

Scottish Colleges Digital Infrastructure Update

Jisc

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Jisc Report

This report is made up of two sections – the first, is an analysis of the UK-wide college sector **infrastructure reviews** carried out by Jisc, presenting the themes that we consider to be pertinent to Scottish colleges. The second is an analysis of the data provided by Scottish colleges through their use of the Jisc **Digital Elevation Tool**.

Infrastructure Review Trends of 2025

Predominant data extrapolated from Infrastructure Reviews in the UK in 2025 highlighted common themes across the sector. Of the 11 infrastructure reviews in 2025, at least 9 raised concerns about the same risks to their institutions, and we provided guidance on how to mitigate them. This provides some update from the **analysis of infrastructure reviews 2020-2024**.

Cybersecurity

Cybersecurity risks are ongoing and growing, and are now a top IT concern for most institutions. It is widely viewed as a matter of when, not if, institutions will become a victim and pressures such as skills and knowledge gaps are worsening the challenge. Many institutions lack the budget to build dedicated security teams or operate an internal security operations centre, so they rely on outsourced services.

The Cyber Essentials standard of compliance was mandated elsewhere in the UK for FE institutions, but it is not currently mandated in Scotland. These basic security standards statistics show that 7 Scottish colleges have their Cyber Essentials certifications expiring in 2026 and 12 in 2027, with some remaining without certification.

11 colleges have previously conducted a Jisc Infrastructure review in the past five years. The mandate for Cyber Essentials or Plus could significantly impact business-as-usual institutions that are merely reacting, negatively affecting services and delivery to college users due to time constraints for those who have not obtained certification.

IT support ratios

The FTE ratio of IT team members who can fix problems to users who could experience issues and require assistance is generally increasing year on year due to funding constraints. Whilst it is great that the student count increases, sometimes an oversight is seen in the IT department that must service those users. The average ratio across the 11 UK institutions reviewed was 1:844. Colleges with a ratio of over 1:1,000 often find delivering services and maintaining infrastructure challenging unless significant investment in automation has been made.

Staffing levels are causing major issues across the board as they try to serve the many facets of an educational institution. Given the business-as-usual requirements of reactive work on a service desk, feedback confirms that these numbers adversely impact proactive measures such as resilient backup testing, proactive patching, and service improvements.

Staff retention and continued professional development remain problems for both institutions and staff, as is often the case in the sector, and some staff leave due to a lack of formal training.

No self-progression is observed; those who stay are sometimes victims of knowledge stagnation.

Many college staff also leave the sector for opportunities in the commercial sector or elsewhere in the public sector, in pursuit of higher pay, better CPD, and career progression.

Staffing levels are down by nearly 1% per year and are currently 9.9% lower than in 2015-2016, **compared with 2024-2025**. With examinations and non-IT courses now requiring technical support, such as manual labour courses, IT support has never been in such high demand.

Computing costs

Capital expenditure on hardware to meet compliance and demand is also an ongoing concern in the sector. Technological advancements increase the demand for hardware capabilities, leading to devices that are no longer technically sufficient for use and potentially impacting the delivery of classes, especially those that are hardware-intensive at a much faster rate than seen in previous years.

Moreover, operating system security compliance is a major factor in determining a device's lifespan. In 2025, the end of support for Windows 10 saw many institutions invest significantly to ensure their hardware fleet remained secure and usable for staff and students. This will be an ongoing requirement, as devices must meet the minimum requirements for Windows 11 and its lifecycle. Across the sector, there have been instances of unofficial measures taken to bypass the minimum technical requirements for equipment to run Windows 11, leaving them functional but vulnerable and, overall, reducing their security posture while extending the hardware's lifespan.

Negligence in either of these two will cost the institution more than just financial concerns; the inability to provide hardware that meets software requirements, fundamental to some courses, could incur reputational damage. In a time when AI has significantly increased device costs, computing hardware is at an all-time high.

In addition, some institutions were hit by the Broadcom licensing model change, which saw renewal prices soar significantly, with some institutions seeing a **268% increase**. Some institutions were unaffected, but those that were had to change Hypervisors and potentially upskill staff or migrate their fleets within a limited time frame.

Data governance and compliance

Data governance and compliance regularly appeared as a widely recognised concern. The regulatory and legal compliance pressures on institutions to demonstrate that they retain data for as long as necessary and can locate and retrieve it for legal requests, such as subject access requests. Several reviews found that weak retention/archiving was associated with higher risks and slower, less timely responses to statutory requests.

Undefined retention policies led to excessive data collection, resulting in redundant/obsolete data and data sprawl, slowing and complicating cloud migration projects. To achieve effective data governance, Jisc recommends a dedicated resource, for example, a SharePoint Administrator. Data management software and the use of Microsoft 365 technologies, such as Purview, are also recommended and may incur additional licensing costs.

The risks of data compromise and leaks are of concern, with some not implementing associated restrictions, such as USB device prevention, sensitivity labels, automated expiration, and

archiving arrangements. Coupled with the risks of data sprawl, these factors increase costs and risks, making modern transformations more difficult.

Review of Digital Elevation Tool underpinning technologies responses

This section provides an aggregated update on the condition of digital infrastructure across Scotland's colleges in 2026. It draws on analysis of the Jisc **Digital Elevation Tool** dataset and the supporting infrastructure analysis provided, and it focuses on sector-level patterns rather than institutional performance.

The overall picture is positive. Scottish colleges show a stronger implementation profile in Underpinning Technologies than the wider benchmark dataset, with a higher proportion of Completed responses and lower shares of In Progress and Not Started activity.

The evidence also shows that progress is incomplete. The sector has established firmer digital foundations, particularly in operational and learner-facing areas, but maturity remains uneven and a sizeable share of activity is still concentrated at Foundation level rather than consistently at Transform or Elevate.

Context

The following analysis derives from the use of Jisc's Digital Elevation Tool, which allows colleges to self-evaluate (against validation statements connected to competency areas across five key themes: learner experience, curriculum development, staff experience, leadership/culture/governance, and underpinning technologies.

The subthemes addressed under Underpinning Technologies are:

e-infrastructure, cyber security, wi-fi, cloud, IT skills, identity and authentication, data and business intelligence, and learning space and estate management.

These cover competencies in the following areas:

digital infrastructure, digital communications, digital connectivity, information security training, cyber security governance, cyber security accreditation, cyber security authentication, cyber security mitigation, cyber security incident response, cyber security training and assessment, wi-fi, cloud investment, cloud adoption, cloud as a service, IT specialist skills, trust and identity, digital data integrity, learner analytics, digital estates, space utilisation and learning space design.

The following analysis considered Scottish colleges' responses in the Underpinning Technologies subset of the dataset, accounting for 2,163 responses out of 15,933 responses in that theme across the UK-wide dataset. While the detailed source analysis included institution-level variation, the purpose of this report is to distil the findings into a sector-wide account of digital infrastructure condition and direction of travel.

Colleges using the Digital Elevation Tool decide which areas to prioritise. They are therefore free to record, against each competence, whether it is Completed, In Progress, Not Started or Not a Priority. Within Underpinning Technologies, the Scottish subset records 56.4% of responses as Completed, 21.8% as In Progress, 16.1% as Not Started, and 5.7% as Not a Priority. This compares with the full benchmark dataset, where 44.8% of responses are Completed, 27.7% are In Progress, 21.5% are Not Started, and 6.1% are Not a Priority.

This gap is material because it suggests that Scotland's colleges are further through the implementation cycle for core digital infrastructure than the UK-wide comparison group. This is to be expected, due to the Tool's inclusion in the Tertiary Quality Enhancement Review requirements (and the explicit inclusion in quality processes is unique to Scotland). In broad terms, the sector appears to be operating from a stronger base of operational capability and delivery progress than the benchmark average.

Infrastructure maturity

Within the Tool, against specific validation statements, each college will evaluate itself as to being at one of the following three levels: Foundation is the "must-haves", Transform is the "should-haves" and Elevate is the "can-haves". In more detail, these are:

- **Foundation**: the policies, processes and digital, data or technology elements that must be in place for a provider to build on.
- **Transform**: built on the foundations, these are the same elements Jisc expects providers already have in place, or plan to put in place, to transform the end-user experience.
- **Elevate**: built on the transform elements, these are aspects some UK FE and skills providers may already have, but most will not yet; early adopters are the innovators whose experience will influence others.

The maturity split within the Scottish Underpinning Technologies subset provides a more nuanced view of infrastructure condition. Responses are distributed as 37.4% Foundation, 25.7% Transform, 28.8% Elevate, with the remainder classed as Not a Priority.

This profile indicates that Scotland's colleges have moved beyond a purely baseline position, but it also shows that advanced maturity is not yet embedded across the whole sector. A substantial share of activity remains rooted in foundational capability, which means that delivery progress has not yet translated into uniformly high-end digital infrastructure maturity.

That distinction is important for interpretation. A high share of Completed responses can indicate successful implementation of essential infrastructure without implying that the underlying capability is fully transformed. The Scottish position in 2026 appears to fit that pattern: stronger implementation, improving resilience, but a continuing need to push more activity from Foundation into Transform and Elevate.

Areas of strength

The supporting analysis highlights several competency areas where the sector appears comparatively mature. These include Digital Learning Environment, Digital Assessment, Digital Inclusion, wi-fi, and Cloud Investment, all of which show relatively stronger completion patterns and visible higher-level activity.

These strengths are significant because they correspond closely to the infrastructure capabilities that underpin continuity, access, learner experience, and service resilience. Stronger performance in these areas suggests that colleges have continued to invest in practical digital foundations such as connectivity, digital platforms, and cloud-enabled service delivery.

The pattern also suggests that progress has been strongest where implementation routes are clearer and where benefits are easier to observe and operationalise. Areas that can be standardised, procured, or managed through established delivery models appear to have advanced more consistently than areas that rely on behaviour change, capability development, or more complex governance.

Areas requiring further development

The weaker areas identified in the supporting analysis are Curriculum Staff Digital Confidence, Learner Progress Monitoring and Improvement, Diagnostic Assessment and Progress, and Digital Vision and Insight of Governors. These themes are closely linked to the effective use of infrastructure, data, and digital leadership rather than to technical provision alone.

This matters because it signals a shift in the nature of the challenge facing the sector. Earlier progress appears to have improved the technical and operational base, but the next stage of development depends more on how well that infrastructure is integrated into teaching practice, learner support, data-informed decision-making, and governance.

In practical terms, this means future improvement will not come only from additional technology investment. It will also require stronger organisational capability, more confident staff use of digital systems, and better leadership visibility of the value and condition of digital infrastructure.

Strategic implications

The aggregated evidence points to a sector that is moving in the right direction and compares well against the benchmark dataset on core technology implementation. Scotland’s colleges appear to have a firmer infrastructure base than the wider comparator group, and that provides a useful platform for further development.

However, the evidence does not support complacency. The remaining Foundation-heavy pattern and the persistence of In Progress and Not Started activity indicate that digital infrastructure maturity is still uneven across the system. The next phase of sector improvement will depend on reducing that unevenness and translating infrastructure delivery into deeper transformation.

Three implications follow from this position. First, the sector should continue to protect and modernise the core infrastructure domains that are already showing momentum. Second, remaining foundational gaps should be reduced so that baseline digital capability is more consistently secured across the college system. Third, infrastructure strategy should be linked more explicitly to workforce capability, learner data, and governance maturity, because those areas are likely to determine whether the next stage of improvement is incremental or transformative.

Conclusion

Scotland's colleges entered 2026 with a stronger aggregate digital infrastructure position than the UK-wide benchmark in Underpinning Technologies evaluation as part of Jisc's Digital Elevation Tool. The sector appears to have made progress in the core systems and services that support digital delivery, resilience, and learner access.

Building on that base, the evidence suggests that the next gains will come less from establishing infrastructure and more from deepening how it is used, governed, and connected to institutional capability. The overall assessment is therefore one of positive progress, tempered by the need for more consistent maturity and stronger translation from infrastructure delivery into system-wide digital transformation.

Find out more
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