

AdvanceHE





Global Issues in Higher Education

Advance HE Horizon Scan

These slides show example
content from our Certificate
programme

What are the key challenges facing universities now and in the near future?

What are the key challenges facing universities now and in the near future?

Respond at [PollEv.com/kwright373](https://www.poll-ev.com/kwright373)

Text **KWRIGHT373** to **020 3322 5822** once to join, then text your message



Forecasting the future is tough

- Sir Alexander Graham Bell (1897) - *This invention will be so significant it's likely we will see one in every...*

.....town

- A prominent banker advising Henry Ford (1903) – *The horse is here to stay but the automobile*

.....is only a novelty - a fad

- Thomas Watson, Chairman, IBM (1943) – *I think there is a world market for about computers*

.....five

- Sir Alan Sugar (2005) – *Next Christmas the ipod...*

.....will be dead, finished, kaput

‘Increasingly, higher education is recognised as core to the furtherance of a nation’s social and economic goals, promoting the education of a flexible and adaptable workforce capable of tackling global ‘wicked issues’. The demands on, and challenges for, higher education are as never before.’

Professor Stephanie Marshall
Former CEO, The Higher Education Academy

<https://www.heacademy.ac.uk/download/rising-challenges-tomorrow>

5 Key Challenges for Higher Education

Identified from research with Higher Education Leaders from UK, US, Australia, Hong Kong, Singapore, Japan, Israel, South Africa and the Netherlands.

- 1. Technological Change**
- 2. Teaching & Learning**
- 3. Interdisciplinarity**
- 4. What are Universities for?**
- 5. Academic workforce**

Technological Change

“The only wrong move when it comes to digital transformation is not to make any move at all”

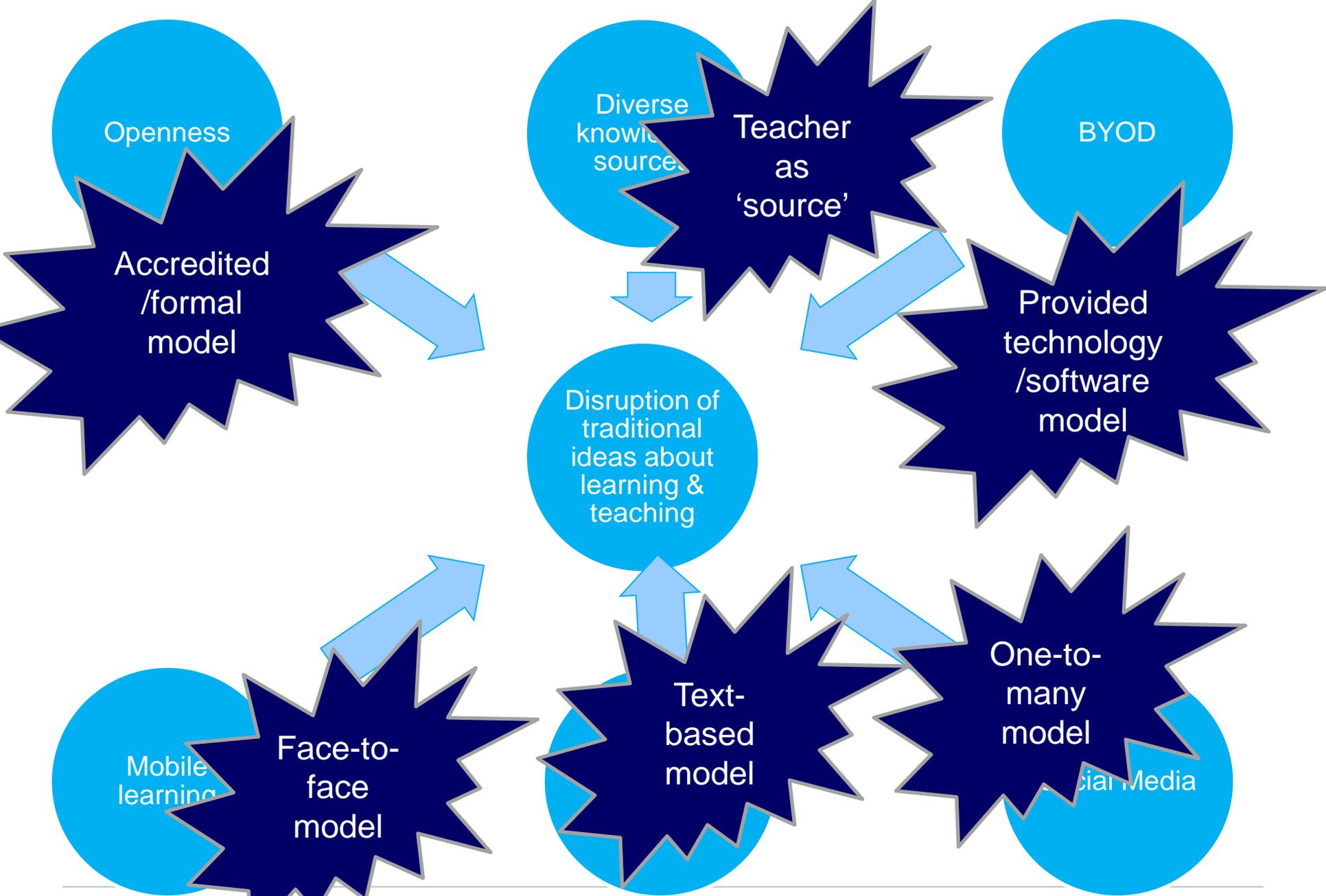
Didier Bonnet, Senior VP Capgemini

Accelerating pace of change

NUMBER OF YEARS IT TOOK FOR EACH PRODUCT TO GAIN 50 MILLION USERS:



Back to dialogue sheets



Digital Trends

01

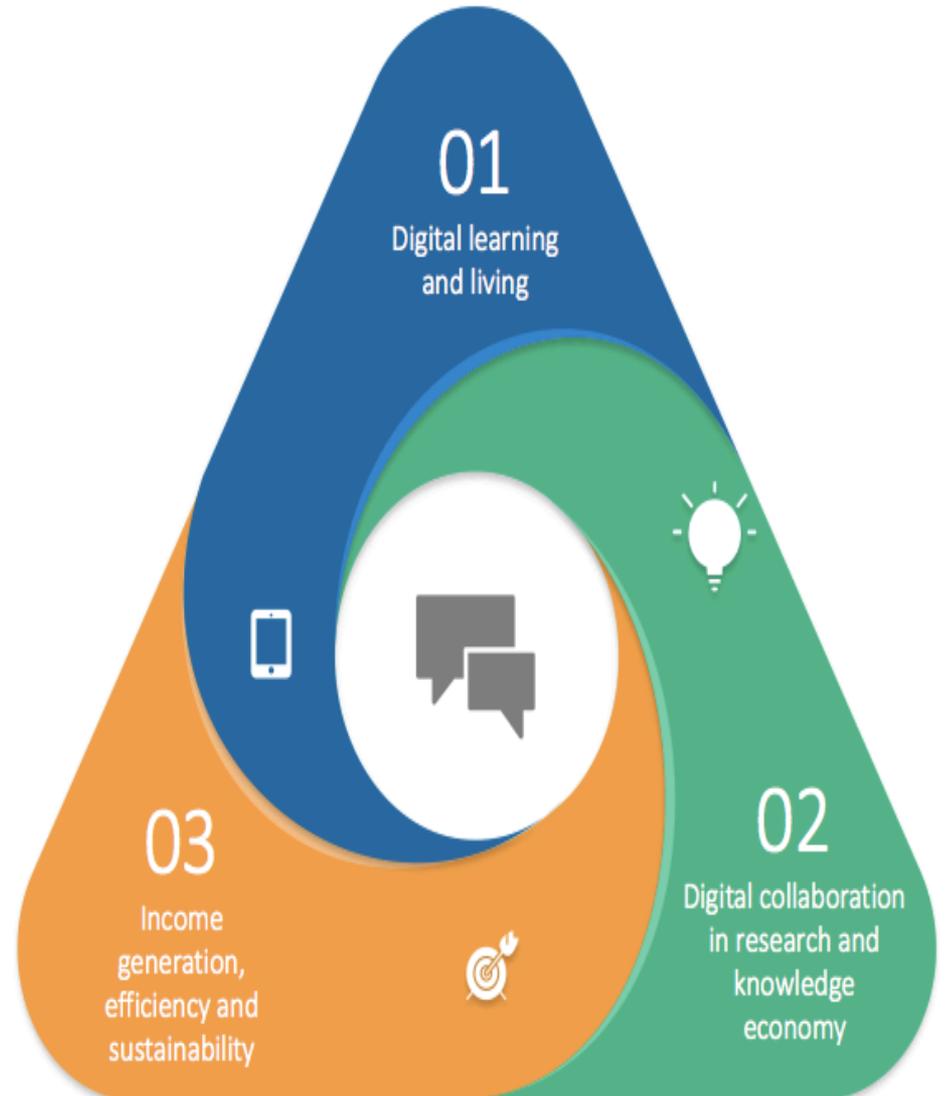
The increasingly digital expectations and desire for flexible and personalised learning and living of Generation Z.

02

The growing importance to funders in how research and knowledge exchange impacts society and commerce

03

The increased pressure on institutions to generate new income streams, sustain asset bases, and reduce climate impact.



Teaching and Learning

- Overemphasis on research
- Need to rebalance and integrate learning, teaching and research
- Developing teaching excellence ('the best' becomes 'the norm')
- Reboot and refresh mid career academics



Interdisciplinarity

- Needed to address global grand challenges (wicked problems)
- Relevant connected curricula
- Individually tailored learning experience
- Flexible – build your own degrees



What are Universities for?

- Societal greater good
- Economic growth and innovation
- Employers / workforce needs
- Widening Participation – more students as first family member to attend University



Staff

- Barrier or facilitator?
- Harnessing potential
- Some countries facing a demographic challenge
- Tenure
- Increasing use of short term / casual staff
- Preparing teachers
- Job uncertainty
- Status of pedagogical research
- Attractiveness of an academic career as opposed to other careers



The importance of students to universities.....

...and the importance of the quality of their experience.

Students increasingly fund universities.

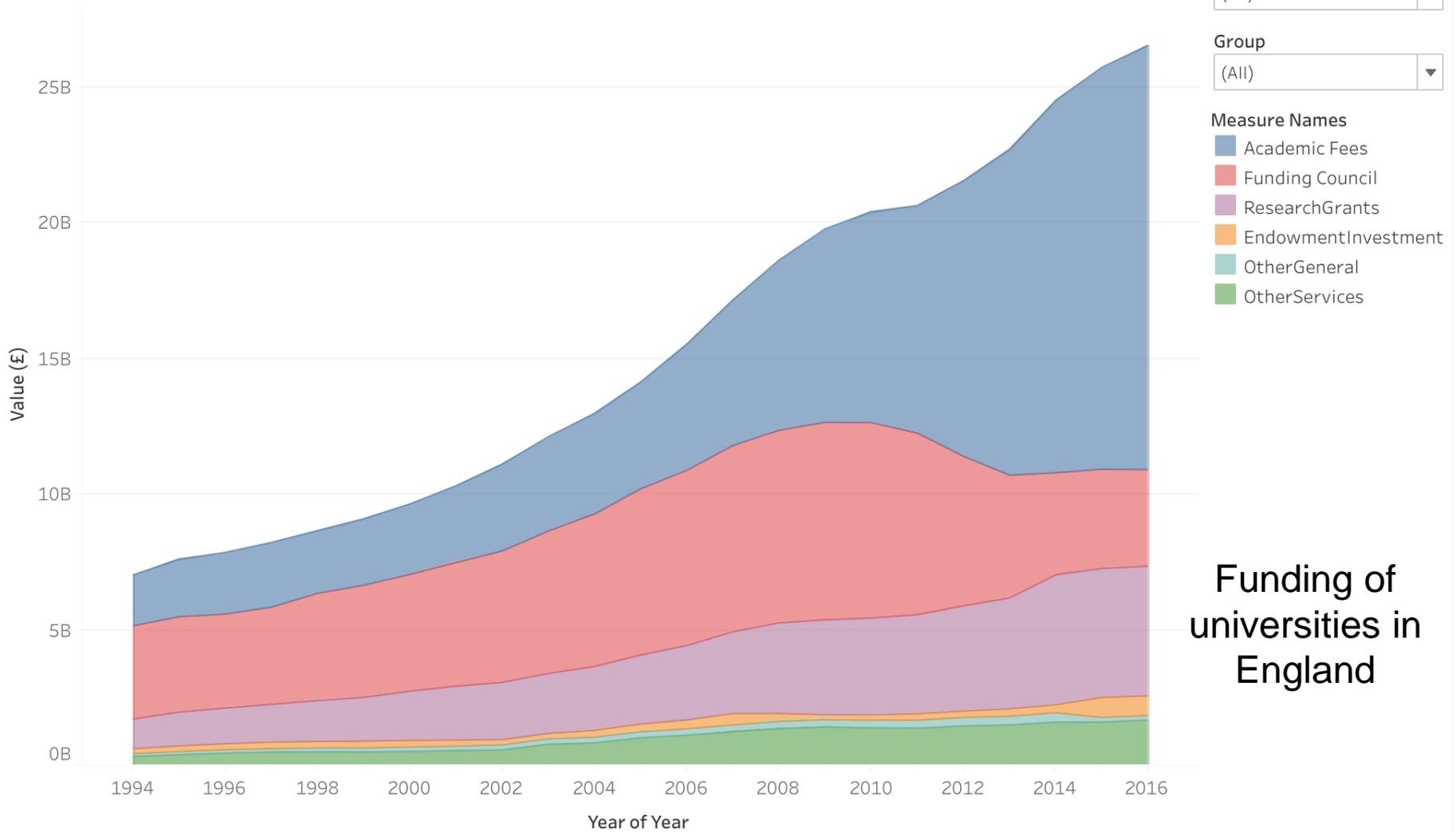


Funding trends



Funding of
universities in
US

Institutional income by source, 1994-2016

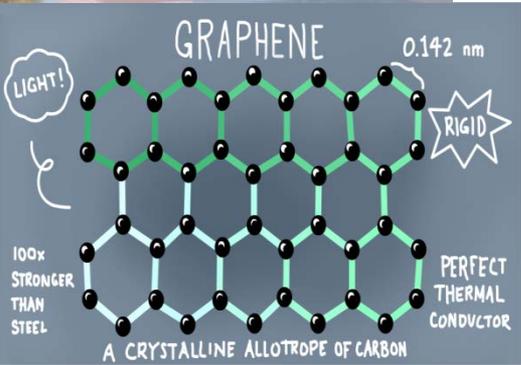
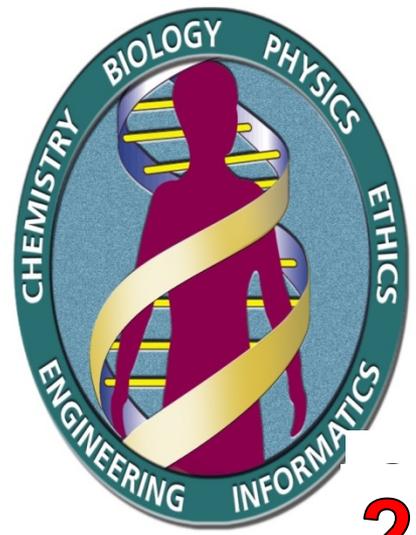


Funding of universities in England

And in Ukraine? And Lithuania?



The accelerating pace of change and students today



2016
2017
2015



So back to our icebreaker:

What are the students of today
like?

So let's look at our students

Past and present

Baby Boomer Generation 1950/60s

- Television
- Typewriters and word processors
- Letters and post

Generation X 1980/90s

- Video games
- Computers
- Email

Generation Z 2000+

- Web – always connected
- Mobile devices
- Instant messenger
- Online communities / social media

By the age of 21 the average person will have spent...

- 10,000 hours playing video games
- 20,000 hours on emails and messages
- 20,000 hours watching 'on demand' TV
- 10,000 hours making mobile calls
- Less than 5,000 hours reading

Prensky, M (2003) *Digital Natives, Digital Immigrants*

<https://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>

The 'Net' generation

- Born after 1982
- Gravitate towards group activities
- 8 out of 10 believe that it's 'Cool to be Smart'
- Focused on attainment
- Busy lives – lots of extra curricula activities
- Fascinated with new technology
- Able to multi-task
- Radical and diverse

The differences between teachers and students in terms of technology

3 biggest fears of a teacher using technology	3 biggest fears of a student using technology
<p>1 How do I make this work?</p>	<p>1 </p>
<p>2 How do I avoid looking like an idiot?</p>	<p>2 </p>
<p>3 {They will know more about this than I do}</p>	<p>3 </p>

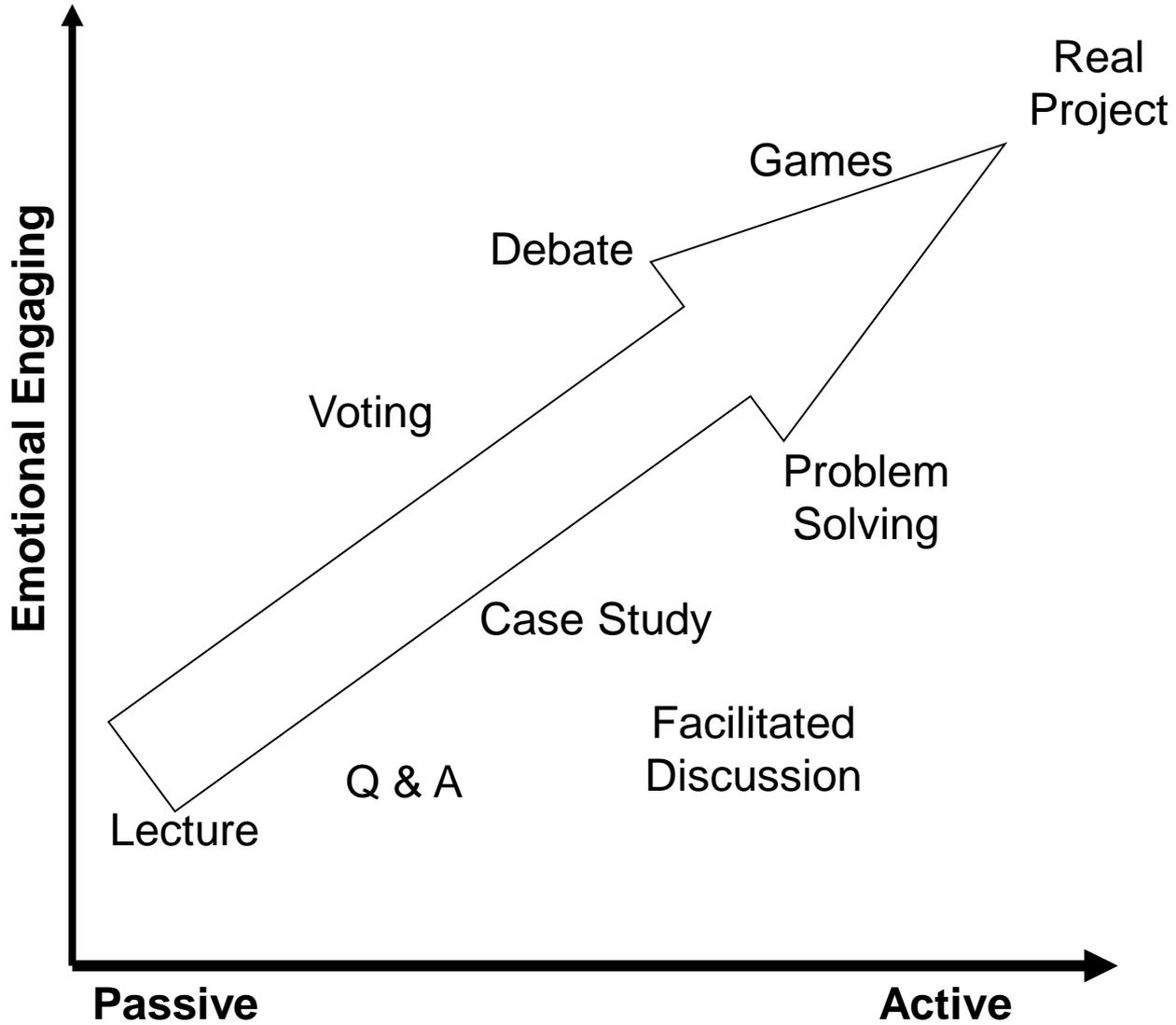
Learners

ARE

- Digitally literate
- Mobile
- Always connected
- Lacking in some social skills – face-to-face
- Unable in some cases to discern quality of information

WANT

- Interactivity
- Visual images
- Opportunities for parallel processing
- Fast responses



Learners

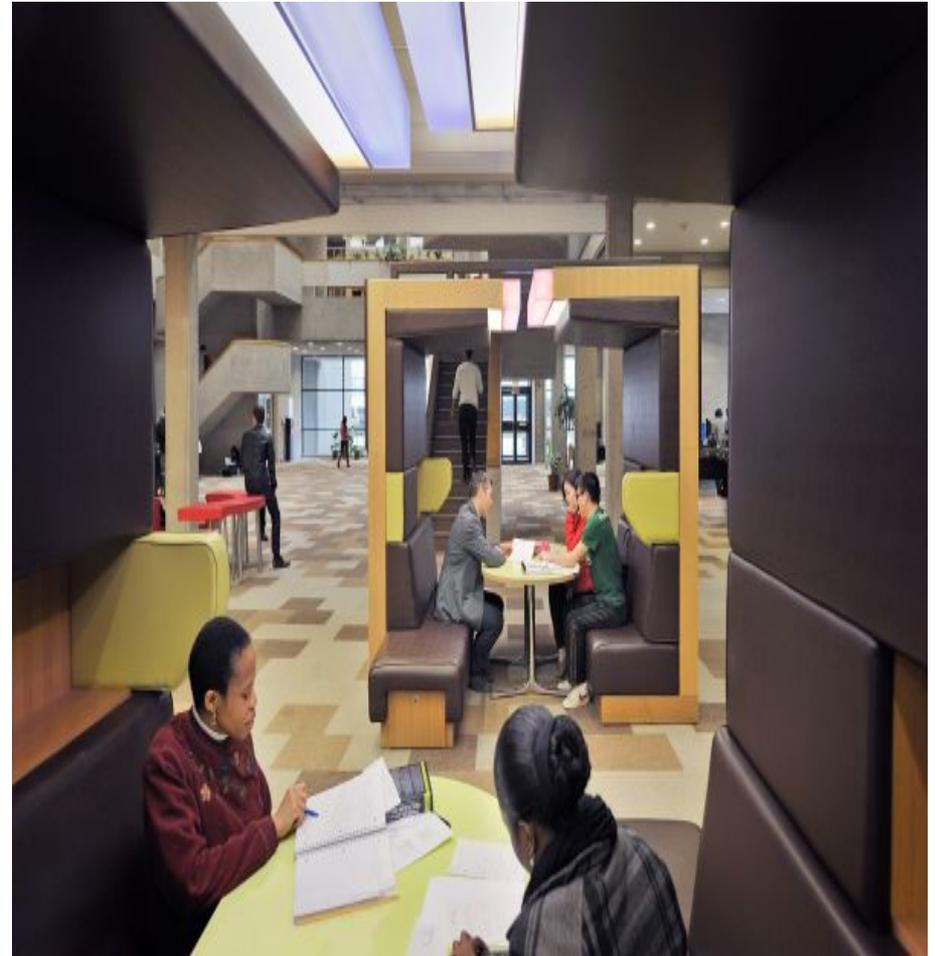
ISSUES

- Short attention span
- Actively choose NOT to pay attention
- Lack literacy skills when faced with text
- Unable to discern the quality of information



Learning spaces are changing...

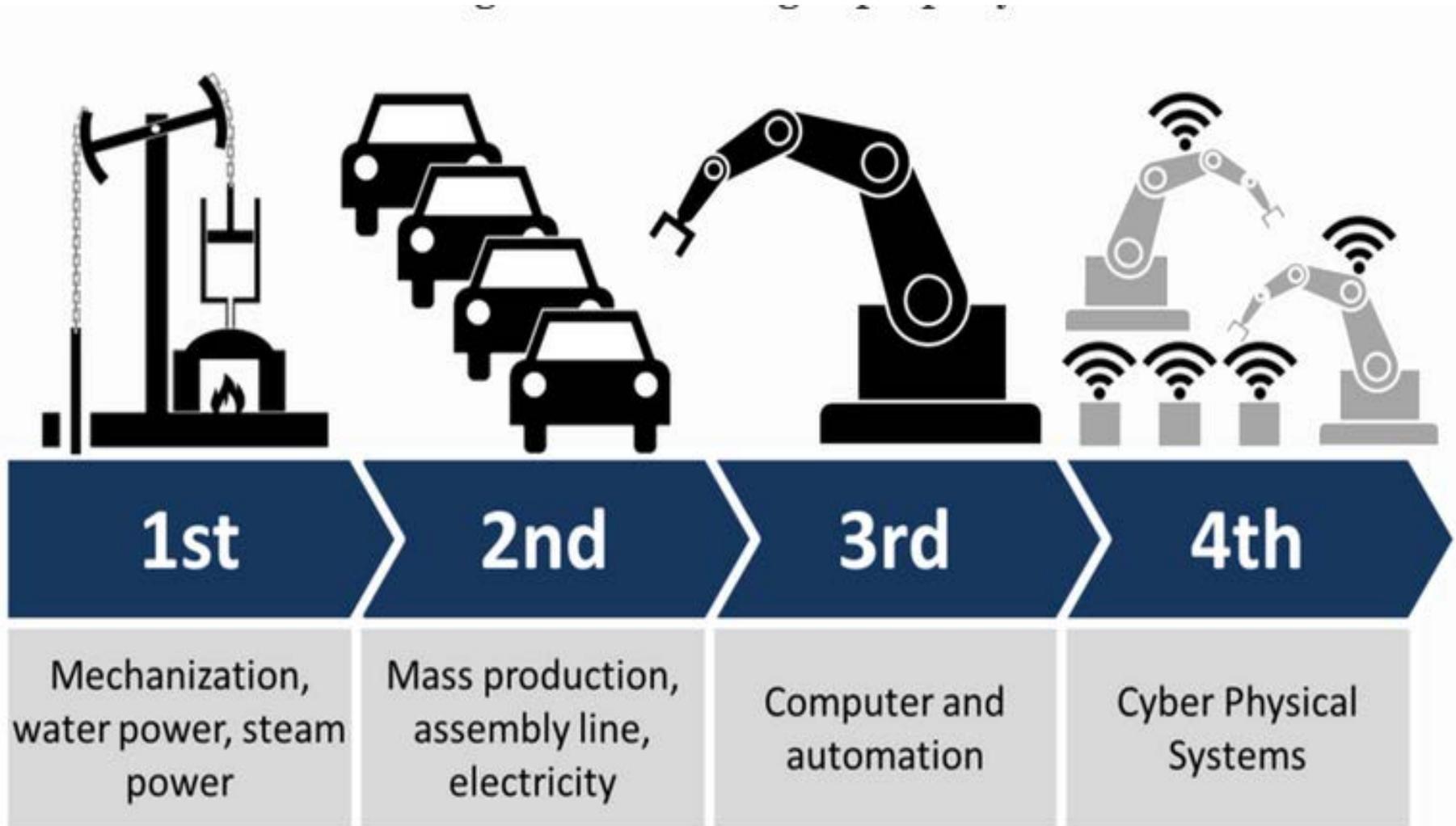




The logo for AdvanceHE, featuring a small teal circle and a purple dot to the left of the text "AdvanceHE".

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4th Industrial Revolution is
here



The 4 Industrial Revolutions (by Christoph Roser at AllAboutLean.com)

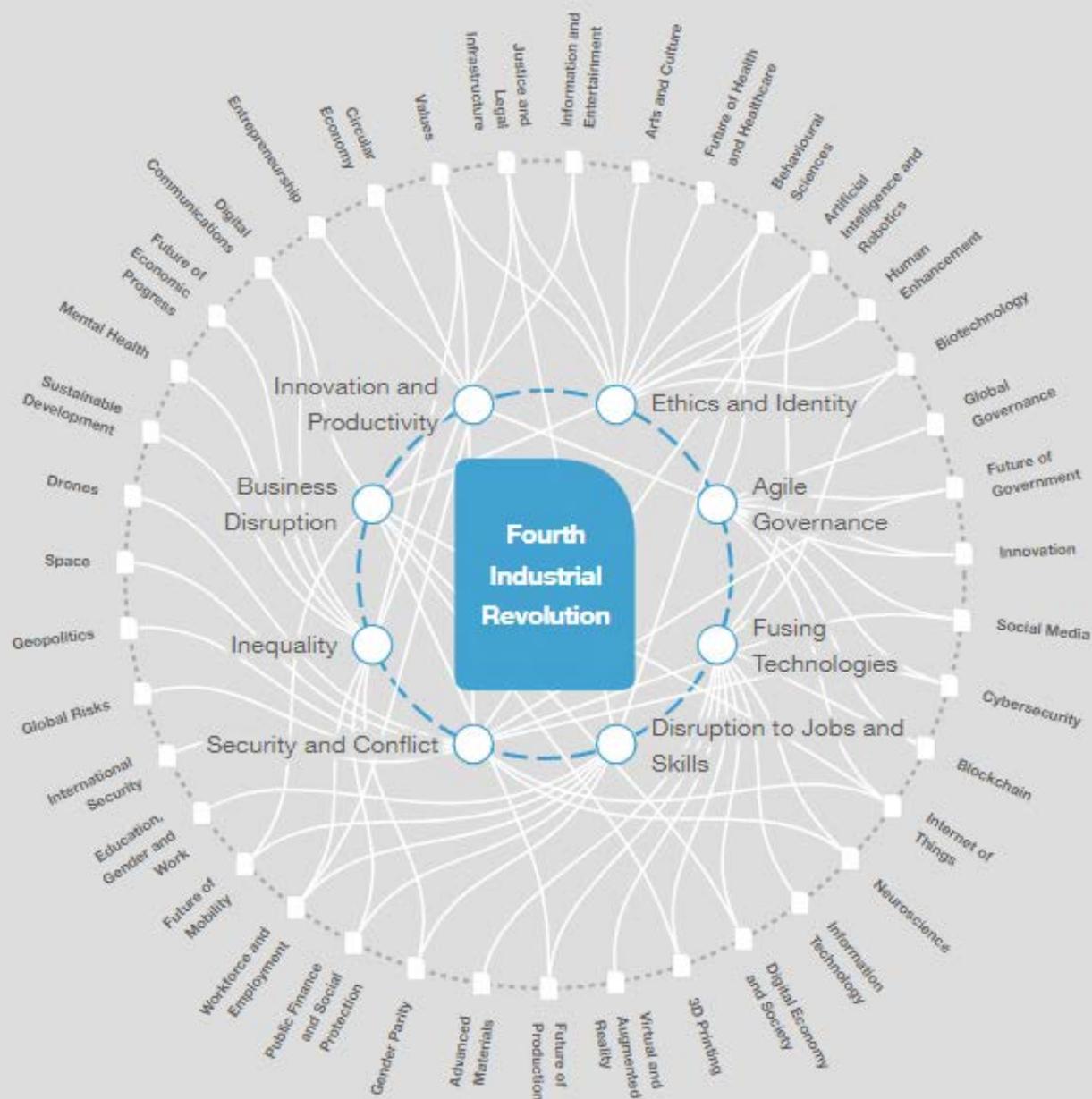
Fourth Industrial revolution



4th Industrial Revolution

‘The Fourth Industrial Revolution represents a fundamental change in the way we live, work, and relate to one another. It is a new chapter in human development, enabled by technology advances that are commensurate with those of the first, second and third industrial revolutions, and which are merging the physical, digital, and biological worlds in ways that create both promise and peril. The speed, breadth, and depth of this revolution is forcing us to rethink how countries should develop, how organizations create value, and even what it means to be human; it is an opportunity to help everyone, including leaders, policy-makers and people from all income groups and nations, to harness technologies in order to create an inclusive, human-centred future.’

<https://toplink.weforum.org/knowledge/insight/a1Gb0000001RIhBEAW/expl ore/summary>



© World Economic Forum

“a fusion of technologies that is blurring the lines between the physical, digital and biological worlds” (UK HMG, Industrial Strategy 2017: p.32).

Students to attend hologram lectures

November 3 2018, 12:01am, The Times



Live hologram lectures at Imperial College London allow tutors to teach while out of the country

Imperial College London is to offer lectures with live holographic guests after introducing the technology to students this week.

Life-size 3D images of speakers in Los Angeles and New York appeared on stage at the university's business school, allowing the audience to ask questions as though they were in the same room.

Studios have been set up in locations including the US, Canada and Singapore. It means that professors can continue giving lectures when they are out of the country.

The university says it is the first in the world to offer live lectures via

Jill Watson

Teaching Assistant
Georgia Institute of Technology



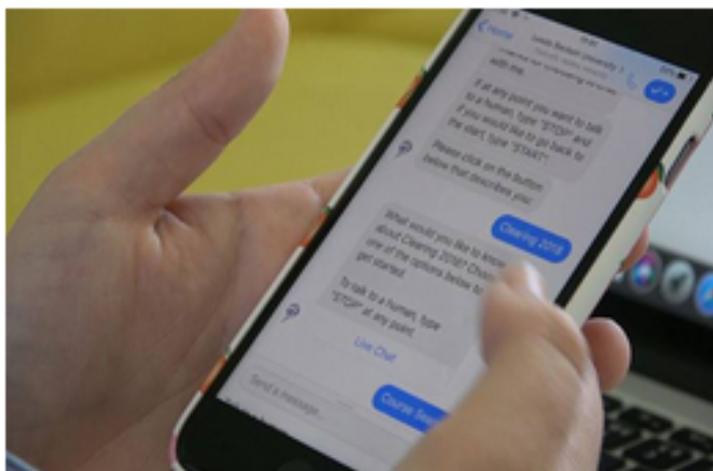
Students loved Jill. She would answer questions quickly, politely and with the occasional jaunty “Yep!”. She would sometimes say something a little odd, but don’t we all? Goel (the programme tutor) didn’t initially tell his students that Jill was in fact an AI system. He was forced to add a short delay to her responses. Otherwise, her students might notice how much quicker she was at answering questions, even in the middle of the night.

Virtual Advisor gets A*

HOME > NEWS > VIRTUAL ADVISOR GETS A*

14 August 2018

Alexa will join our virtual advisor "Becky" this year as prospective students look to confirm their places.



Prospective students are turning to online conversations for information and advice.

'Becky' the Chatbot - developed by a graduate of Leeds Beckett who is now a member of staff - had 21,172 conversations with prospective students about the university application process during last year's clearing period alone.

- 215 offers were made to prospective students via Becky in 2017
- Almost half (46.6%) of students who were offered a place via the chatbot enrolled at the university in September

POSTED IN

Staff

Students



Student employability skills

- Disciplinary knowledge/skills + human skills
- Human skills + digital literacy

- Both/And not Either/Or
- Hybrid jobs: Every job is digital?

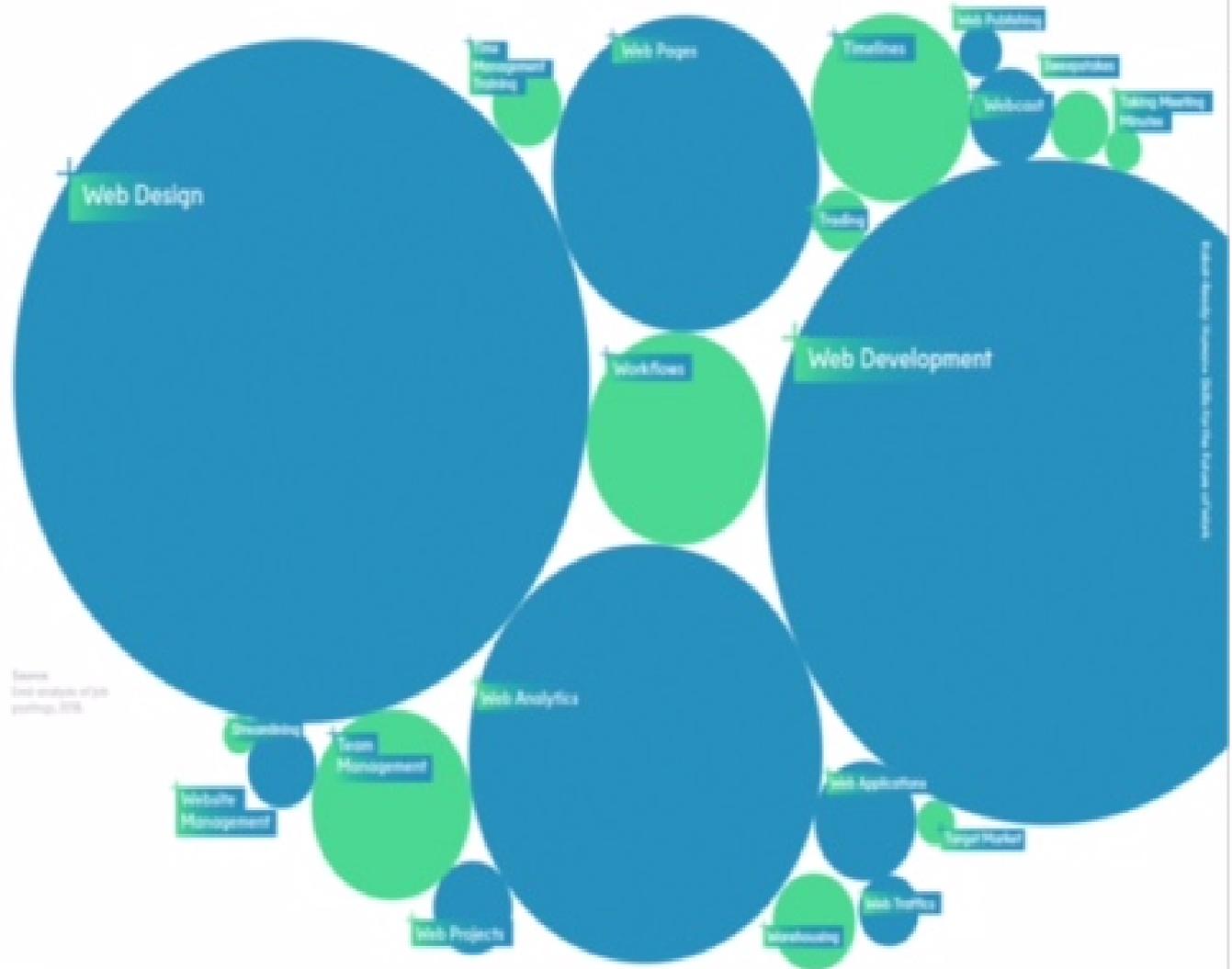


Hybrid Jobs

Every job is digital

Journalism job postings increasingly require tech skills like analytics, SEO, and JavaScript

Bubble size reflects relative demand of each skill



Slide from 'Robot Ready: Human Skills for the Future of Work', Strada Institute

Graduate attributes

Sheffield Graduate Attributes



Building Higher Education Curricula Fit for the Future

<https://www.advance-he.ac.uk/sites/default/files/Building-HE-Curricula-Fit-For-The-Future.pdf>

Report recommendations

The skills required for the future extend beyond STEM subjects

- Develop a broader collective vision that looks beyond STEM subjects to recognise the creative and innovative possibilities fostered in graduates of all disciplines
- Capitalise on the transferable skills and meta-competencies of graduates in all disciplines

Technical and academic knowledge are closely interconnected

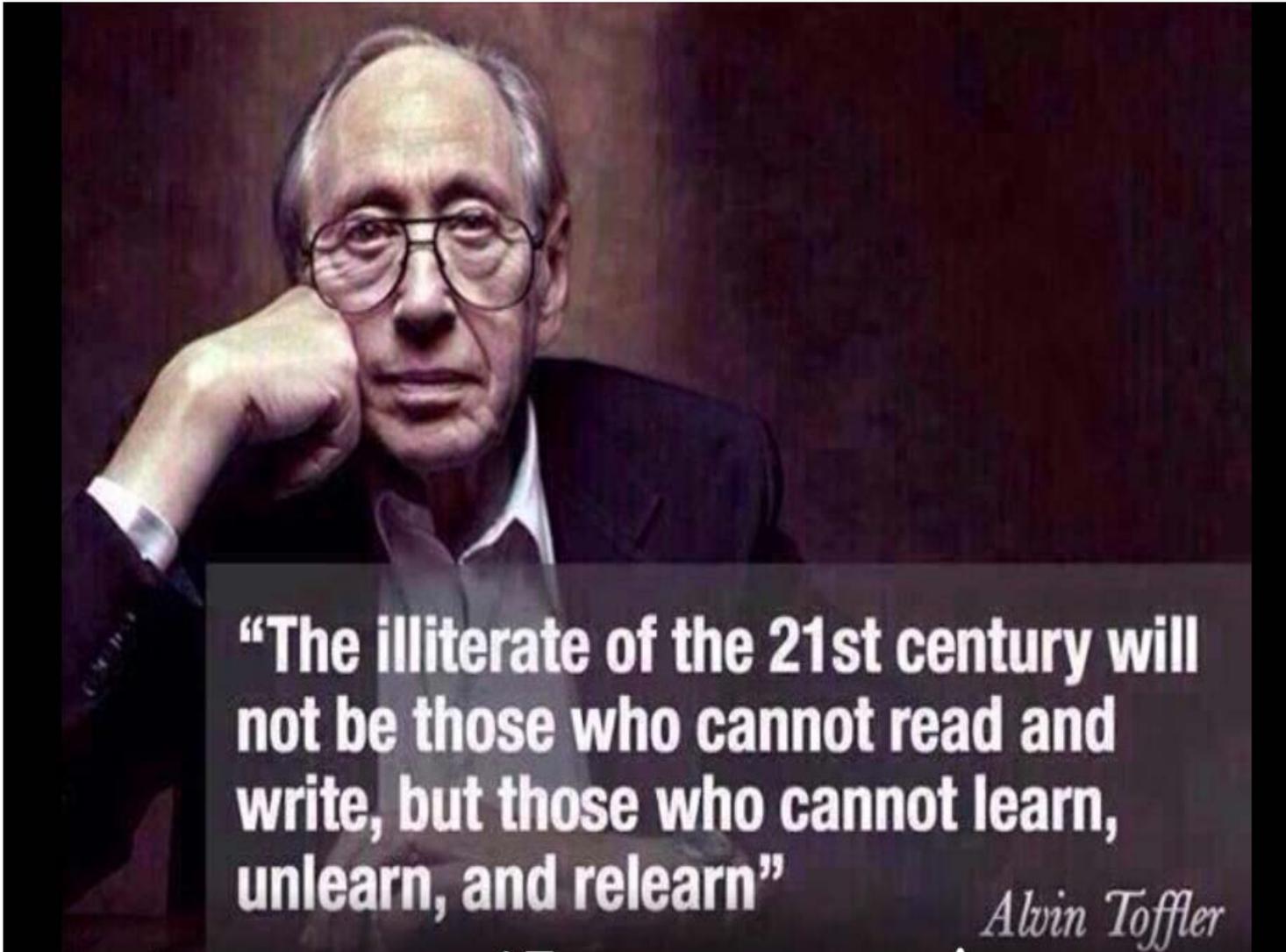
- Consider the impact of early separation of routes: separating academic, technical and vocational routes at secondary level and in further/higher education
- Government, industry and the higher education sector to work together to design a lifelong skills approach encompassing technical, conceptual, reflective and innovative capabilities across the whole workforce

Lifelong reskilling opportunities will need 'buy-in' from all stakeholders

- Ensure both higher education institutions and employers are supported to share responsibility for enabling access to flexible, lifelong reskilling.

Higher education teaching has a unique role in transferable skills development

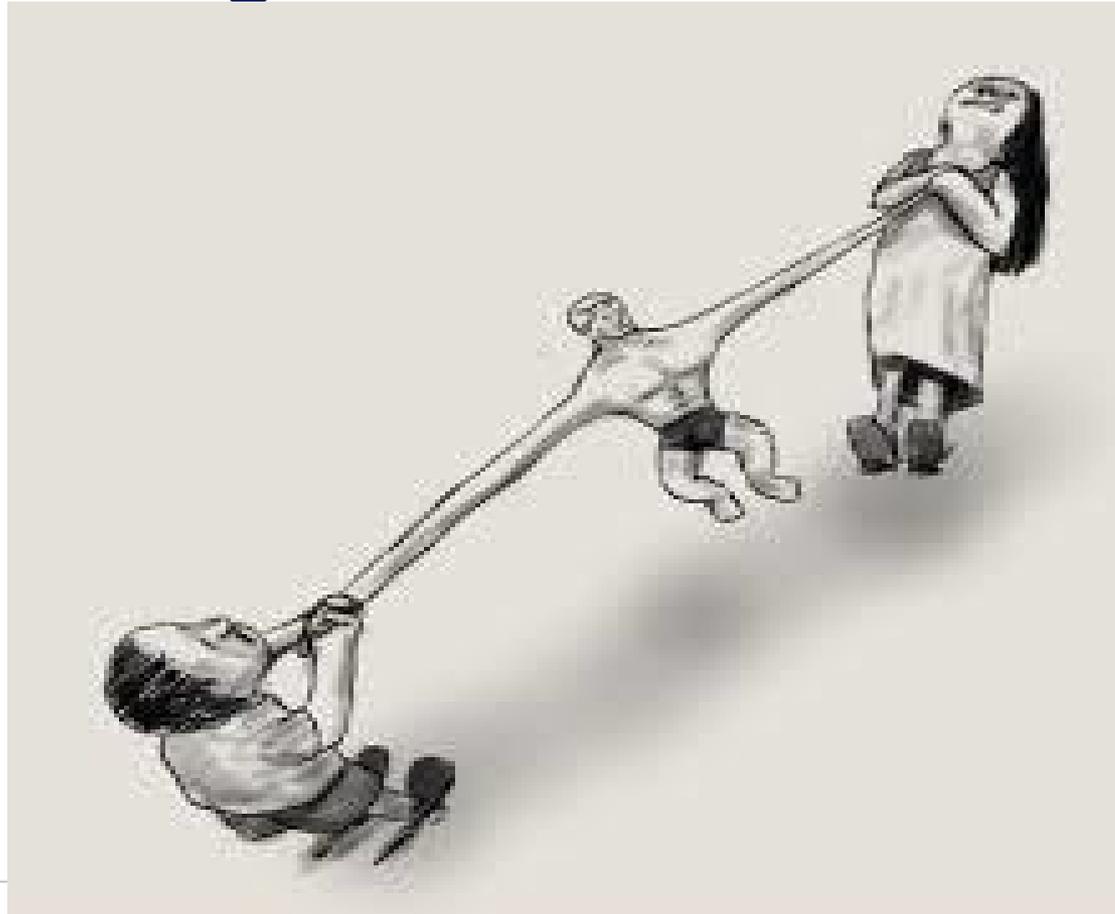
- Develop innovative teaching methods for integrating academic and applied learning
- Ensure these methods connect with and actively foster the skills and attributes that employers will seek in a rapidly changing employability landscape

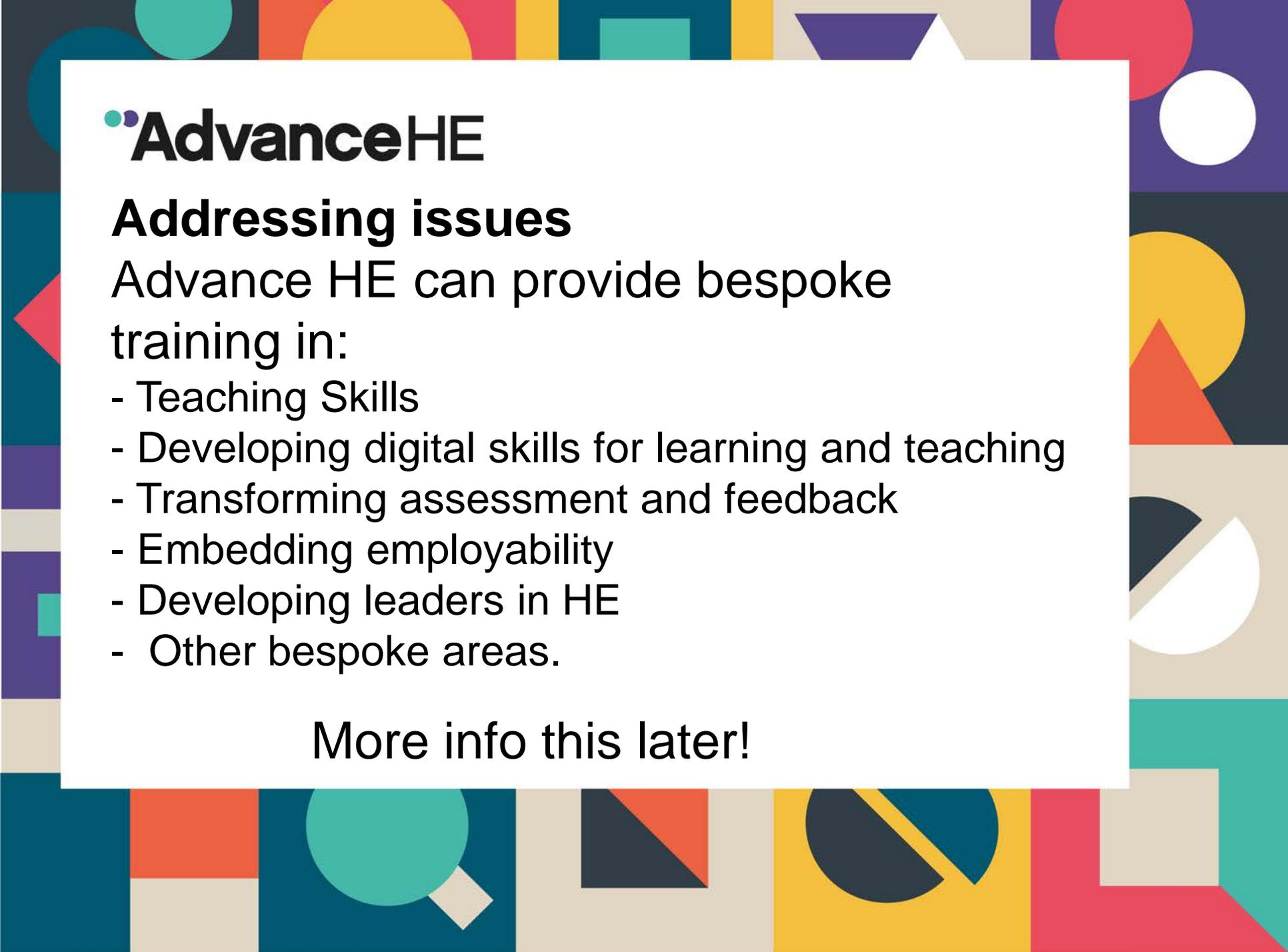


“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn”

Alvin Toffler

What it feels like to be in a university in the middle of all this change!





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Addressing issues

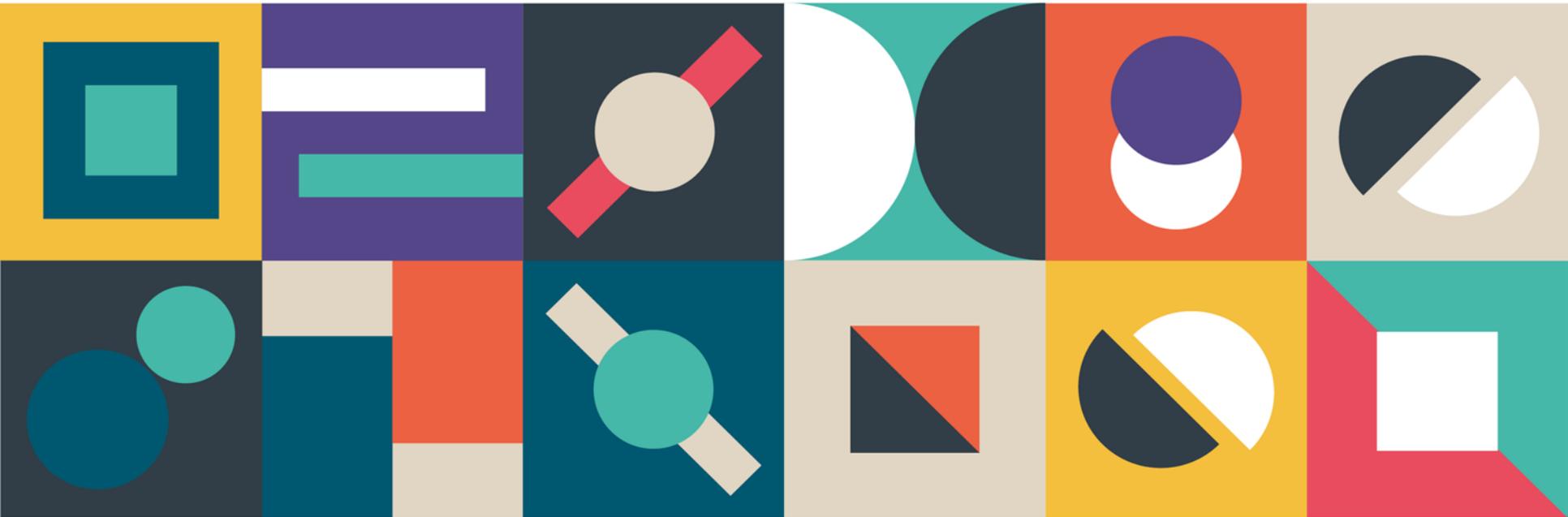
Advance HE can provide bespoke training in:

- Teaching Skills
- Developing digital skills for learning and teaching
- Transforming assessment and feedback
- Embedding employability
- Developing leaders in HE
- Other bespoke areas.

More info this later!

AdvanceHE

For more information
www.advance-he.ac.uk
@AdvanceHE



Formed from the merger of



www.advance-he.ac.uk