Predicts 2021: Education — Unprecedented Disruption Creates Shifting Landscape

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Initiatives: Education Digital Transformation and Innovation; Education Technology Optimization and Modernization

The ongoing global pandemic has created seismic shifts in how education offers learning, instruction and engagement. Education CIOs must pivot, adapt and respond to changes that require new business models, support new academic offerings and delivery options, and bolster reliable partnerships.

Overview

Key Findings

- The pandemic has created a landscape of ongoing uncertainty as education institutions readdress and reconfigure their strategies to respond, recover and renew on a continuing basis.

- The initial response to the pandemic forced education institutions to pivot immediately to remote learning activities and virtual engagement that required considerable technology investments and reengineering of operating models.

- The impact of the pandemic on the global economy forces institutions to confront an unsettled future. However, a next “new” normal was already in the making and has been accelerated by the current disruption.

Recommendations

Education CIOs responsible for digital transformation and innovation:

- Develop resilience by leveraging your reset strategy to generate plans that stabilize and restore a scalable infrastructure required to restart and reestablish budgets.

- Launch new practices and operating models by adapting and aligning strategic plans to deliver optimized and new experiences that support virtual engagement and remote work.

- Lead your organization's response by creating a technology plan that dynamically evaluates the institution's priorities and capabilities and collaboratively assesses items like organizational risk,
Strategic Planning Assumptions

By year-end 2025, 90% of U.S. public school districts will leverage a combination of in-person and digital remote learning for regular and ongoing instruction.

By year-end 2023, 60% of students enrolling in online learning programs will locate them via major online platform providers.

By year-end 2025, 25% fewer graduating secondary students in industrialized nations will seek a formal higher education degree.

Analysis

What You Need to Know

Prior to the COVID-19 pandemic, education was preparing for change and disruption. However, the unexpected onslaught of the pandemic has accelerated the pace of that change as institutions have been forced to respond and make ongoing adjustments that require dynamic planning and long-term commitments. At the end of 2019, we told clients that disruptive forces were creating critical uncertainties for the education sector (see Higher Education Ecosystem 2030: Planning in the Face of Radical Uncertainty). In early 2020, that radical uncertainty manifested itself in the form of the COVID-19 pandemic. Since that time, the education ecosystem has found itself in a continuous reset strategy that has exposed old fallacies and overreliance on single goal strategies such as depending on international students (see The Postpandemic Planning Framework).

No one will be able to put things back the way they were because everything has changed. All education institutions — at both the K-12 and higher education levels — are still working through how they develop, implement and deliver on their existing and future strategic plans.

At the K-12 level, for example, institutions and their CIOs must be prepared to pivot at a moment’s notice and reset how they deliver instruction. K-12 leaders and education institutions continue to readjust to a mix of in-person instruction, online learning and/or a hybrid of both. Funding for remote learning in U.S. public school districts has grown into a massive technology investment in 2020. Many countries around the globe are also making similar investments, or making plans to do so in the coming days. Pressure is on schools to expand on that investment and create persistent digital remote capabilities for public education beyond the pandemic.

At the higher education level, many established universities are already in the midst of cost optimization activities. Yet they also find themselves forced toward increased investment in digital online learning...
capabilities. We see major online platform providers, such as massive open online courses (MOOCs) and large established online universities, seeing an increase in demand.

Education institutions must leverage opportunities presented by the current pandemic situation to:

- **Rescale** where appropriate
- **Reinvent** as required
- **Return** to baseline where it makes sense
- **Reduce** to optimize
- **Retire** where no longer relevant

Those that do, will have the best chance to bring their resiliency to life.

Activities, such as face-to-face classes, online learning, curriculum changes, degree/program changes or recruiting, advising and remote work modification represent education delivery examples and processes that have either been rescaled, reinvented or reduced. Figure 1 showcases two examples of how education could evolve as the pandemic fades and institutions reacclimate to full-time campus engagement. Institutions that make only short-term adjustments with the sole intention of returning to baseline will have missed the mark. However, those that have established a new baseline with the intention of reshaping their roadmap will build the resilience to thrive going forward.
Figure 1: Education’s Shifting Landscape

Postpandemic Planning Framework

Strategic Planning Assumption: By year-end 2025, 90% of U.S. public school districts will leverage a combination of in-person and digital remote learning for regular and ongoing instruction.

Analysis by: Kelly Calhoun Williams

Key Findings:

- The pandemic crisis triggered a massive investment for public school districts in the U.S. to create digital remote instructional capabilities, with billions of dollars spent in 2020 earmarked for this effort.
- Pressure is on K-12 organizations that invested in hardware and internet access options for students to leverage this investment to expand and develop innovations for public education beyond the crisis.
- The professional and skills development requirements for K-12 teachers to learn how to create high-quality remote learning experiences is proving to be a long-term challenge, in that new strategies are...
very different from a traditional classroom environment.

- K-12 education institutions will continue to be under pressure to return to the traditional in-person classroom environment as soon as possible. However, newly acquired digital skills by both teachers and students will and should influence what happens in that new classroom.

Market Implications:

- The pressure to create robust and effective remote learning capabilities for the U.S. K-12 organization, regardless of specific circumstances of the current learning environment, will predominate and become a mandate for most K-12 CIOs. Furthermore, remote options may need to be turned on and off into the foreseeable future.

- This drive for remote learning will require additional and ongoing investments in hardware, internet connectivity options for students, device management systems, analytics and instructional content and management solutions.

- Despite budget crises for K-12 education in most states, organizations will invest significantly in professional development and training for teachers to enable new skills needed for remote learning.

- K-12 organizations will leverage new remote capabilities to address existing and future challenges, such as flexibility with facilities and staffing, natural crises or disasters, and anticipated teacher shortages in the coming years.

Recommendations:

K-12 education CIOs and their organizations involved in digital transformation and innovation should:

- Expand on efforts to create robust, reliable and effective remote learning capabilities for the organization, regardless of whether schools are in-person, remote or hybrid, by addressing the need for insight and analytics on student engagement and participation.

- Identify, acquire or build the professional development resources teachers require to address remote learning needs by developing professional learning communities for teachers to gain knowledge from other successful model teachers.

- Ensure the investments made to date are not wasted by developing a plan with the executive team to leverage remote learning capabilities for other important strategic priorities.

- Advance future student learning outcomes by creating strategic initiatives built around newly acquired key enabling digital capabilities.

Related Research:
Strategic Planning Assumption: By year-end 2023, 60% of students enrolling in online learning programs will locate them via major online platform providers.

Analysis by: Tony Sheehan and Glenda Morgan

Key Findings:

- At a time when many established universities are in the midst of cost optimization activities, major online platform providers, MOOC providers and large established online universities, are attracting considerable demand and external investment.
- MOOC platforms, such as Coursera, edX and FutureLearn, have supported the major demand for learner reskilling and upskilling during 2020, with some seeing 640% higher enrollments than in 2019.¹
- MOOC platforms now offer both institutional platforms to accelerate digitalization of universities and flexible pathways toward lower-cost online undergraduate and master’s degrees.
- Large online platforms increasingly act as aggregators of students as a consequence of their reach, marketing investments and brand recognition. In parallel, established online players, such as Southern New Hampshire University, have built market share and student numbers with marketing budgets of more than $100 million per year.²

Market Implications:

- Strategic partnerships between universities and major platform providers will create opportunities to design new styles of program and flexible pathways to faculty and content.
- Ongoing uncertainties of the pandemic make online learning capabilities and student recruitment key to institutional strategy.
- Students faced with increased choice of online learning offers will demand both value and quality of the online experience.³
- Universities seeking to recruit online students face a considerable battle both for prospect attention and market credibility of their online offers against major platform providers.
Enhancing online learning teaching quality and maturity, along with revenue losses and budget cuts, will leave many institutions unable to invest sufficiently in marketing to attract large student numbers.

Opportunities will emerge both in development of cost-effective programs at scale and in highly customized online learning experiences.

MOOC providers and other large-scale platforms hold rich student data that when mined and analyzed will reveal key interests and new program opportunities.

Recommendations:

Higher education CIOs involved in digital transformation and innovation:

- Assess the health of your current online learning portfolio by evaluating online learning maturity and analyzing competitor approaches and threats.
- Evaluate both current impact and future marketing needs by reviewing student pipeline, projections, current marketing initiative effectiveness and investments.
- Drive conversion by aligning MOOC and other preprogram activities to desired program outcomes.
- Enhance student numbers and experience by targeting strategic partnerships with major platform providers. Leverage these partnerships to identify future student needs, accelerate digital capabilities and market a blend of foundational courses and custom-made higher-value online offers.
- Increase student prospects and conversions by forming key corporate partnerships and exploring partnerships with organizations that funnel workers (exclusively) to your institution.

Related Research:

Higher Education Online Learning Maturity Model

CIO’s Research Collection for Online Teaching and Learning in Higher Education

Video: Reflect, Aim and Act to Enhance COVID-19 Online Learning Practices in Higher Education

Strategic Planning Assumption: By year-end 2025, 25% fewer graduating secondary students in industrialized nations will seek a formal higher education degree.

Analysis by: Terri-Lynn Thayer and Jan-Martin Lowendahl

Key Findings:
Declining birth rates in many industrialized nations have resulted in fewer traditional-age prospective university students.

Traditional university degrees are becoming increasingly unaffordable in many countries and the economic impacts of the pandemic has worsened this situation.

The opportunity cost both in actual cost (including living cost) and time for a formal degree is mounting compared to kick-starting a career with an informal microdegree. This is especially applicable in professions with a short half-life of skills such as application development.

University curriculum is not changing fast enough to keep pace with knowledge discovery or the needs of the future workforce.

Governments seeking to accelerate postpandemic economic recovery may target specific industry needs to align with skills development.

Learners, especially adult learners, are increasingly seeking self-service, DIY options.

Technology, and specifically online learning, has fueled the growth in the numbers and kinds of nontraditional education providers.

**Market Implications:**

Higher education is not the only “kid on the block” and the block will get more crowded. The number of diverse and affordable learning options is expected to grow as entrepreneurs seize this opportunity (see Figure 2).

Employers will increasingly recognize alternative credentials and experiences (instead of the traditional diploma) as a proxy for skill worker certification.

Some employers create their own corporate universities (Capital One) and credentials (Salesforce-Trailhead) to secure skilled talent based on the perception that higher education is not fast enough or cannot provide the volume of skills needed. This further increases competition in the education ecosystem.
Recommendations:

Higher education CIOs involved in education digital transformation and innovation:

- Identify the half-life of skills and make skills attainment more modular to support alternative learning credentials and learning paths that build a resilient institution and revenue diversification (see Predicts 2020: Education Needs to Brace for Changes to the World of Work).

- Improve your institution’s financial position by applying Gartner’s cost management framework (see Promote Cost Management Frameworks in Higher Education to Achieve Sustainable Business Results).

- Prepare your institution to be more competitive in a world where informal credentials are more desirable by piloting digital credentials that are granular, transparent and portable. Take an iterative approach, despite the immaturity of current solutions.

- Improve your institution’s agility with curriculum design by implementing a curriculum management solution.
A Look Back

In response to your requests, we are taking a look back at some key predictions from previous years. We have intentionally selected predictions from opposite ends of the scale — one where we were wholly or largely on target, as well as one we missed.

On Target: 2016 Prediction — By 2020, at least 10% of higher education institutions will use smart machines to improve student success.

Analysis by: Jan-Martin Lowendahl

Our prediction regarding the adoption of artificial intelligence and smart machines was largely on target, as demonstrated by the response we received to the 2020 Gartner CIO Agenda survey. We found that 10% of respondents said they have implemented AI and machine learning and 16% had already invested in AI conversational interfaces (AI CIs) specifically (see The 2020 CIO Agenda: Winning in the Turns).

The 2020 Gartner CIO Survey included views of 1,070 CIOs in 64 countries, representing $3.5 trillion in revenue or public-sector budgets and $67.5 billion in IT spending. The survey crossed industries, including education, government, manufacturing and others.

AI is expected to accelerate the adoption of analytics and enhance their impact (see Top 10 Strategic Technologies Impacting Higher Education in 2020). Chatbots are the most common AI application, according to the 2020 Gartner CIO Survey; as 46% of higher education CIOs said they have invested or will invest in the technology in 12 months.

Higher education remains particularly well-positioned to leverage AI CIs since higher education institutions exchange 20% to 25% of their student populations each year. Students tend to ask the same questions as earlier generations, making AI CIs relatively easy to train if that data is captured. AI CIs also

Related Research:

Higher Education Ecosystem 2030: Planning in the Face of Radical Uncertainty

Microcredentials Promote Continuous Learning and Build an Agile Workforce


Case Study: Digital Transformation Journey (University of Central Florida)

The Future of Work Will Demand Changes to Higher Education
offer substantial time savings for administrators and advisors because of the continuous availability of AI CIs. AI implementation does, however, lag because of the lack of available skilled people in all interrelated fields (see A Framework for Applying AI in the Enterprise). This includes the development of implementation and training frameworks for higher education.

**Missed: 2016 Prediction** — By 2020, over 10% of higher education institutions will have eliminated the traditional “final exam” in science, technology, engineering and math (STEM), relying instead on integrated assessment in adaptive learning.

Although the higher education sector has explored enhanced assessment methods, traditional final examination practices largely endure. Client inquiries and market trends during the COVID-19 pandemic demonstrate continued adoption of traditional summative assessments. There have also been strong demands to migrate these models online. Institutional adoption of proctoring solutions or faculty anxieties about students cheating over the same period reinforce continued reliance on final examinations.

Interest in extended assessment is being catalyzed by the pandemic and will be key to supporting flexible and adaptive student pathways in the future. Those institutions adopting competency-based education models or embedding nudge technologies within STEM programs do embrace more holistic forms of assessment to support their goals. At present, however, this trend cannot be validated at the 10% level.

In response to your requests, we are taking a look back at some key predictions from previous years. We have intentionally selected predictions from opposite ends of the scale — one where we were wholly or largely on target, as well as one we missed.

**Evidence**

2. Marketing for a Massive Online University, Inside Higher Ed.
3. Crisis ‘May Have Impacted’ U.K. Student Perceptions of Value Already, THE.
4. Big Proctor, Inside Higher Ed.

**Recommended by the Authors**

Top 10 Strategic Technologies Impacting Higher Education in 2020

COVID-19 in Higher Education: Responding to the Short-Term Challenge

Use Business Capability Modeling to Drive Digital Business Design in Higher Education

Promote Cost Management Frameworks in Higher Education to Achieve Sustainable Business Results

Navigating Change — The CIO’s Role in Creating an Adaptive Higher Education Institution