The Next 25 Years
The Future of Online Learning

Humans and machines
Who can we become?

"He not busy being born is busy dying"

Bob Dylan

Finite players play within boundaries

Infinite players play with boundaries

- James Carse
Data explosion

Beating humans
Machines teach themselves

Starting out - 10 minutes of training

The algorithm tries to hit the ball back, but it is yet too clumsy to manage.

Always getting better

Source: Electronic Frontier Foundation
A voracious appetite for data

Source: EasySolutions
Reality or virtual reality?

Beyond human perception
Interacting remotely

The next interface beyond smartphones
Data on our eyes

Source: Grau et al/ PLOS
Structure

Networks everywhere

Brain
Internet
Organisations
Industries
Society
Applications
Proteins
Actors
Contagion
Politics
“Ranked by market value, 60 of the world’s 100 largest corporations earn at least half of their revenue from platform markets”

- Prof. Thomas Eisenmann, Harvard Business School

Platforms

enable value-creating interactions between external producers and consumers, based on an open infrastructure and governance structures

Adapted from: Platform Revolution, Parker, van Alstyne and Choudhary
The many layers of platforms

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<th>Learning-as-Platform</th>
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Value is created across ecosystems
The conditions for emergent value
Continuous job destruction and creation

Work can be done anywhere
Automating manual tasks
Capabilities and skills for the future

**Capabilities**
- **Creativity**: Value will not come from the old ways, only the new, making imagination and creativity central to tomorrow's capabilities.
- **Adaptability**: In a rapidly changing world we must be highly flexible, able to deal with ambiguity, work across cultures and shape ourselves to new situations.
- **Relationships**: Everything comes from people; we will need exceptional interpersonal skills to tap into people's talents and collaborate efficiently.
- **Learning**: We must be life-long learners with a deep appetite for the new and the ability to continuously gain and develop new knowledge.

**Skills**
- **Design**: We need to use design thinking to create unique responses to individual, responses and develop understanding of how things work well for humans.
- **Analysis**: There is a massive value in information but it requires insight, perspective and the ability to communicate well to help drive better decisions.
- **Technology**: We need to understand the fundamentals of technology and develop areas of specific expertise, especially as we can work well in conjunction with sophisticated machines.
- **Business**: Understanding the fundamentals of business and finance allows all skills to be made more relevant, and enable good ideas to be readily built into entrepreneurial ventures.

*Source: Ross Dawson, Commonwealth Bank Jobs and Skills of the Future Report*
Distraction and fragmented attention

Neuroplasticity and the evolution of our minds
Supporting higher-order human capabilities

- **Human**
  - Context
  - Insight
  - Ethics
  - Data quality
  - Model quality
  - Transparency
  - Decision factors
  - Confidence
  - Visual presentation

- **AI**
  - Defined decisions
  - Optimization
  - Personalization
  - Assessment
  - Conversational interfaces

Tapping our human potential

- **Passion**
- **Mission**
- **Profession**
- **Vocation**

what you LOVE

what you are GOOD AT

what you can be PAID FOR

what the World NEEDS

**ikigai**
Education pays

Source: D.H. Autor, Science

Knowledge and information
Cognitive diversity

For the unique individual

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Workflow learning

Connected learning
Challenge Yourself
Join 683,040 of your peers to learn, improve your skills and compete for cash prizes. Solve interesting problems for industry’s biggest brands.
What are you waiting for?

Compete with your peers in one of three tracks.

Graphic Design

- Blueprints, storyboards, mockups & logos. Flex your creative muscles.

Development

- Nodes! No problems. Angular! Deep right up. Are you a builder? This is the place for you.

Data Science

- Algorithms match the big brains. Solve these & bragging rights are yours. View upcoming events

Be part of a community.
Taking calculated risks

Governance for Transformation

Acceptance
Risk
Granular risk appetite

Pace of transformation
Ecosystem engagement

Forces of disruption
Industry outlook

Aligned purpose
Culture
Fast failure

Future Vision
Work transition
Shifting business models

Collaboration
Learning

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Culture of experimentation

Source: UBI Global

Governance for Transformation

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Institutes and initiatives

Global Futures Laboratory
Designing and shaping a future in which Earth is thrivin

Julie Ann Wrigley Global Institute of Sustainability
Finding practical solutions to environmental, economic and social challenges to enable better lives

Global Security Initiative
Addressing global security challenges in partnership with business, development and defense communities

Institute for Social Science Research
Supporting the social sciences at ASU by helping students and faculty develop the research skills needed for today's world

Decision Theater
Exploring decision-making in uncertain times through advanced modeling and visualization technology

Blockchain Institute
Improving health, protecting lives and sustaining our planet

McCalla Institute for International Leadership
Advancing character-driven global leadership based on security, economic opportunity, freedom and human dignity

Institute for Humanities Research
Exploring social and scientific issues through historical, philosophical and creative perspectives

LightWorks
Discovering and inventing energy solutions to address the world's fuel, electricity, security and justice challenges

NewSpace Initiative
Leading the integration of academic and commercial space enterprises

Governance for Transformation

Risk
- Acceptance
- Granular risk appetite
- Pace of transformation
- Ecosystem engagement
- Strategies
- Innovation
- Priorities
- Metrics

Future Vision
- Forces of disruption
- Work transition
- Shifting business models
- Transparency

Culture
- Fast failure
- Collaboration
- Learning
- Participation

Communication
- Clarity
- All stakeholders

Aligned purpose
- Collaboration
- Learning
- Participation

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Roadmaps and consistent communication

Source: Malaysia Ministry of Education

Leadership
The only way you can control your destiny is to be more flexible than your environment

- The Law of Requisite Variety
Creating the future together

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<tr>
<th>Vision</th>
<th>What world do we want to create? What might be possible?</th>
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<tr>
<td>Foundations</td>
<td>What institutions, business models, platforms and systems will enable this vision? What is missing now?</td>
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<tr>
<td>Roadblocks</td>
<td>What is blocking the potential? How can we take away or bypass these blocks?</td>
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<tr>
<td>Paths</td>
<td>What possible paths forward could allow us to reach our vision? What is most feasible? What are milestones?</td>
</tr>
<tr>
<td>Collaboration</td>
<td>What collaboration is needed between who? How can we foster and enable that collaboration?</td>
</tr>
<tr>
<td>Action</td>
<td>What action today can be taken? What action can you take to enable the potential of the vision?</td>
</tr>
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“It is not in the stars to hold our destiny but in ourselves”

William Shakespeare