

# The Future of Academic Teaching and Learning: The Role of the Library

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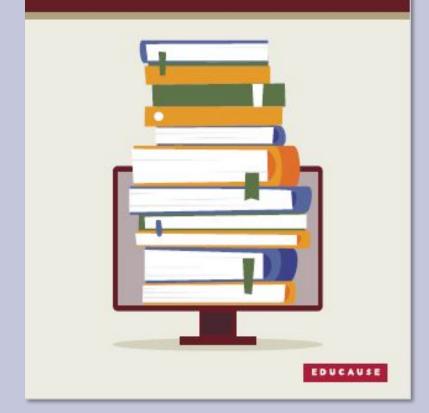








# **2022 EDUCAUSE Horizon Report\***Teaching and Learning Edition











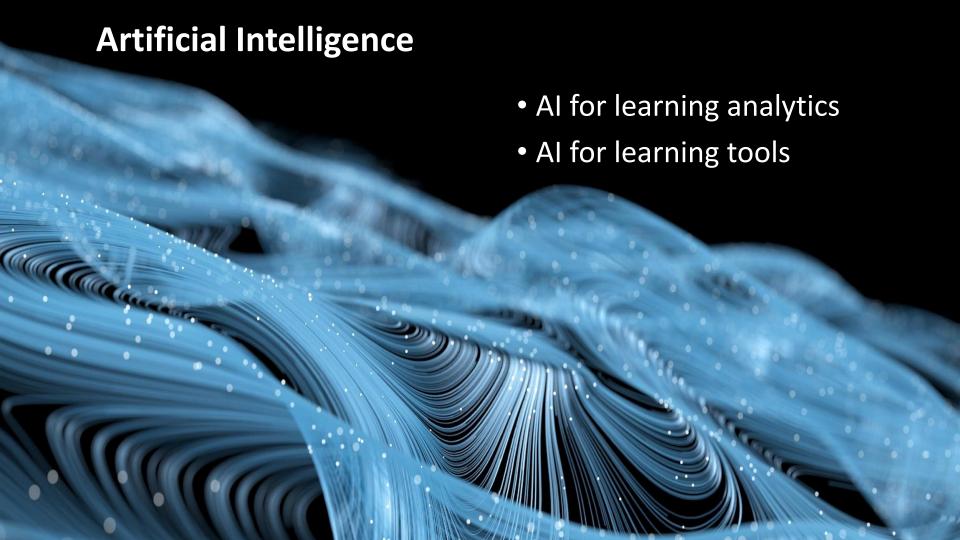




# Learning, Working, Living

- Ubiquitous internet access
- Remote learning, work, social interaction
- Mobile first or mobile only
- Hybrid learning modes and spaces
- Lifelong learning
- Sustainability





# Curricula, Degrees, and Micro-Credentials

- Personalized learning experiences
- Measuring the 'skills premium' or ROI on investing in skills
- Learning models and curricula focus on skills
- Alternatives to academia
- Micro-credentials
- Blockchain for tamper-proof credentials

#### **2022 EDUCAUSE Horizon Report\***Teaching and Learning Edition



#### SCENARIOS

Given the crends we're observing, and the technologies and practices we see taking shape, where might higher education and teaching and learning wind up in 10 years' time? How might the people and institutions and practices of temorrow look different from those of today? And how might the circumstances we find ourselves in today have evolved, expanded, or vanished altogether?

In this section we use a forecasting framework from the Institute for the Future [IFTF] to envision not just one definitive future but a collection of alternative futures that each take different angles on how today might lead into tomorrow. By envisioning sweral different types of futures, we can be expensive and flexible in our thinking and planning and be better prepared o anticipate and adjust towhatever future does eventually occur. This section of the Horizon Report is a creative exercise, then, that pushes us to imaginatively consider what might be possible. But it's also a grounded exercise, rooted as it is in the concrete trends, technologies, and practices we're observing around us today.

As we have in the past few years of Horizon Reports, we focus here on four scenarios for the future, each imagining the course of higher education through the decade beginning in 2022. The first scenario we consider is that of "growth," a scenario that sees current trajectories continue to expand into a future in which higher education largely flourishes but leaves seeme of its issues inadequately addressed. The second is "constraint," a scenario in which higher education is governed by a core guiding value that animates our important decisions and daily practices. Third is "collapse," a scenario in which higher education is beset by rapid breakdowns and forces of change outside its control and that ultimately leave higher education decimated. Finally, in the "transformation" scenario, a new paradigm is established for higher education that allows it to successfully evolve and thrive into the future.

This year's Horizon Report finds our panelists continuing to reflect on the global impacts of COVID-19, social unrest, and climate instability, all of which are certain to transform higher education and teaching and learning for many years to come. Now two years into the pandemic, many "emergency remote teaching" programs are evolving into welldesigned online and hybrid learning programs, as colleges and universities embrace and plan for online education, not just as a stopgap but as a long-term strategic capability. Beyond the walls of the institution, political divisions are intensifying and social unrest is









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#### **Five Scenarios Overview**

	Global Environment	Overview	Economics	Regulation	Innovation & Tech
Education as Usual	Status Quo Akimbo.  The world economy is showing steady growth. Demographic transits in developed economies have dampered labor supply but new cohorts of educated workers from developing countries now enter the glabal workforce and are constituting to improved productify; and income equality. The world's skilled worldrace has increased by 20% since 20% and all of this growth is attributable to developing economies.	Societies and governments focus on improving their local situations. Education shorpers its focus on job and skills outcomes, especially in developed accordings.	Governments remain core funding source.  Private investment stalls due to lock of innovation.  VC investment pours into disruptive abencolies.  Education remains high cost.	Local regulation dominates formal education.  Light touch regulation focuses on job automas.  Slaw pace hinders industry innovation.	Education sector remains under- digitized: Innovation R&D inefficient and high cast, Fragmented innovation efforts across the sector.
Regional Rising	Collaborative Advantage.  Regional alliances dominate competitive global education landscape, supported by government economic and political cooperation.  Countries form multilateral accords to solve unique regional issues, strengthen their competitive position for talent and maintain important aspects of culture.	Regional education systems cooperate and share resources, Intronegianal student on teacher caculation feature skills exchange Cursolium sharing lawers costs for regional education systems.	Cost pressures ease via efficiencies gained from alignment of frameworks and processes, regional "buying power" and improved access to regional expertises latta-regional exther than intervational study options lowers the overall cost of education.	Education regulators collaborate to harmorize regulatory frameworks, establish mutual recognition conventions and build regional qualifications frameworks,	Economic and innovation benefits, gained from participating collectively in regional blended learning. Begional buying power eases technical infrastructure costs. Callaborative approaches to research fuel innovation.
Global Giants	Go Big or Go Home.  Globalization has brought the world closer together in 2030.  Multilateral agreements and free market policies have  removed barriers to international trade and a stable  geopolitical environment roters global competition and  growth.  Political activity has litted to the global level as  intergovernmental organizations play a greater role in  shaping international law, security, trade and commerce.	Consolidation and emergence of Jaggerraut education institutions with masses global market share. Education and technology glotts patter to dominate delivery of past secondary learning and angoing skills training.	Governments enter into agreements with gloots to ensure delivery of effective skills training, technical infrastructure and data on learning and performance.  Cost of education does not lower commensurate to delivery art global scale.	Regulators deal with a much less thagmented education market Big data on schools, learning, teaching, students, provided by teach gloats feed directly to regulator. Regulators transformed to distactive decision-makers,	Fully personalised experiences belie tech algopoly. RSD concentrated inside tech glants who meet in start-ups and integrate through their value chain.
Peer to Peer	Trust the, Trust you. In 2030, the global 'peer-to-peer' economy has gone moinsteam and is now an accepted way to live, work, loan and earn. Powered by declining transaction acets and ubiquitous connectivity, peer to peer exchange of goods and services has meant the disintermediation of the 'institution' in most industries.	Learners are more in control of settat, wheir and have they learn. Individuals collect miaro aredentials from a high number and broad range of providers. Micro-aredentials are stared on the bloakchain and learners contract their own collection of relevant knowledge, skills and experiencies.	Post-recondary dost collapse. Diminated need for high coat infrastructure. Micro-button payments and verification fees become the norm. Investment surge as skills and economic outcomes improve.	Regulators struggle to redefine their role in the PZP economy.  Most professional and skills training occurs outside the purview of traditional education regulators, who focus their efforts on the formal schooling sector.	Ubiquitous smortphone ownership shapes learning delivery. Distributed ledger technology underpriss the PZP economy and supports verification of skills.
Robo Revolution	Wha's Teaching who? The advancement and applications of <b>critificial intelligence</b> have delivered significant economic benefits to most countries in the world by 2030. As labor inputs have slowed in advanced economies, the importance of productivity in driving averall growth is now critical.	All applications in education have automoted against of teaching and administration and more complies human activities are augmented by artistical intelligence. All is managing the design of learning experiences and incorporating human intervention whate required.	Productivity gains through automation and augmentation realies significant cost savings in schoolsen. Generally educational delivery is more efficient.	Data on student learning and school performance is channelled directly to the regulator.  Security of data and othersion to underlying algorithms involved in decision-making one a key focus of education regulators.	The advent of no-human-in-the- loop' technologies has displaced human workers, but also accuted a new set of jobs to build, maintain, and manage these technologies.



### **Higher Education Digital Capability Framework**

An open-source capability framework for higher education, 4 dimensions, 16 domains and 70+ capabilities,

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PRODUCT STRATEGY	2.0 HARKETING PROCESSES	STUDENT RECRUTMENT	ED DIROLLMENT MANAGEMENT	CLERICULUM DESIGN	DIGITAL CONTENTS COURSEWARE	SUBLECT HATTER EXPERTSE	TEACHING STRATEGIES	ACADING ADMINISTRATION	IEARNING & ACREEMIC EXPERIENCE	tio srupeur UFE	SECURIOR SEC	WORK WITGASTIO STERMENTS	CARSER PLANNING & PLACEMENT	INDUSTRY É BUSINESS BUGINGEMBNT	ALUMNA 6 CONTINUING CONCATION	
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COMPETITORS & ALTERNATES	2.03 MARKETING AUTOMATION	203 SCHOOLS & COMMUNITY OUTREACH	A03 RECOGNEEING PROR LEADING	S.03 LEARNING ENVIRONMENTS & PLATFORMS	GER & CONTENT UCENSING	703 SOURCHG 6 MANAGING EXPERTISE	DEFERENTIAL LEARNING APPROACHES	ROJ THETARING E SCHEDULE HUNGGIHENT	NO.GS ASYNCH LEXAMOS EXPERENCES	TLOS STUDENT COMMUNITES, CURS 6 SOCETES	ALCOHOL: ALCOHOL: ALCOHOL:	ITEMS OF STREET	TARIZO A SECRETARIO EVENTS	CUSTOMISED PROSERVS (ROSE)	NACE ALLEMNI BUSASEMENT	
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		3.05 EGB PECRUINENT E PARTNETSHEPS		S.DS ACCREDITATION			BOS PERSONALDED 6-ADAPTIVE LEAGUEG	9.06 REPORTING & REGULATORY COMPLIANCE	NOS- NOSPONDIT LEARNING RESOURCES	TLOS STLEDNT VOICE 6 SURVEYS	SACCING S SUCCESSORY	DESCRIPTION OF THE PERSON OF T	JUDE FRICHIG E SPACIATE PLACEMENT			
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#### Purpose of Framework

The Higher Education Digital Capability (HEDC) Framework is a learner-focused, practical and flexible approach to mapping and measuring digital capability in Higher Education institutions across the learner lifecycle. Universities and HE institutions globally use the framework to identify strengths, prioritise areas of focus and support their digital transformation strategies.

#### Methodology & Guiding Principles

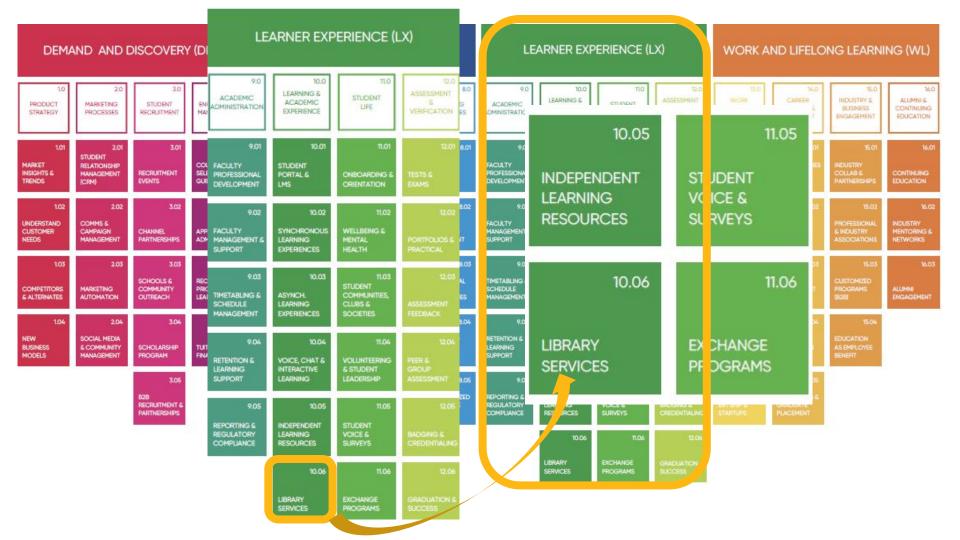
The Framework acknowledges educational literature on digital capability and grounds these in current practice using ongoing consultation, research and analysis with Higher Education leaders around the world. The HEDC Framework benefits from a continuous and iterative feedback cycle informed by an engaged community of HE professionals.

#### Use the Framework

institutions use the HEDC Framework to build familiarity, understanding and shared language of digital capability across the learner lifecycle. The Framework is accompanied by global case studies and other tools to support cross-institutional discussion of perceived performance, gaps and priorities. Go to www.digitalcapability.com to explore updates and download resources.



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PRODUCT STRATEGY	2.0 MARKETING PROCESSES	3.0 STUDENT RECRUITMENT	4.0 ENROLLMENT MANAGEMENT	5.0 CURRICULUM DESIGN	DIGITAL CONTENT & COURSEWARE	7.0 SUBJECT MATTER EXPERTISE	E.O TEACHING STRATEGIES	9.0 ACADEMIC ADMINISTRATION	10.0 LEARNING & ACADEMIC EXPERIENCE	STUDENT LIFE	ASSESSMENT & VERIFICATION	WORK MITEGRATED LEARNING	CAREER PLANNING 6 PLACEMENT	INDUSTRY 6 BUSINESS BNGAGEMENT	ALUMNI 6 CONTINUING EDUCATION
1.01 MARKET INSIGHTS & TRENDS	2.01 STUDENT RELATIONSHIP MANAGEMENT (CRM)	3.01 RECRUITMENT EVENTS	4.01 COURSE SELECTION & GUIDANCE	5.01 DIGITAL DESIGN PRINCIPLES	6.01 DIGITAL CONTENT CREATION	7.01 DESIGNING FOR DIGITAL LEARNING	8.01 LEARNER NEEDS & ANALYTICS	9.01 FACULTY PROFESSIONAL DEVELOPMENT	10.01 STUDENT PORTAL S LMS	11.01 ONBOARDING 5 ORIENTATION	T2.01 TESTS & EXAMS	13.01 EMPLOYABILITY SXLLS BUILDING	74.01 COMPETENCIES & SKILLS EVALUATION	TS.01 INDUSTRY COLLAB & PARTNERSHIPS	16.01 CONTINUING EDUCATION
1.02 UNDERSTAND CUSTOMER NEEDS	2.02 COMMS & CAMPAIGN MANAGEMENT	3.02 CHANNEL PARTNERSHIPS	APPLICATION & ADMISSIONS	5.02 PROGRAM ARCHITECTURE	6.02 IMMERSION, SIMULATION & LAB	7.02 FACULTY EXPERTISE & SPECIALISMS	8.02 DESIGNING ASSESSMENT	9.02 FACULTY MANAGEMENT & SUPPORT	10.02 SYNCHRONOUS LEARNING EXPERIENCES	11,02 WELLBEING 6 MENTAL HEALTH	12:02 PORTFOLIOS S FRACTICAL	15.02 WORKPLACE SMULATION 6 PROJECTS	14.02 CAREER PLANNING SERVICES	15.02 PROFESSIONAL & INDUSTRY ASSOCIATIONS	16.02 INDUSTRY MENTORING 6 NETWORKS
1.03 COMPETITORS & ALTERNATES	2.03 MARKETING AUTOMATION	3.03 SCHOOLS & COMMUNITY OUTREACH	4.03 RECOGNIZING PRIOR LEARNING	5.03 LEARNING ENVIRONMENTS & PLATFORMS	6.03 OER & CONTENT LICENSING	7.03 SOURCING & MANAGING EXPERTISE	8.03 EXPERIENTIAL LEARNING APPROACHES	9.03 TIMETABLING & SCHEDULE MANAGEMENT	10.03 ASYNCH LEARNING EXPERIENCES	TI.03 STUDENT COMMUNITIES, CLUBS & SOCIETIES	12:03 ASSESSMENT FEEDBACK	TLO3 INTERNSHIPS & PLACEMENTS	14.03 CAREER & RECRUITMENT EVENTS	15.03 CUSTOMIZED PROGRAMS (828)	16.03 ALUMNI ENGAGEMENT
1.04 NEW BUSINESS MODELS	2.04 SOCIAL MEDIA & COMMUNITY MANAGEMENT	3,04 SCHOLARSHIP PROGRAM	4.04 TUITION FINANCING	5.04 LEARNING DELIVERY MODELS	6.04 MANAGING INTEGRATED CONTENT	7.04 SPECIALIST INDUSTRY PARTNERS	8.04 DESIGNING GROUP WORK	9.04 RETENTION S LEARNING SUPPORT	10.04  VOICE, CHAT & INTERACTIVE LEARNING	TI.04 VOLUNTEERING & STUDENT LEADERSHIP	12.04 PEER 6 GROUP ASSESSMENT	13.04 STUDENT WORK	JOB APPLICATION SUPPORT	15.04 EDUCATION AS EMPLOYEE BENEFIT	
		3.05 B28 RECRUITMENT & PARTNERSHIPS		5.05 ACCREDITATION			8.05 PERSONALIZED & ADAPTIVE LEARNING	9.05 REPORTING & REGULATORY COMPLIANCE	10.05 INDEPENDENT LEARNING RESOURCES	TLOS STUDENT VOICE S SURVEYS	12.05 BADGING & CREDENTIALING	ENTSHP 6 STARTUPS	JOB FINDING & GRADUATE PLACEMENT		
				5.06 CURRICULUM QUALITY MANAGEMENT					10.06 LIBRARY SERVICES	TI.06 EXCHANGE PROGRAMS	12.06 GRADUATION & SUCCESS				





https://www.leanlibrary.com/community/librarian-futures-report/

My goal as a 21st century librarian is to provide uncomplicated access to high quality information wherever and whenever the user needs it. My library's busy users need to access scholarly information within their workflow and with minimal barriers. I want library resources right on the shoulder of the patron.

LINDA VAN KEUREN, ASSISTANT DEAN FOR ACCESS AND RESOURCE MANAGEMENT, GEORGETOWN UNIVERSITY MEDICAL CENTER





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### Questions

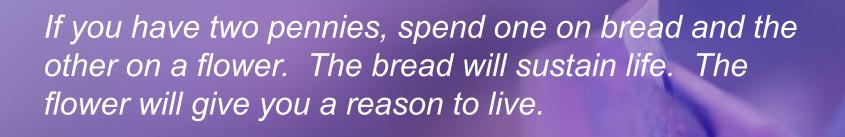
- Knowledge and skills versus years of education completed. How does 'learning' differ from 'education'?
- Artificial intelligence: what are we losing?
- Academia that is not measurable by straightforward ROI: how do we mediate the value of humanities?



'Collini is astute, analytical, and often killingly funny'
BEVIS HILLIER, DAILY TELEGRAPH

'Collini is that rare bird, a don who can be read with pleasure...'

STEFAN COLLINI



-- Chinese proverb



# Thank you!

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