Lessons from within: redesigning higher education

Annie Hale, Leanna Archambault and Lukas Wenrick

Introduction

As higher education continues to evolve from the gatekeepers of knowledge to a space of curators, creators, and connectors - universities are at a unique point in their history and trajectory (Wolfe and Andrews, 2014). Institutions are being called to discover more effective and efficient ways of preparing learners of all types and at all stages. Despite criticism, a general lack of funding, and false starts along the way (e.g., the concept of a massive open online course) - this transition involves a complex set of actors, actions, and artifacts. The question becomes, what lessons can we learn from those involved in transforming higher education to be more than it is currently?

Visionary scholars and leaders are calling for engaged change while leading efforts to reform and transform higher education (Crow and Dabars, 2015). Ramaley (2000) and the Kellogg Commission (2000) aim for higher education to better embrace their civic responsibility and conduct socially inspired research. While a wide variety of ideas and large-scale plans for execution exist, most do not closely unpack how individuals tasked with implementing these goals grapple with and overcome barriers.

What are the challenges associated with educational transformation?

Often unspoken and unacknowledged, attempting to innovate in an environment steeped in tradition can result in numerous challenges. From a purposefully selected review of several major universities in the United States undertaking such change in the last five years (specifically, Arizona State University, University of Maryland, Southern New Hampshire University, Georgia State University, Massachusetts Institute of Technology, and Purdue), we have identified several elements that crosscut each universities efforts:

- a strong university leader who has projected a vision for the 21st-century learner;
- embracing and investing in digital tools to assist learners; and
- a large personnel base to design, build, and implement.

Case study

The following ten categories have been identified from a review of the academic literature, our participation in this space over the last ten years as researchers, and in-depth analysis of transcripts from a recent 2019 Pedagogy and Virtual Education (PAVE) meeting (n = 10) at our case study university in the desert southwest. PAVE is a self-generated working group that aims to share successes and struggles. PAVE members include senior







Annie Hale is based at the Biodesian Institute, Arizona State University, Tempe, Arizona, USA Leanna Archambault is based at the Mary Lou Fulton Teachers College, Arizona State University, Tempe, Arizona, USA. Lukas Wenrick is based at the Arizona State University, Tempe, Arizona, USA.

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developers, directors, researchers, and content experts who focus on non-degree education.

Using both a narrative analysis and constant comparative methodological approach, ten major categories were identified through a close review of the collected data. Two researchers met to explore their independently coded analysis to identify the overarching categories and discuss any discrepancies in coding. The third researcher independently cross-checked the effort.

What lessons can we learn from those involved in transforming higher education?

Listed below are the ten constructed categories with simple clarifying descriptions. We use the term implementer to describe an employee of the university and learner to describe someone who engages with learning at the university. These considerations include:

- clarify purpose for both implementers and learners;
- use transparent terminology for both implementers and learners;
- design coherent learning pathways and create an accessible learning environment;
- determine standards/quality metrics used by the institution to demonstrate trustworthiness of constructed assets that represent the earned result (e.g., certificate, badge, credential);
- describe learning futures that include a rich exploration of scale, models of learning, questions about the future of learning, and account for path dependency;
- ensure that the purpose, direction, and goals are not only clear but also include iterative evaluation;
- develop incentives/business model(s) to explore mechanisms for implementation, evaluation, revision, and recognition;
- offer resources and provide support for implementers;
- identify and research the intended learner population to ensure that specific needs for retention and completion are met; and
- create and implement learning assets through a careful examination of what is in/out of scope and in light of what already exists.

Discussion

We center on three key categories: clarifying purpose, using transparent terminology, and identifying relevant standards and measures. Originating from an aspiration to execute high-quality work in the digital education landscape, PAVE meeting participants identified a deep desire for a more cogent vision of transformation from their institution. They wanted to participate in the co-creation of such vision or to be able to directly shape its ultimate formation. A top-down decision-making approach, commonplace in higher education, often obscures what is actually taking place on the ground. One participant mentioned, "[Leadership] is not on the ground, creating this content. So, they are looking at us in our little boxes, watching us run around our little mazes going, oh, they must be doing that." This is illustrative of many university initiatives that may overlook the importance of clarifying the rationale.

Similar to a desire for a coherent vision is the need for clear terminology. Understanding the definition of particular words, phrases, and acronyms such as Continuing and Professional Education (CPE), Career and Technical Education (CTE), and Professional Education (PD) present a hurdle. Likewise, relating and connecting often ambiguous terms to broad university initiatives can increase confusion. For instance, one member during the meeting mentioned, "Just below the [overarching initiative]. Do [we] separate at that point by academic for-credit and non-academic for-credit? What's the next level below the initiative?" As various large-scale initiatives evolve, another implication for practice is to take the time to ensure that the main message/goals are clear.

Another consideration is quality standards and metrics. Notably, participants were concerned that quality would be diminished within the non-degree space without qualitycontrol metrics such as formal accreditation oversight. Other members questioned how they could better design content or legitimize various types of content learning assets that could meet the needs of evolving learners within a digitally-transformed world. Institutions must consider their broader roles, including asking how their efforts could or should transcend the concept of offering traditional university courses.

Additional questions that are worthy of consideration are:

- Q1. How can university leadership develop better systems for the co-creation of institutional transformation or modify midstream existing visions?
- Q2. Could universities involve personnel earlier on and seek more robust feedback?
- Q3. In what ways and to what extent should universities help designers navigate emerging trends and terms?

Final thoughts

For universities seeking to innovate beyond the traditional modes of education to meet the needs of learners at the pre-college, college, and post-college levels, sharing the experiences and challenges from those who have begun down this path is critical. Creating new methods and models for a wide array of diverse learners requires breaking out of traditional structures, which can be difficult on a variety of fronts. It is useful to explore universities who are trying new techniques and pushing boundaries. Likewise, it is also important to examine the inevitable growing pains that are part of the journey so they can be addressed and overcome as part of the process of pushing learning forward into the 21st century.

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References

Crow, M.M. and Dabars, W.B. (2015), Designing the new American University, JHU Press, Baltimore, MA.

Kellogg Commission. (2000), Renewing the Covenant: Learning, Discovery, and Engagement in a New Age and Different World, National Association of State Universities and Land-Grant Colleges, Washington, DC.

Ramaley, J.A. (2000), "Embracing civic responsibility", AAHE Bulletin, Vol. 52 No. 7, pp. 9-13, available at: https://aahea.org/articles/march00f2.htm

Wolfe, J. and Andrews, D. (2014), "The changing roles of higher education: curator, evaluator, connector and analyst" On the Horizon, Vol. 22 No. 3, pp. 210-217, doi: 10.1108/OTH-05-2014-0019.

About the authors

Annie Hale is a Director of Research and Development for the Biodesign Pathfinder Center at Arizona State University. Her work combines the fields of science and technology studies, sustainability, and design from a human-centered approach. Annie's research interests focus on the question: How do people construct and understand the world around them, and, in turn, how do those constructs change the way people engage with their world? She directs a variety of educational programs that target sustainability and 21stcentury learning that aim to inspire, engage, and empower a variety of publics, from educators to community leaders through elegantly designed content. Annie Hale is the corresponding author and can be contacted at: Annie.Hale@asu.edu

Leanna Archambault is an Associate Professor of Learning Design and Technology within the Mary Lou Fulton Teachers College at Arizona State University. Her research areas include teacher preparation for K-12 online and blended classrooms, the use of innovative technologies to improve learning outcomes, and sustainability literacy for preservice and inservice teachers.

Lukas Wenrick mission is to create purposeful educational experiences that meet each student where they are academically, experientially, and financially. He holds a Master's of Education in Higher Education from the Harvard Graduate School of Education and a Bachelor of Arts in Social Science Education from Wright State University. His experiences at both a broad access public university and an elite private institution inform the work he does each day. Currently, Lukas serves as a University Innovation Fellow at Arizona State University where he works to leverage the ASU enterprise to resolve educational and social inequities in the world.