Embracing uncertainty: future-proofing skills, knowledge and capabilities in a paradigm shift

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Higher Education...

- A ‘massification’ of higher education
- A marketisation of higher education
  - An increasingly consumer-focused regulatory environment
- A desire for increasingly personalised, tailored learning experiences
Sorry!
The lifestyle you ordered is currently out of stock.
Technological Disruption

- **The Internet of Things** - A global, immersive, invisible, ambient networked computing environment –
- **Augmented reality and embedded technologies**
  - **Big data** - Tagging, databasing, and intelligent analytical mapping of the physical, behavioural and social realms –
Technological Disruption

https://frankdiana.net/2014/08/12/combinations-and-disruption/
Estimated that 400,000,000 – 800,000,000 jobs could be displaced by automation across the next 20-25 years.
Technological Disruption: world of work

Automation will have a far-reaching impact on the global workforce.

<table>
<thead>
<tr>
<th>Technical automation potential</th>
<th>~50% of current work activities are technically automatable by adapting currently demonstrated technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of adoption by 2030</td>
<td>Work potentially displaced by adoption of automation, by adoption scenario, % of workers (FTEs)</td>
</tr>
<tr>
<td>Slowest</td>
<td>% (10 million)</td>
</tr>
<tr>
<td>Midpoint</td>
<td>15% (400 million)</td>
</tr>
<tr>
<td>Fastest</td>
<td>30% (800 million)</td>
</tr>
<tr>
<td>Workforce that could need to change occupational category, % of workers (FTEs)</td>
<td></td>
</tr>
<tr>
<td>Slowest</td>
<td>0% (&lt;10 million)</td>
</tr>
<tr>
<td>Midpoint</td>
<td>3% (75 million)</td>
</tr>
<tr>
<td>Fastest</td>
<td>14% (375 million)</td>
</tr>
</tbody>
</table>

| Impact of demand for work by 2030 from 7 select trends |
|---------------------|-------------------------------------------------------|
| Trendline demand scenario, % of workers (FTEs) |
| Low                 | 15% (390 million)                                    |
| High                | 22% (600 million)                                    |
| Step-up demand scenario, % of workers (FTEs) |
| Low                 | 6% (165 million)                                     |
| High                | 11% (300 million)                                    |
| Total, % of workers (FTEs) |
| 21% (555 million)    | 33% (899 million)                                    |

In addition, of the 2030 workforce of 2.66 billion, 8-9% will be in new occupations.

Jobs Lost, Jobs Gained: Workforce Transitions in a time of Automation

James Manyika, Susan Lund, Michael Chui, Jacques Bughin, Jonathan Woetzel, Parul Batra, Ryan Ko, Saurabh Sanghvi,

McKinsey Institute November 2017
Technological disruption: world of work

The future of employment

About half of today’s jobs will likely be done by computers in a decade or two. Automation has so far taken over mostly well-defined routine tasks, shifting jobs from middle-income manufacturing to lower-income service jobs. As computers get better at for example perception - think self-driving cars - those service jobs are likely next up to be replaced by machines. Frey and Osborne (2013) estimate the probability of each job becoming automated. Here are how their predictions apply to 2016 US employment statistics.

Black fields are jobs likely to be automated and white fields are jobs that are likely to remain.

Skills Disruption

35% of core skills will change between 2015 and 2020

Disruption across countries and industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Average Disruption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Services &amp; Investors</td>
<td>43%</td>
</tr>
<tr>
<td>Basic &amp; Infrastructure</td>
<td>42%</td>
</tr>
<tr>
<td>Mobility</td>
<td>39%</td>
</tr>
<tr>
<td>Information &amp; Communication Technology</td>
<td>35%</td>
</tr>
<tr>
<td>Professional Services</td>
<td>33%</td>
</tr>
<tr>
<td>Energy</td>
<td>30%</td>
</tr>
<tr>
<td>Consumer</td>
<td>30%</td>
</tr>
<tr>
<td>Health</td>
<td>29%</td>
</tr>
<tr>
<td>Media, Entertainment &amp; Information</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: Future of Jobs Report, World Economic Forum
Disruption of a skillset for success
A new ‘technical and professional’

5. Sustainable success in which key capitals are adaptability and connectivity/network
Curriculum 2018

Competencies, Capabilities, Attitudes, Intelligences

Disciplinary Knowledge
(Core Curriculum)
Like our students, universities face an increasingly disruptive volatile external landscape. Plurality of ‘truth’, fragmentation and ambiguity are operating norms.

Disruptive technologies are playing/ will play a large part in the accelerating changes to our societal fabric and the way we behave and function personally and professionally.
Within this landscape, disciplinary silos where knowledge is the goal/endpoint are outmoded: knowledge does not equal power.

Interdisciplinarity/multidisciplinarity and real world application of converging disciplines to an external issue or problem, configured as outward facing, demand-led problem-based curricula; connectivity, adaptability, agility and resilience are future capitals.
Sustainable graduate success is not primarily dependent on knowledge acquisition, but on acquisition and practice of the capabilities, behaviours, attitudes and competences which will ensure successful *application* of interdisciplinary knowledge across disruptive interdisciplinarities and an accelerating change landscape: navigating the unknown through development of a new ‘technical and professional’ towards personal and professional *productivity*
This paradigm shift represents a threshold concept and troublesome knowledge for universities – we are now in the liminal, messy, uncomfortable phase of transforming ourselves and our relationships with the accelerating change landscape in which we all sit.

As individual educationalists and as educational institutions, this disruptive paradigm shift requires us to respond to the external world and the emergent support needs of our graduates in a fundamentally different manner in order to continue to give value and remain relevant.

We are not entirely set up and ready to do this: university operating structures, support cultures, thinking and practices are predominantly resident in a paradigm wrapped around a teaching model founded on traditional practices established in a fading world.

In Summary...
So what next for Personal Advising? Critical questions for the next 5 years (and beyond…)

What is the fundamental future place of Personal Advising in a holistic higher education experience?

How do you increase personalisation?

How are you going to help your students navigate the unknown?

What role does disruptive/ emergent tech play in your ideas?

How are you going to evolve your role and the way you enact it to keep adding value?
Factors for resiliently developing (a) difference...

- Fail differently, fail fast, try again
- Learn to un-learn and learn again
- It’s complicated, not unsolvable
  - Just do it, and then improve it
At a recent Salford Leadership event...

Enabling and empowering action and decision making towards innovation and productivity/ value add;

1. Is it right to do it?
2. What are we really going to break?
3. When is it the right time to safely tell someone it's going wrong?
Embracing uncertainty: co-creation and co-production

- Co-creating the landscape with our students and internal/external partners
- Co-operation/collaboration across departments
- Self-managing, autonomous units of action
- Clear, time-defined purpose, not outcome
- Participants bring themselves, not (just) their role
Some factors for success and traction...

• One size does not fit all – work with local cultures
  • Co-create/ co-produce
  • Work intelligently in-year
• Prioritise communication and engagement to avoid noise
  • Manage up/down/ across
  • Be visible
I don’t think we’ve even seen the tip of the iceberg. I think the potential of what disruptive technologies are going to do to society, both good and bad, is unimaginable. I think we’re actually on the cusp of something exhilarating and terrifying... The state of learning and personal development is going to be so different to the moment, where the interplay between the student, the education provider and the external environment, will be so insympatico its going to crush our ideas of what disciplines are all about...
The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify... into every corner of our minds.’

John Maynard Keynes (1936)
Thank you and questions...

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