

Keynote Addresses

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Keynotes were presented by Dr. Joseph Aoun, President of Northeastern University and by Ryan Craig, Managing Partner of University Ventures. Both keynotes focused on the theme of disruption in action and, broadly, how the delivery of post-secondary education must be disrupted to respond to the changing realities of today's labour market.

Dr. Aoun's opening keynote reflected the arguments in his recent book, *Robot-Proof: Higher Education in the Age of Artificial Intelligence*. He touched on the significant changes underway in the global marketplace, including the proliferation of digital technology, automation and artificial intelligence, and spoke to what these changes mean for educators preparing the workforce of the future.

As a member of the audience, I thought Dr. Aoun's keynote left us with three important ideas to take back into our work:

1. The best way to adapt to a future characterized by smart machines is to leverage the value of unique human qualities and skills—something Dr. Aoun called “humanics”—like creativity and mental flexibility. To develop the innate competitive advantages that humans have over machines, he proposed we focus education on three critical literacies: digital literacy, data literacy and human literacy. One of his key suggestions for doing this was to incorporate experiential learning into curriculum whenever possible. In his view, learners who put their knowledge into practice through experiential learning have a sharper suite of human-centric cognitive skills. Putting learners in real-world environments stands to ensure success in labour markets that place a premium on human skills. Northeastern University—where Dr. Aoun is president—has wholly embraced this approach to higher education.

2. Dr. Aoun also spoke of the need for lifelong learning and the opportunity for institutions to open their doors to mid-career workers. As technological disruption becomes pervasive in the labour market, mid-career workers are required to retool and upskill. He proposed that cutting-edge educators will adapt models of teaching and learning to respond to the needs of workers at all stages of their careers. To better serve the lifelong learner population, Dr. Aoun suggested shorter, more flexible and stackable credentials are needed. Leaders in this space will be those who make education more efficient, accounting for previous experience and ensuring it counts in the credentialing process.
3. Dr. Aoun was also a strong advocate for engaging employers in curriculum design, something he suggested ensures that learning reflects current labour market realities. Employers are critical to effective experiential learning and will either be the biggest supporters of or the biggest obstacles to mid-career upskilling. For these initiatives to work within higher education, employers must be fully on board.

It was interesting to reflect on how Canada's polytechnics have already embraced experiential learning, mid-career training and employer engagement as fundamental ingredients in their approach to higher education, particularly given Dr. Aoun's position as a thought leader on innovative higher education in the United States. His keynote finished with a fireside chat with Kwantlen Polytechnic University president Dr. Alan Davis, where the two made noted of these parallels. As Northeastern University expands into Canadian markets like Toronto and Vancouver, the two saw opportunities for partnership and collaboration—another innovative pathway

for educational institutions focusing on future labour market needs.

The closing keynote was delivered by Ryan Craig, who, like Dr. Aoun, focused on how higher education can adapt and respond to disruptions in the labour market. Craig's keynote touched on themes from his latest book, *A New U: Faster + Cheaper Alternatives to College*.

In a world of work where skills needs are evolving quickly, Craig suggested that approaches to higher education need to be reconsidered, especially given the pace of change, the financial and opportunity costs of post-secondary education and challenges around graduate employability. To underline the challenge of employability, Craig highlighted a study from New York's Federal Reserve Bank estimating that 45% of new college graduates in the U.S. are underemployed.

Though many would argue that higher education serves a number of purposes in society, Craig's research suggests that more than 90% of post-secondary students reported employment was their primary motivation in a 2019 survey. In 2000, this number was closer to 50%. As a result, Craig posits that higher education must adapt to better satisfy the needs of both students and employers by better delivering on employability.

The big takeaways from the closing keynote were:

1. An emerging requirement for what Craig calls "faster/cheaper" models of education, such as last-mile training, boot camps and digital apprenticeships. In Craig's view, these models deliver results in an environment of disruption because they are flexible enough to quickly respond to the changing needs of the labour market. By maintaining deep connections to employers, integrating both technical and soft-skill development, and valuing competency over a credential, these models stand to produce talent for the new economy. While they may not replace traditional approaches to higher education anytime soon, Craig suggested models focused on outcomes have the potential to deliver highly employable, next-generation talent.
2. While Craig noted the alignment of polytechnic education with "faster/cheaper" models, he suggested four areas of potential improvement:
 - a. An expanded focus on experiential education, like co-ops, internships and apprenticeships. While experiential learning is central to the polytechnic model, there is room to experiment with and incorporate new approaches as technology and skills expectations evolve.
 - b. Amplification of traditional employer relationships to include intermediaries, like staffing agencies, to ensure the graduate pipeline has alternative pathways to employment. This approach would give both learners and employers exposure to one another without a long-term commitment, providing students with early experience and allowing employers to "try before they buy."
 - c. Experimentation with digital credentials, recognizing that employers are increasingly disenchanted with credentials as a predictor of performance in the workplace. Craig pointed to several prominent multinational firms—Microsoft, Ernst and Young and Google among them—that have dropped the requirement for credentials altogether. As employers make competencies their hiring currency, prospective employees will be required to demonstrate their skills in new ways. Institutions focused on producing employment-ready graduates will have to consider how to make credentials more transparent. In his view, digital credentials move in that direction.
 - d. Lastly, Craig suggested that polytechnics could work more closely with high schools to inform young learners about the broad opportunities available to them and about workplace realities. Career education is often limited by outdated notions about jobs and the skills required to do them. In order to attract young people to high-demand fields like the skilled trades, polytechnics are well-positioned to share information drawn

from their employer relationships and provide a more realistic picture of today's workplaces.

Together, the conference keynotes provided bookends to a conference characterized by sharing best practices in an age of disruption. Both Dr. Aoun and Ryan Craig brought American perspectives to their presentations, allowing delegates to reflect on how Canadian polytechnic education is positioned to respond to emerging disillusionment with traditional post-secondary credentials. The close relationships polytechnics have with employer partners, as well as their flexibility to respond to change and openness to experimentation, will, according to these speakers, be critical advantages in the years ahead.

About Keynote Speakers

Joseph E. Aoun is the President of Northeastern University and author of *Robot-Proof: Higher Education in the Age of Artificial Intelligence*.

Ryan Craig is the Co-Founder & Managing Director of University Ventures and the author of *A New U: Faster + Cheaper Alternatives to College*.



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