Irish National Digital Experience (INDE) Survey:
Findings from students and staff who teach in higher education

Summary of Main Report
Executive Summary

Across all countries and contexts, higher education institutions are confronted with the question of how to adapt and shape higher education in an increasingly digital, networked world. At a time of unprecedented global challenge, the importance of confident, supported engagement with digital technology has become clear. The findings of the Irish National Digital Experience (INDEXX) Survey, presented in this report, provide a comprehensive and nuanced understanding of the digital engagement, experiences and expectations of students and staff who teach across our sector.

Overall, the INDEXX Survey stands as an important benchmark for Irish higher education, recorded at a key moment in time. Ireland is the only country with national data representative of all students and staff who subsequently experienced the sudden shift to online teaching and learning resulting from the COVID-19 pandemic. The data reflect a sector in which digital technology was considered valuable for learning, and both students and staff who teach were eager for more use of digital technology and additional support to develop their digital skills. The potential, both latent and manifest, which allowed the higher education community to move to teaching and learning online and to transfer, re-purpose and re-imagine existing knowledge and experience reflects the significant Government investment in teaching and learning over the past several years and the sustained efforts of institutions and all those who support staff and students.

The INDEXX Survey has deep roots in the policy and practice contexts of Irish higher education. The publication of the National Strategy for Higher Education to 2030 and subsequent establishment of the National Forum in 2013 accelerated the momentum of teaching and learning enhancement in Ireland, with a distinct focus on building digital capacity that has carried forward to this day. A nationwide consultation conducted by the National Forum in 2013-15 to explore the perspectives and experiences of senior managers, staff and students regarding teaching and learning in a digital world indicated that we could all be using technology more effectively to improve the way we teach, and to transform the ways in which students are enabled to engage with their learning. This consultation resulted in the development of the Roadmap for Enhancement in a Digital World, which identified key drivers for capacity building, encouraged purposeful dialogue between stakeholders, and presented focused, action-orientated ways in which digital learning and digital innovation could be fostered across the sector. The shared vision for building digital capacity that emerged from the Roadmap led to the establishment and implementation of the INDEXX Survey and will be an important touchstone as we continue to interrogate the survey findings and look to the future.

---

The INDEEx Survey

The INDEEx Survey was undertaken in autumn 2019 to explore the digital experiences of students and staff who teach in Irish higher education. Data was collected from 25,484 students and 4,445 staff who teach at 32 higher education institutions. The survey was coordinated and managed by the National Forum in partnership with members of the higher education community. The aim was to highlight what makes a difference to students and staff who teach in Irish higher education, providing an evidence base to inform decision-making and future enhancement of digital teaching and learning.

The INDEEx Survey was composed of two separate online survey instruments: the INDEEx Student Survey, open to all students enrolled on taught programmes of study, both undergraduate and postgraduate, aged 18 and over, and the INDEEx Survey of Staff Who Teach, open to all staff who teach and all who support teaching and learning, including academic, professional and technical staff. Students and staff shared their digital practices, attitudes, preferences and recommendations, as well as their experiences of digital infrastructure, digital skills and support provision, and digital environment and culture within their institutions.

Key strengths of the INDEEx Survey were its breadth in terms of the range and diversity of students and staff who participated, its reach across the sector, its consideration of digital capabilities in different domains, both individual and institutional, and its enabling of national and international benchmarking. The INDEEx dataset is benchmarked with three national datasets available to us via published findings from similar digital experience surveys conducted in the UK (for both students and teaching staff) and Australia and New Zealand (for students).

Consolidated key findings

Importance of digital to student learning in Irish higher education

A majority of students agreed that when digital technologies are used on their course, they understand things better, enjoy learning more, are more independent in their learning and can fit learning into their life more easily. Indeed, half of students indicated that they would like digital technologies to be used on their course more than they are now. Almost three-quarters of staff who teach also indicated that they would like digital technologies to be used in their teaching practice more than they are at present.

Supporting student and staff digital capabilities

Four in ten students said they had regular opportunities to review and update their digital skills. When asked to describe what their institution could do to improve their experience of digital teaching and learning, students requested more interactivity in teaching, in both lectures and online, and emphasised the need for ongoing support for themselves and the staff who teach them in developing digital skills, knowledge and confidence. It is clear that the digital capabilities of students and staff who teach are interdependent and that participatory, co-creative digital pedagogies are valued by students. Indeed, students cited lecturers on their course as their primary support in using digital technology in their learning.

The vast majority of staff who teach engaged in development of their digital teaching skills either formally or informally and more than a third reported that their institution regularly provided opportunities for them to develop their digital skills. There was a relatively even split between the sources of support staff most
relied on to use digital technology in their teaching: online videos and resources, teaching colleagues, and support staff. Close to half of all staff who teach rated as above average the support they received from their institution to develop the digital aspects of their role. When asked to describe what their institution could do to support them in their use of technology for teaching, the most popular response from staff who teach was more and dedicated time to develop digital teaching and learning. This was reinforced by separate findings that half of all staff who teach did not feel that their institution provided them with time and support to innovate or reward/recognition when they developed the digital aspects of their role.

A new understanding of which digital tools and activities are valued

We have never before had such robust national data telling us which digital tools and digital teaching and learning activities students and staff use and value. For example, we know that the digital tool found most useful by students and staff is the virtual learning environment (VLE), and that universal, effective and consistent use of the VLE and provision of lecture recordings were two of students’ top requests for improving their experience of digital teaching and learning. Regarding digital activities, the course-related digital activity most students found useful was polling/quizzing. This new knowledge about what is valued can be combined with related findings regarding support and provision to inform future decision-making. At the time of the INEx Survey, for example, one-quarter of students reported having access to lecture recordings and just under a third of staff who teach reported having access to lecture capture; two-thirds of students reported having access to polling/quizzing on their course, while half of all staff who teach had never carried out live polls or quizzes in class.

Access to wifi, devices and digitally-enabled teaching and learning spaces

Overall, four in five students and two-thirds of staff who teach rated the quality of their institution’s digital provision (software, hardware, learning environment) as above average. Although access to reliable institutional wifi was available to most students and staff who teach, one in five student and staff respondents reported that they lacked such access. When asked how their institution could improve their experience of digital teaching and learning, students’ top suggestion was access to better, faster, more stable wifi.

Student device ownership and use for learning was high overall, but it was not universal. Eight out of ten students used a personally-owned smartphone to support their learning, with one-third of students reporting that they regularly accessed the VLE on a mobile device. While nine out of ten students owned and used a laptop, over one-quarter of students indicated that they would find it useful to have more laptops/tablets on long-term loan. These findings suggest caution in assuming that all student devices are equally suitable or reliable, particularly during the current period of institutional closures with students relying on access to personal devices, software and wifi in order to take part in learning and assessment.

Nearly half of all students but just under a third of staff agreed that teaching spaces were well-designed for digital technologies. Priorities for students, in addition to access to reliable wifi, included adequate access to reliable, up-to-date computers, devices and printers (in classrooms, lecture halls, computer labs, libraries, etc.) and access to adequate power and seating to support learning and wellbeing. Staff who teach described a variety of ways that teaching spaces could better support their use of digital technologies for teaching, mostly by facilitating seamless use of devices and technologies across different teaching spaces. As infrastructure and needs vary across institutions and discipline areas, it will be important to explore the specific needs of students and staff within each institution.
Online teaching and learning

Until the recent sudden shift to remote/online learning, teaching and learning in a live online environment was largely considered the purview of those who taught or were enrolled in online programmes, or those who support them. At the time of the INDEx Survey, 70% of staff who teach had never taught in a live online environment; looking at the benchmarking data, this compares with 74% in the UK. This proportion will have changed dramatically since March 2020. Many who had never taught or learned online now have done so and understanding their experiences and how their attitudes and expectations with regard to online teaching and learning have been affected will be essential in order to make sure that the evidence of the INDEx Survey and of recent experience both inform future decision-making.

Supporting the needs of all students

One in ten students reported that assistive technologies were vital to meet their learning needs. Students’ largely positive assessments re digital teaching and learning were consistent across almost all cohorts of students. Some differences in engagement and attitudes were evident, however, and these may point to differing needs that can be taken into account in ensuring equitable provision and support for all students. For example, full-time students were more likely to want digital technology to be used more for learning; postgraduate students were more likely to have created an e-portfolio; online students were less likely to access the VLE on a mobile device; mature students were more likely to use assistive technologies; and international students were more likely to regularly work online with others as part of their course. In addition, students in their institution for less than one year were more likely to have used polling/quizzing, to have had opportunities to update their digital skills, and to be involved in digital decision-making.

Digital workplace readiness

The importance of digital skills and digital competence for higher education students is widely acknowledged, but INDEx findings shed further light on this. Three-quarters of all students agreed that digital skills are important for their chosen career; while there were some disciplinary differences, a majority of students in all discipline areas agreed. In contrast with this perceived need, however, fewer than half of all students believed that their course prepared them for the digital workplace. Detailed analysis and discussion of INDEx data within institutions, and within specific disciplines/departments, will be helpful in designing, adapting and implementing initiatives to address these gaps. Examples of findings that relate to workplace readiness and may be worth interrogating at institutional and programme level are the degree to which students collaborate online, produce work in digital formats other than Word/PowerPoint, or feel that the software used on their course is industry standard and up-to-date.

Importance of professional identity to staff engagement, experiences and expectations

The INDEx Survey definition of staff who teach was ‘all staff who teach and all who support teaching and learning’. Staff respondents encompassed a range of roles including, for example, lecturer, academic dean, education developer, instructional designer, learning technologist, library staff, manager, technician and tutor. The findings indicate that professional identity may be relevant to engagement, experiences and expectations related to digital technologies, with responses varying somewhat across roles. For example, findings indicate that: lecturers are close to the overall average for all staff who teach in practices such as use of polling/quizzing, creating learning materials using digital media, and teaching live online; librarians and managers are most likely to have time to innovate; learning technologists and deans are most likely to have an opportunity to be involved in decisions about digital services; and managers are most likely to be informed about their responsibilities re students’ online safety.
Digital policies
Underpinning digital capabilities and pedagogical practices are the digital strategies, environment, culture and policies within each institution. It is these organisational digital capabilities that motivate, enable and support the individual digital capabilities and digital practices of students and staff. While each institution may have a range of policies in place regarding digital teaching and learning, many students and staff indicated that they were unaware of these policies or the related guidelines. Only half of all students said their institution protected their data privacy and just over a quarter said they were informed about how their personal data was stored and used, while half of staff respondents said they were informed about their responsibilities with regard to managing learner data securely. Four in ten students said their institution helped them to stay safe online, while fewer than two in ten staff said they were informed about their responsibilities with respect to ensuring students’ online safety. Additional findings indicate further areas where awareness of existing policy-related guidelines was low, e.g., use of assistive technologies, copyright and licensing. These findings indicate a need to increase student and staff awareness of and engagement with policy development and implementation.

Digital decision-making
INDE's findings show that almost one-third of students and nearly half of all staff who teach reported they did not have the opportunity to be involved in decisions about digital services at their institution. It is not possible to ascertain from this data if this is because respondents did not have such opportunities or were unaware of the opportunities available to them. However, in their responses regarding how their institution could better support their use of technology for teaching, several staff requested that institutions consult with staff when making decisions about new technology, tools and platforms. Reflection on these student and staff findings from an institutional perspective may help individual institutions to enhance communications and engagement with respect to current and future digital decisions. Engaging and partnering with students and staff can ensure that digital strategies, policies and initiatives will complement and support the diverse needs of students and staff across the institution.

Differences across institution types
In the main, INDE's findings were largely similar across all institution types, although there were some differences. For example, students at technological higher education institutions (THEIs) were most likely to agree that their course prepared them for the digital workplace; staff at THEIs were most likely to have taught live online. Students at universities gave the highest ratings for their institution's overall digital provision; university staff were most likely to have access to lecture capture. Students at private colleges had the highest access to recorded lectures and staff who teach at private colleges were most likely to be involved in digital decisions. At other institutions, students and staff were most likely to say they had access to reliable wifi and students reported the highest access to digital resources.

Differences between countries
The INDE dataset is benchmarked with three national datasets available to us via published findings from similar digital experience surveys conducted in the UK (for both students and teaching staff) and Australia and New Zealand (for students only). Overall, the generally similar expectations and experiences in the four countries highlight the structural and cultural similarities across these higher education sectors. Differences were observed in a few areas. For example, compared with students in the UK, Australia and New Zealand, students in Ireland were more likely to access the VLE on a mobile device and less likely to have access to recorded lectures. Students in Australia and New Zealand were more likely to have created a digital record or portfolio of their learning than students in the UK or Ireland. Compared with staff who teach in the UK, staff who teach in Ireland were more likely to use the VLE for student collaboration and
have regular opportunities to develop their digital skills, but only half as likely to have access to lecture capture.

A unique characteristic of the INDEEx Survey was its combined focus, nationally, on both students and staff who teach. Across the findings, the multiple interdependencies between students and staff who teach were evident, most notably with respect to digital capabilities. Students and staff often make assumptions about one another’s digital capabilities, for example, students relying primarily on lecturers for support in using technology for learning, and staff assuming that students are aware of and know how to use (and make the most of) various digital tools. Critically, the digital capabilities of staff who teach enable them to use digital technologies to enhance pedagogic practice as well as to support learners to actively develop their own digital capabilities. Developing the digital capabilities of students and staff must be viewed as an interdependent endeavour, informed by the evidence of research and practice and supported by knowledgeable decision-making regarding institutional supports and provisions.

Building a future together

INDEEx findings reflect a higher education community that has progressed significantly with respect to engagement with digital technologies since the Digital Roadmap was first developed. None of this would have been possible without the foundations that had been laid for effective community and collaborative working, including willingness to collaborate, experience of collaborative project management and implementation, the availability of the infrastructure for collaboration, and commitment to collaboration. From initial contact with registrars and policy partners to the convening of a national steering group, through all steps involved in collectively mobilising students and staff to encourage participation in the survey among their colleagues and peers, collaboration was crucial.

There is work to be done at every level of higher education in raising awareness of, and engagement with, existing provision and supports and in addressing identified gaps. The sense of shared purpose and cross-cutting ambition that underpinned the INDEEx Survey will now need to carry through to the realisation of the potential of its findings. A rich picture of the needs and priorities of students and staff who teach with respect to the digital dimension of their lives in education is available to us. It supplements existing evidence and comes at a time when the potential and the commitment of the sector to work together for the good of all students have never been more evident. We need to determine, together, how we can channel this energy and leverage existing potential to identify areas where focused effort may accomplish relevant, specific, positive outcomes for all students and staff.

With much of the Digital Roadmap purposefully navigated, and this new evidence base of the digital engagement, experiences and expectations of students and staff now available, Irish higher education is primed to consider a re-articulated vision for digital teaching and learning. We can move from the original Digital Roadmap to a mapping of enhanced pathways to student success underpinned by robust digital infrastructures, policies and pedagogical approaches. Collaboration, responsiveness and adaptability to institutional contexts will be prioritised as we re-articulate a national vision for digital teaching and learning. This will require openness at institutional and system levels, meaningful partnership between students and staff, and structures that enable ongoing communication and problem-solving, at local and national levels, as the digital terrain continues to evolve.

Since the closure of all higher education institutions in March 2020, staff and students across the sector have made enormous efforts to continue teaching and learning remotely and online. This has been accomplished in the context of a continuing global health crisis and myriad individual and family challenges. While the exact contours of our future are not yet known, capable and critical engagement with digital technology remains central to our mission in higher education. Now particularly, we recognise that ‘digital’ does not only relate to those with ‘digital’ in their titles and is not just an individual endeavour. Student-staff partnership and equitable, holistic approaches will help us to move towards becoming truly digitally capable institutions and a digitally capable sector – helping students and staff to thrive as they live, learn and work in a rapidly changing and increasingly digital world: building our future together.
Who Responded to the Survey

A key strength of the INDEdX Survey is the breadth of participation – across the entire higher education sector, including the perspectives of students and those who teach. The tagline for the survey was “Let’s see where we are, so we can build our future together.”

- **32 INSTITUTIONS**
  - 7 Universities
  - 12 Technological higher education institutions
  - 5 Other institutions
  - 8 Private colleges

- **25,484 STUDENTS**
  - Response Rate: 11%

- **4,445 STAFF WHO TEACH**
  - Response Rate: 25%
At-a-Glance Findings

- A majority of students agreed that when digital technologies are used on their course, they understand things better, enjoy learning more, are more independent in their learning and can fit learning into their life more easily.

- 48% of students would like digital technologies to be used in their course more than they are now and 68% of staff who teach would like digital technologies to be used in their teaching practice more than they are at present.

- 80% of students and 64% of staff who teach rated as above average the overall quality of their institution's digital provision (software, hardware, learning environment).

- 71% of students rated as above average the overall quality of digital teaching and learning on their course. The report provides detail about the digital tools and digital activities that students found most valuable.

- When asked to describe what one thing their institution could do, or do better, to improve their experience of digital teaching and learning, students’ top suggestion was access to better, faster, more stable wifi. The next three most popular suggestions were effective and consistent use of the VLE by staff who teach, availability of lecture recordings, and access to reliable, up-to-date hardware and software.

- When asked to describe one thing their institution could do, or do better, to support them in their use of technology for teaching, the three most popular responses from staff were more and dedicated time to develop digital teaching and learning, improved digital infrastructure, and more support and professional development re digital skills, digital literacies and the use of educational technologies; 46% of staff who teach rated the support they received from their institution to develop the digital aspects of their role as above average.

- Lecturers were seen by students as their main source of support to use digital technology in their learning; there was a relatively even split between the sources of support staff most relied on to use digital technology in their teaching: online videos and resources, teaching colleagues, and support staff.

- 74% of students believed that digital skills were important in their chosen career; 46% said their course prepared them for the digital workplace.

- 70% of staff who teach had never taught in a live online environment (using benchmarking data, this compares with 74% in the UK); this proportion will have changed dramatically since March 2020.

- 30% of students and 44% of staff who teach said they did not have the opportunity to be involved in decisions about digital services at their institution.

- There are some differences in INDeX findings across student cohorts (e.g., discipline area, mode of study) and institution type, as well as a small number of differences between INDeX findings and equivalent Digital Experience Insights findings from the UK, Australia and New Zealand. These will be valuable for institutions to interrogate to inform decision-making and to ensure equitable opportunities for all.

- Across the findings, multiple interdependencies between students and staff who teach were evident, most notably with respect to digital capabilities. Both students and staff who teach requested additional and ongoing support in developing their digital skills and knowledge, digital literacies, and digital confidence.
Actionable Next Steps

At system level

- Support gathering and dissemination of lessons learned following COVID-19. The unique national evidence base now available through the INDEex findings should be combined with the evidence of the experience of learners, teachers and leaders who have gained new perspectives, considered new approaches and shifted thinking with regard to teaching and learning in recent months. There is a need for a targeted national response to support the teaching and learning needs of institutions as they recover from the unforeseen effects of this crisis.

- Ensure that INDEex findings inform developments emanating from other related national work in the area of higher education, such as the development of the Digital Transformation Framework, the realisation of the potential of the Innovation and Transformation Fund and the Human Capital Initiative, and actions related to digital transformation and digital connectivity arising from the Charter for Irish Universities\(^4\) and the recent report of the Technological Universities Research Network\(^5\).

- Ensure INDEex findings inform the work of other relevant sectors of Government so that related infrastructure and shared services availed of by institutions, and their students and staff, can be optimised. The roll-out of the National Broadband Plan, for example, may impact on wifi in higher education institutions in the longer term.

- View INDEex findings in the context of other national reviews and datasets, such as previous National Forum reviews of digital policies and infrastructure and relevant aspects of the annual StudentSurvey.ie findings, to ensure a broad evidence base is drawn upon in national decision-making.

- Consider differences, or notable findings, within the comparative institutional data and what these may mean for equitable provision and supports at system level, to ensure the success of all higher education students across Ireland.

- Consider international INDEex Survey benchmark findings and engage in open dialogue with key policy and system representatives in benchmark countries to ensure a sharing of valuable lessons and practices across borders.

- Ensure that performance frameworks, and national decision-making processes take cognisance of INDEex findings and serve to support institutions in carrying out the institutional steps listed below.

---


At institutional level

- Interrogate further, differences in engagement, experiences and expectations of different student cohorts and what these mean for ensuring equitable provision and support for all. Through all digital decisions – infrastructure, learning design, teaching, policies, etc. – it is vital to seek to understand equity and inclusivity needs and how these can be addressed.

- Ensure dedicated time, and recognition/reward, to support staff who teach as they engage in formal and informal professional development related to the digital aspects of their roles. This action will come to the fore in determining workload models and criteria for staff promotions.

- In addition to considering the national findings from open-ended questions, explore institutional open-ended responses regarding suggestions from staff and students to inform optimal engagement with digital technology in teaching and learning. Existing processes and structures for staff-student partnerships, such as the National Student Engagement Programme, may be useful in supporting constructive conversations on INDeX findings at institutional level.

- Ensure senior leaders and decision makers demonstrate and communicate, through their actions and decisions, their awareness of INDeX findings and the importance of a sustained, integrated approach to building digital capabilities for students, staff and the institution as a whole.

- Encourage, enable and capture systematic reflection from students, staff and decision makers about the recent rapid shift to remote/online teaching and learning. Such data gathering will honour the efforts in this space and will ensure that future decision-making can be based on both evidence from the INDeX Survey and evidence from experience.

- Consider the efficacy of institutional communication and engagement strategies in ensuring awareness among staff and students of existing opportunities, resources, policies and supports with respect to digital with a view to maximising the potential of current provision. Compare current provision with awareness of provision in the INDeX findings to inform targeted adjustments to such strategies.

- Take cognisance of INDeX findings within quality assurance and enhancement processes. The findings may be especially informative for quality review conversations and associated reporting.

- Continue to strive towards maximal wifi reliability and access for all in the institutional community and continue to examine and respond to the needs of students in respect of access to digital devices to support their learning.

- Consider the detailed data with regard to how and why students and staff access the institutional VLE and how the potential of the VLE can be maximised for student learning in light of the analysis of findings.

- Explore the digital tools and activities valued by students and staff who teach and consider how related supports and provision can be enhanced within the institution. Also, explore further within the institutional community why such tools and activities are valued so that this knowledge can inform further enhancements.

- Further interrogate differences in engagement, experiences and expectations among staff who teach in different roles and consider and discuss what differences in findings between roles within the institution may indicate with regard to communications, structures, approaches and priorities around digital.

- Develop/review/update policies to support digital teaching and learning. Important policy areas include: lecture recording, student data management and protection, use of assistive technologies, open access and open education, students’ online safety, and student and staff digital wellbeing. Policy review and development should emerge from open, active and widespread consultation across the institution and student/staff partnership. Consider also how institutional digital strategies, policies and initiatives fit within, and can be integrated into, broader teaching, learning and other policies and strategies.

6 See www.studentengagement.ie