.659 (p<0.05)

²⁸ Pearson's Correlation = 0.682 (p<0.01)

Secondly, it was found that there is also a strong positive correlation in the responses from teaching staff and students to two different, but related questions²⁸ (see Figure 26 scatterplot). There is a correlation between the level of support that teaching staff reported to develop the digital aspects of their role (Q17) and the student rating for the quality of digital teaching and learning on their course.

This reveals a clear link between teaching staff digital CPD and student satisfaction with the digital teaching and learning experience, and suggests that if organisations want to improve the quality of digital teaching and learning on their courses (as perceived by their students), they need to invest in their teaching staff CPD to develop the digital aspects of their roles.



Figure 25: Pearson's correlation between teaching staff and students from the same organisation in response to the question 'overall, how would you rate the quality of this organisation's digital provision (software, hardware, learning environment)?



course?' (for students)



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Appendix 1

Our thanks to the following organisations that took part in the Jisc digital experience insights teaching staff survey 2018–19 and collected at least five responses from teaching staff between September 2018 and June 2019:

- » Aberystwyth University
- » Barton Peveril Sixth Form College
- » Belfast Metropolitan College
- » Bexhill College
- » Bishop Burton College
- » Bishop Grosseteste University
- » Borders College
- » Bournemouth University
- » Canterbury Christ Church University
- » Cardiff and Vale College
- » Cardiff University
- » Carmel College
- » Cheadle and Marple Sixth Form College
- » Chesterfield College
- » City of Wolverhampton College
- » City, University of London
- » Coleg Gwent
- » Coleg Sir Gar
- » Coleg Y Cymoedd
- » Cranfield University
- » Derwentside College
- » Exeter College
- » Fareham College
- » Furness College
- » Gower College Swansea
- » Grimsby Institute of Further and Higher Education
- » Grwp Llandrillo Menai
- » Harlow College
- » John Leggott Sixth Form College
- » Keele University

- » Lakes College West Cumbria
- » Leeds College of Music
- » Lincoln College
- » Manchester Metropolitan University
- » Neath Port Talbot College
- » New College Durham
- » Newham Sixth Form College
- » Northampton College
- » Pembrokeshire College
- » Peterborough Regional College
- » Royal Agricultural University
- » Royal Conservatoire of Scotland
- » Staffordshire University
- » Tameside College
- » The Sheffield College
- » The University of Sheffield
- » Trafford College Group
- » Ulster University
- » University of Derby
- » University of Durham
- » University of Glasgow
- » University of Hertfordshire
- » University of Huddersfield
- » University of Lancaster
- » University of Portsmouth
- » University of St Mark & St John
- » University of Westminster
- » University West Scotland
- » Walsall College
- » WMC Camden College
- » York St John University

Appendices 2 and 3 can be downloaded from digitalinsights.jisc.ac.uk/our-service/our-reports.





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