Initial Insights.

Higher Education Digital Capability.

Results from an initial exploratory survey of HolonIQ’s Global Higher Education Executive Panel conducted in November 2020

December 2020
About the Higher Education Digital Capability Framework & Global Higher Education Panel.

Informed by global academic research and with input from higher education leaders globally, the HEDC framework offers an overarching view for institutions to map and benchmark digital capabilities across the learner lifecycle, ultimately to support practical and sustainable approaches to digital services and online learning.

Global Higher Education Executive Panel

HolonIQ's Global Higher Education Panel consists of 1,000+ senior leaders from higher education institutions and other organisations that work within or support the sector including tech companies and EdTech, Professional Services, Investors, government bodies and professional associations.

Panel Insights on Digital Capability in Higher Education

This special Higher Education Panel is driving a longitudinal study into digital capability in Higher Education and will include perspectives from a diverse mix of stakeholders globally. This report summarizes results from the first survey of the panel conducted in November 2020.
Mapping digital capability to the learner lifecycle.

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<thead>
<tr>
<th>Demand and Discovery (D0)</th>
<th>Learning Design (L0)</th>
<th>Learner Experience (L3)</th>
<th>Work and Lifelong Learning (WL)</th>
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<tbody>
<tr>
<td>Product Strategy</td>
<td>Marketing Processes</td>
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<td>Curriculum Design</td>
<td>Digital Content &amp; Courseware</td>
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<td>Learning &amp; Assessment Experience</td>
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<td>Career Planning &amp; Placement</td>
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**Higher Education Digital Capability Framework**

www.digitalcapability.org
Background to the Higher Education Digital Capability Framework

The Higher Education Digital Capability (HEDC) Framework builds on earlier HolonIQ models and adds a deeper focus on digital capabilities across the whole learner lifecycle. Institutional capabilities have been mapped to four connected dimensions across the lifecycle, from Demand & Discovery (DD) to Learning Design (LD), Learner Experience (LX) and Work & Lifelong Learning (WL).

The framework encompasses current capabilities such as recruitment, curriculum design, assessment and career planning, but also looks ahead to future and emerging capabilities for successful digital learning.

Informed by academic research and with input from higher education leaders globally, the HEDC Framework offers an overarching view for institutions to map and measure digital capabilities across the learner lifecycle, ultimately to support practical and sustainable approaches to digital services and online learning.
The Higher Education Digital Capability Framework is built on four core dimensions with sixteen underlying domains. Each domain is comprised of multiple blocks that represent digital capabilities.

**4 Dimensions, 16 Domains and 70+ Capabilities**

- **4 Core Dimensions**
- **16 Capability Domains**
- **70 Capability Blocks**
- **2 Ratings Scales**

Each dimension breaks down into four capability domains (themes) for deeper analysis. These are groups of capabilities needed to successfully deliver on digital learning at each stage of the lifecycle.

**Examples**

**6. Digital Content and Courseware**

**6.01 Creating Digital Content**

"We create and adapt consistent and professional digital content in traditional and emerging formats to suit learners and disciplines, including multimedia, interactive and mixed reality formats."

**Performance**

- 1
- 2
- 3
- 4
- 5

**Priority/Impact**

- 1
- 2
- 3
- 4
- 5
Executive Summary
Respondent Profile
DD. Demand and Discovery
LD. Learning Design
LX. Learner Experience
WL. Work and Lifelong Learning
Next Steps
Executive Summary
Process & people are the biggest gaps, not technology. LX ranked last on performance; Learning design & experience is now the main priority. Building digital capability is critical.

312 University Leaders and Industry Executives from 30 countries shared their insights about digital capability in higher education, painting a global picture of current performance, gaps and priorities.

**RANKING DIGITAL CAPABILITY GAPS**

1. **Process**
   “Looking for defined actions/steps and repeatable processes for digital”.

2. **People**
   “Finding the right leaders and people with the appropriate skills, experience and knowledge”.

3. **Technology**
   “Acknowledge this needs to be determined AFTER the people and processes are in place.”

**RANKING DIGITAL PERFORMANCE**

1. **Demand and Discovery**
   “Historic focus of digital has been recruitment and enrolment”.

2. **Learning Design**
   “We have some way to go with use of technology in course development”.

3. **Work & Lifelong Learning**
   “There are few organisations that can yet demonstrate a truly ‘systemic’ approach”.

4. **Learner Experience**
   “No one accountable for digital LX”.

**RANKING DIGITAL PRIORITIES**

1. **Learning Design**
   “Cannot just copy/paste from the classroom for the new digital learner”.

2. **Learner Experience**
   “We can learn a lot from the field of UX and a focus on the learner journey”.

3. **Demand and Discovery**
   “Need to move beyond using digital just enrolling students to course completion”.

4. **Work & Lifelong Learning**
   “I worry as we triage LD and LX, we will fall further behind in the pathway to work”.
Nearly 1 in 3 Universities seek strategic partnerships to deliver digital capability. 1 in 2 prefer not to outsource; the balance see outsourcing as a short-term solution.

Except for very large institutions, around one third of university respondents indicated that their institution takes a ‘strategic partnership approach’ to outsourcing digital capability, while 26% to 54% use such arrangements as a short term ‘gap fill’ until they can build their own capability set.

Larger universities have a lesser preference for outsourcing compared with their smaller peers. This may be related to resources and capital available internally for digital projects as well as greater levels of digital capability available at larger institutions, which self-rated more highly on digital maturity.

“We can handle smaller digital projects, but outsource larger ones for initial installations and for instances when we don’t have the resources to maintain or upgrade”.

Question. Which of the following choices best describes your institution’s overall approach to outsourcing digital capability?

Across all university sizes and types, ‘process’ is viewed as the area of greatest need vis a vis digital capability followed closely by ‘people’. Organizational issues, such as ‘silos across units and divisions’ and ‘archaic structure and faculty governance’ are cited some of these process challenges.

**Question. Where do you see the current gaps in digital capability at your institution? (choose all that apply).**
Digital Maturity. Half of university respondents rate their digital maturity highly, but still much to be done.

Almost half of the university respondents assessed their institutions’ overall digital maturity as ‘high’ or ‘very high’ (7–10), while 22% rated their digital maturity as ‘low’ or ‘very low’ and the remaining 29% with a moderate level of digital maturity. No matter the level of digital maturity, respondents echoed the need to continually keep up with an ever-changing digital landscape and learner needs.

A majority of non-university respondents are EdTech or technology organisations that work in the higher education sector. Not surprisingly 62% identified that their organisation’s level of digital maturity as ‘high’ or ‘very high’ (7–10), but recognise the work required to remain digitally competent.

*Ongoing, very slow and expensive journey. Developers lack speed and design skills in many cases*.

Non-University Respondent.

**Distribution of Digital Maturity by Institution**

<table>
<thead>
<tr>
<th>Digital Maturity Level</th>
<th>University Respondents</th>
<th>Non-University Respondents</th>
</tr>
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<tbody>
<tr>
<td>Very Low</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Low</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Very High</td>
<td>18%</td>
<td>17%</td>
</tr>
<tr>
<td>High</td>
<td>1%</td>
<td>20%</td>
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</table>

Question. Rate the overall digital maturity of your institution
Capability. Strong in Demand & Discovery and Learning Design, but gaps remain in all areas.

Universities perceive their strongest area of digital capability in the area of Learning Design, with over 40% of respondents identifying Advanced Capability or Best Practice in this area. Similarly, universities identify digital strength in the Demand & Discovery dimension.

While over 30% of institutions self-assess digital capability in Learner Experience as strong, a quarter identify Emerging capability in this area, and a further 40% with Foundational or Little/No digital capability.

“There are lots of competing ideas to address different areas, but not a solid understanding of the integration and implications of different systems”.

University Respondent.
Capability. Strong in Demand & Discovery and Learning Design, but gaps remain in all areas.

While all dimensions along the learner lifecycle are identified as important, the core business of teaching and learning remain critical for universities when it comes to digital, with ~ 70% of respondents identifying these areas of high or critical priority.

Learning Design and Learner Experience incorporate the process of designing curriculum and learning experiences for digital delivery, including learning resources, assessment and interaction. Upskilling and supporting faculty and students in digital learning remains a significant challenge for many institutions.

“Covid moved the priority of digital capabilities to the forefront of the college. Like many colleges, we scrambled to get faculty online and teaching. Another priority that has emerged is universal design to ensure all students can access learning resources”.

University Respondent.

Question. Rate your institution’s current level of digital capability in Demand & Discovery.
Capability. Universities rate their digital capabilities more highly than non-university stakeholders.

HIGHER EDUCATION DIGITAL CAPABILITY. EXECUTIVE SUMMARY

Question. Rate your institution's current level of digital capability for the [...] dimension.

HIGHER EDUCATION CAPABILITY LEVEL
UNIVERSITY PERSPECTIVE

Best Practice: 7.9%
Advanced: 11.3%
Emerging: 30.3%
Foundational: 35.5%
Little or None: 1.3%

Demand and Discovery: 30.3%
Learning Design: 31.3%
Learner Experience: 21.1%
Work and Lifelong Learning: 28.9%

Question. Provide your rating on the level of digital capability at Higher Education institutions for the [...] dimension.

HIGHER EDUCATION CAPABILITY LEVEL
NON-UNIVERSITY PERSPECTIVE

Best Practice: 1.9%
Advanced: 12.1%
Emerging: 47.7%
Foundational: 33.6%
Little or None: 4.7%

Demand and Discovery: 11.2%
Learning Design: 31.3%
Learner Experience: 26.3%
Work and Lifelong Learning: 23.7%

19.6%
Priority. Non-university stakeholders perceive higher levels of criticality for university digitization.

HIGHER EDUCATION DIGITAL PRIORITIES
UNIVERSITY PERSPECTIVE

- Critical: 15.2%
- High Priority: 23.0%
- Medium Priority: 13.2%
- Not a Priority: 30.5%

NON-UNIVERSITY PERSPECTIVE

- Critical: 35.5%
- High Priority: 43.0%
- Medium Priority: 31.8%
- Not a Priority: 20.5%

Question: How important is digitization of the _____ dimension for your institution?
Respondent Profile
The HolonIQ Higher Education Panel is a global cohort driving a longitudinal study into digital capability in Higher Education and includes perspectives from a diverse mix of stakeholders. The Panel consists of 1,000 leaders working within institutions of higher education, along with organizations that service and support higher education, including EdTech companies, government, investors and professional services.
The vast majority of respondent universities offer both undergraduate and postgraduate programs, with a small number of graduate schools participating and almost one quarter of respondents from institutions that offered only undergraduate degrees.

Distribution of university respondents is fairly even with approximately one third each from the Small (under 5000 enrolments), Medium (5-20,000 enrolments), and Large (over 20,000 enrolments) categories.
Non-University Respondents - Segment, Size & Digital Maturity.

Digital Services and EdTech companies made up almost 65% of respondents from the non-university group followed by Professional Services (23%) and Investors (7%). Just over half of these respondents are from small organizations, with revenue under $5M and 50 or less staff. Perhaps not surprisingly this set of respondents self-assessed digital maturity of their organisation relatively highly.

Almost half of University respondents rated the digital maturity of their institution as high or very high. However, prior to COVID, the majority of programs (60%) at these institutions were delivered exclusively or predominately in an on-campus format, with less than 20% delivering programs exclusively or predominantly online.
DD. Demand & Discovery
Demand & Discovery (DD)

This dimension brings together digital capabilities which impact institutional strategy and early stages in the learner lifecycle, connecting marketing processes, student recruitment and enrolment management.

New models and competitors are challenging established programs, and successful institutions draw on deep and complex data sets to understand and respond to the changing needs of learners, partners and markets.

Data now connects every stage in the student journey, enabling the creation of personalised communications across an array of channels and partners. Prospective learners are diverse and fragmented, requiring sophisticated tools and organisational capabilities to profile, segment, qualify and convert leads.

The demands on user experience (UX) continue to rise; recruitment and enrolment processes are expected to provide consistent, responsive and tailored digital experiences across every touchpoint.
Demand & Discovery. The gap between capability and priority is most acute for smaller institutions.

Across institutions of all sizes, there is a gap between digital capability on the demand and discovery dimension with the institution’s priorities in this area. For small institutions, over half place critical or high priority on digital capability in demand and discovery, however 70% noted a low level of digital capability.

Larger institutions rate themselves with higher levels of capability and also much higher levels of priority.

"As a small institution it can be a struggle to develop advanced systems, but the need for them increases every day."

University Respondent.
Demand & Discovery. Digital capabilities on this dimension are of higher priority for larger institutions.

While 15% of institutions identify the Demand & Discovery dimension as of critical priority in the development of their digital capabilities, larger institutions are more focused on this dimension with 70% indicating this dimension as of High or Critical Priority.

Smaller institutions have identified this Dimension as less of a priority, with their attention likely to be focused on the re-design and delivery of programs for their current student cohort over digital recruitment for new students.

However, institutions are looking ahead to how digital capabilities on this dimension will be important in the market.

"We must act to seek or retain competitive advantage".

University Respondent.

**Question. How important is digitization of the Demand & Discovery dimension for your institution?**

**Importance of Demand and Discovery Capability by University Size**

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>X Large</th>
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<tbody>
<tr>
<td>Critical</td>
<td>8%</td>
<td>12%</td>
<td>12%</td>
<td>21%</td>
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<tr>
<td>High priority</td>
<td>46%</td>
<td>29%</td>
<td>53%</td>
<td>49%</td>
</tr>
<tr>
<td>Medium Priority</td>
<td>23%</td>
<td>49%</td>
<td>19%</td>
<td>28%</td>
</tr>
<tr>
<td>Low priority</td>
<td>23%</td>
<td>10%</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Not Priority</td>
<td>0%</td>
<td>0%</td>
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</table>
LD. Learning Design
Learning Design (LD)

Digital capabilities in Learning Design combine evidence-based understanding of learner needs and learning processes with emerging skill sets in user experience design (UX), instructional strategies, content and mixed media design.

Successful institutions are designing programs and courses to suit new learning environments, delivery modes and learning approaches. Diverse types of digital content are created, licenced and managed to support learning, responding in particular to the need for immersive learning and simulation in STEM subjects.

Emerging disciplines are also demanding new subject matter expertise, which must be sourced, managed and updated to keep pace with changing industries and knowledge.

Instructional strategies draw on an increasing range of digital capabilities to provide active and adaptive learning experiences for students to learn in different ways, both as individuals and as members of class groups and communities.
Learning Design. Digital capabilities in learning design are perceived as an area of strength.

Compared with other dimensions, digital capabilities on the Learning Design dimension are perceived as an area of strength, with between one third and one half of institution’s identifying advanced or best practice capabilities in this domain. Learning Design is also the highest priority area for universities, along with Learner Experience when it comes to digital capabilities.

However, all is not equal within institutions. Respondent’s comments have highlighted the variance between faculties and schools.

“We are typically strong in this side but still have some way to go with our academic use of technology in all aspects of course development”.

University Respondent.

“Our graduate programs are much farther ahead in all of these dimensions.”

University Respondent.

Question. Rate your institution’s current level of digital capability in Learning Design.
Learning Design. Digital skills in this area identified as most critical by the majority of institutions.

Overall, approximately one quarter of university respondents marked the Learning Design Dimension as of ‘critical’ priority. When broken out by institution size, small institutions rate digital capability in Learning Design most critical, but institutions of all sizes recognize the importance of digital skills in the design of their primary ‘product’ given the impact on students and their learning.

However, a third of institutions, while rating this priority as high or critical, identified a low level of digital capability in Learning Design at their institution.

“IT is a challenge to hit the right level of digital capability that meets the broad demographic range of our adult learner student population”.

University Respondent.
At the heart of the learner lifecycle is a broad set of digital capabilities supporting student life, community and wellbeing as well as learning processes, academic progress and assessment.

Within Learner Experience, improved digital capabilities are bringing efficiency and relief to burdensome academic administration processes such as timetabling, compliance and reporting. As learning design and delivery changes, faculty professional development remains as important as ever.

Students are able to take more control over their learning journey with improved digital learning environments and a single view of their priorities and progress, tailored to their needs. Where students are geographically distant, digital solutions can help them to create and engage in social groups and communities, and seek out the support they need, when they need it.

Digital assessment and verification capabilities are evolving, with vast improvements showing the potential for assessments, portfolios and exams to be conducted fairly and securely online. Graduations and celebrations can now take place in digital formats for those who can’t attend in person, with digital credential options embedded throughout the student journey.
Institutions of all sizes have identified digital capabilities in the domain of Learner Experience as an area to build digital capability. Between one third and one half of institutions assess their current capability as low.

Prior to COVID, the majority of programs (60%) at respondent institutions were delivered exclusively or predominately in an on-campus format. This now requires a broad set of digital capabilities to come together to deliver an integrated digital experience for students, which remains a significant challenge for many institutions.

“Higher education institutions are taking a very piecemeal approach so while they are outsourcing capabilities, they are not thinking holistically about the continuum of digital experiences for students.”

Non-university respondent.

Question. Rate your institution’s current level of digital capability in Learner Experience.
Learner Experience. Represents the greatest gap between priority and current digital capability.

The Learner Experience is where it all comes together in terms of digital capability, from infrastructure, to student-facing systems, digital content, data integration and digital skills of academic staff.

Institutions of all sizes recognise the need to ensure a high-quality learner experience to achieve educational outcomes. It is also the area where there is the largest gap between priority and digital capability, suggesting institutions are/will be focusing their attention and resources on this area.

“...Higher Education now sees the need for digital transformation, but are very slow in adapting as so many of their practices are enshrined in the pre-digital age”.

Non-University Respondent.
WL. Work & Lifelong Learning
Traditionally thought of as the ‘final’ stage in the learner lifecycle, the focus has been shifting for some time to consider how learners can be supported as they choose and change careers throughout their lives, underpinned by ongoing learning and skill development.

Work-Integrated Learning remains a key focus, with digital capabilities enabling virtual internships and remote mentoring with industry professionals. Career planning and placement services are making use of AI and machine learning for skills assessment and matching, whilst jobs fairs and events explore virtual possibilities.

Technology also supports networks and partnerships with industry, connecting learners and professionals and facilitating access to industry expertise. Finally, alumni engagement is thriving in the digital age, as institutions future-proof their roles as education providers by supporting learners at many different points in their lives.
Work & Lifelong Learning. Most institutions identify emerging or foundational digital capabilities in this domain.

Approximately one third of institutions rate their digital capability in Work & Lifelong Learning as Advanced or Best Practice, which roughly correlates with the 60% of institutions that, prior to COVID, delivered all or most of their programs on campus, and likely also offered in-person solutions to mentoring, internships, job placement and career counselling activities.

Going forward, and depending on the longer-term approach to online, blended and on-campus delivery, auxiliary services such as career counselling and placement will likely need to build a digital set of solutions to service student needs and expectations.

"Digital capability is critical for scaling learning experiences online".

University Respondent.

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<thead>
<tr>
<th>Capability Level</th>
<th>X Large</th>
<th>Large</th>
<th>Medium</th>
<th>Small</th>
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<tbody>
<tr>
<td>Best Practice</td>
<td>0%</td>
<td>12%</td>
<td>7%</td>
<td>2%</td>
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<tr>
<td>Advanced</td>
<td>31%</td>
<td>20%</td>
<td>28%</td>
<td>35%</td>
</tr>
<tr>
<td>Emerging</td>
<td>15%</td>
<td>32%</td>
<td>26%</td>
<td>19%</td>
</tr>
<tr>
<td>Foundational</td>
<td>46%</td>
<td>27%</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>Little or none</td>
<td>8%</td>
<td>10%</td>
<td>9%</td>
<td>15%</td>
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Question. Rate your institution’s current level of digital capability in Work and Lifelong Learning.
Work & Lifelong Learning. Slightly lower priority than other dimensions, but digital expectation growing.

Compared with other Dimensions, digitization of the Work & Lifelong Learning area is seen as less of a priority overall, mostly driven by responses from small institutions. However still over half of institutions identify digitization of this dimension as critical or of high priority.

There are more digital solutions in the market for internships, career support, job readiness & workplace simulations, which are likely to continue gaining traction as institutions turn to digital alternatives on this dimension.

“I see wide spectrum of digital capability / maturity within Higher Ed. While there are institutions who build these capabilities in-house, there are other that are completely underserved”.

Non-university Respondent.
Next Steps
Diagnosis and Action

The Open Source HEDC Framework identifies key domains and capabilities required for digital delivery across the whole student lifecycle and provides a structure to facilitate cross-institution conversations. It is designed to allow flexibility and interpretation in context. The 70+ capability blocks can be used to assess institutional strength in areas of strategic priority, to conduct internal and external benchmarking and ultimately to guide strategic procurement decisions.

Open Source HEDC Framework

Tools to support capability building and decision making

- Institutional diagnostic survey
- Self-assessment against 60+ digital capabilities
- Benchmarked results
- Internal and external benchmarking

Strategic decisions & digital choices

Buy | Build | Partner

People | Process | Tech
Join the Global Higher Education Panel

1. Download the Open-Source Framework

2. Join the Global Higher Education Panel

www.digitalcapability.org