

Future Student Experience Project

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A reputational ecosystem for higher education

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Future Student Experience

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1 Scenario: a reputational ecosystem

1.1 Vision

Learning is space agnostic, taking place in the workplace, the further education sector and through a proliferation of alternative providers.

Students learn at a pace and place that suits them. They select institutions by their reputation and the opportunities they provide but also if they chime with their personal values.

The marketisation of education and skills, coupled with a globalised economy of provision, affords students the luxury of considerable choice in the pace and place of their learning. This results in competition between providers and a diverse, accessible and economically attractive set of offers.

Globalised students are increasingly connected to the issues that will shape society throughout their lives, and beyond, for humankind. Being acutely aware of the significant challenges facing society, they increasingly make choices that align with their own values about what a university education should be for and how different institutional missions will shape their experience. Students balance their practical needs for employability with their view about the experience of learning they can expect, and the societal, economic and ecological impact they believe their place of study will have locally, regionally, nationally and globally.

A learner's potentially 'consumerist ethic' also has implications for quality, standards and reputation when it comes to education and skills acquisition. This makes the calibre and mission of an institution a key consideration in this choice as students seek to co-brand themselves with the provider of their learning.

The underlying growth in demand for affordable higher education points to an increase in providers, but with significant power in the hands of students as technology frees up access, allow easy sharing of rich digital transcripts of student achievements and the reputation of providers.

1.2 Value proposition

The scenario above envisages a more complex HE ecosystem with potential advantages and challenges for different stakeholders.

This scenario has perceived values for:

- + the learner: there are increasing choices about how, where and with which institution they study, but these may involve compromises determined largely by their personal values
- + the teacher: like the learners, teachers could align the choice of institution they work with to better fit with their personal values. However, it is likely that for some the increased competition felt by institutions may lead to more precarious and less well compensated employment

- + the institution: competition will be fierce, and they will need to be careful to tailor the offer to the needs and values of their learners – or they may fail. However, for those that ‘get it right’, the globalised nature of education will mean that they can thrive and grow
- + governments: will have a plurality of providers to influence and support as they determine policies. However, their direct control will be reduced
- + society: will be reflected in the types of institutions that thrive; where environmental values are strong then institutions that chime with this will thrive.

2 Approach

2.1 Research methods

Multiple ideological and theoretical lenses frame this inquiry. This multi-disciplinary approach has made it possible to conceptualise the project using a robust analytical framework drawing on soft systems methodology (Checkland and Poulter, 2006). Finding out about the ‘problematical situation’ involved a literature review, focus groups and the use of expert witnesses, along with a practitioner analysis using the lens of the Theory of Disruptive Innovation. The soft systems methodology practitioners (SSMP) then reflected across the collected information to arrive at a proposed ‘HE system of choice’.

2.1.1 Literature review

A scoping literature review was undertaken by an expert academic based at the sustainability unit at Manchester Met to provide the context for this project. The focus was sustainable development at universities. Sustainable development was the key concept because it is a model of development that integrates social, environmental and economic considerations, which are issues at the heart of the student experience.

2.1.2 Data sources

Focus groups with university students. Students were recruited based on their experience of the pandemic in higher education, because it is those that follow them who will be making the choices about where and how they study. The SSM technique of rich pictures was used to elicit students’ views on learning in 2035, along with practitioner notes that were analysed thematically using an inductive analysis approach (Braun and Clarke, 2016). Once initial themes were identified, these were explored in depth during the SSMP meetings and revisited in the context of wider literature around sustainable development. Constructed themes were reviewed and refined to identify three core components of a future student university experience of choice.

Focus groups with the Learning Research Technology unit at Manchester Met. The university technology-enhanced learning team at Manchester Met was consulted as part of a detailed focus group, which included highly experienced members who have decades of experience developing technological solutions for learners. The session explored the technological opportunities and issues that the scenario presents. A particular focus of these sessions was the contribution that artificial intelligence can make to teaching and learning. Notes were taken and used by the SSMP to develop their understanding.

Expert analysis of the political and economic. Professor Li Yuan at the College of Education for the Future at Beijing Normal University Zhuhai Campus provided expert input as an SSMP.

3 Literature review

The Ladder of Sustainable Development defines a spectrum that goes from treadmill, to weak, to strong, to ideal sustainable development (Baker, 1997, 9). Treadmill refers to the most anthropocentric type. Treadmill focuses on exponential economic growth through global markets and global economy, with no change to integration and a focus on resource exploitation. Weak refers to sustainable development that is market reliant with initial moves to local economic self-sufficiency with equity as a marginal issue. Strong refers to sustainable development where there is an environmentally regulated market, environmental management and protection, environmental policy integration across sectors and strengthened redistribution policy. Ideal refers to a type that promotes and protects biodiversity with holistic intersectoral integration, and inter and intra generational equity. Ideal is the most ecocentric and biocentric type. Sustainable development has been criticised for three main reasons. Firstly, there are a variety of interpretations of the concept (Bonnett, 1999, 2002; Fischer et al, 2017; Haque, 2000; Holt and Barkemeyer, 2012; Stables and Scott, 1999). Secondly, there can be a lack of criticality regarding the limits to economic growth (Baker, 1997; Bosselmann, 2001). Finally, sustainable development can be seen as Euro-centric or aligned with narratives of the global north (Plaatjie, 2013). Despite these critiques, sustainable development is one of the only concepts that tries to integrate environmental, social and economic aspects and has international policy significance (Baker, 1997; Estes, 2010; United Nations General Assembly resolution A/RES/70/1, 2015).

Universities are in a unique position to help implement sustainable development. Universities work at the intersection of global and local communities (Radinger-Peer and Pflitsch, 2017; Leal Filho et al, 2019). They work to develop knowledge, which can support links between theory and practice (Leal Filho et al, 2019). Universities undertake research at the forefront of technological and social innovation. Universities work across different sectors and can collaborate with stakeholders including NGOs, government agencies, trade unions, educational institutions, industry leaders (Vargas et al, 2019a). Universities, through transformative teaching and learning, can nurture values, attitudes and behaviours for restorative and regenerative practices towards society and the natural environment (Leal Filho et al, 2018; Sonetti, Brown and Naboni, 2019).

Over the last few decades, universities have been demonstrating growing commitment to sustainable development (Karatzoglou, 2013; Ramos et al, 2015). Despite the activity and potential discussed above, the integration of sustainable development in higher education is fragmented around the world (eg Lozano et al, 2015; Moura et al, 2019; Ulmer and Wydra, 2020; Giesenbauer and Müller-Christ, 2020; Farinha et al, 2020; Roos et al, 2020; Roos and Guenther, 2020). For holistic approaches, the higher education sector would need to integrate sustainable development in practice and policy at least through the following areas: outreach, research, curriculum review, staff development, campus, education, partnerships, collaboration, policy and teaching and learning (Vargas et al, 2019b). However, a shift towards more integrated approaches seems to be taking place (Karatzoglou, 2013; Ramos et al, 2015). The framework developed by Giesenbauer and Müller-Christ, which is one of the latest typologies of universities in the context of sustainable development, presents four different types of universities (2020). These are traditional, modern, post-modern and integrative.

The traditional university is organised around hierarchy and authority. The type of education is teacher centric, around standardised knowledge, learning for recognition and academic titles. Research is focused on strong theories based on deductive and inductive approaches, with a focus on absolute truths and the development of disciplines. Governance and operations and culture is focused on key activities with impressive buildings and extensive libraries. In terms of sustainable development, it focuses on being compliant to regulation in areas such as waste management and health and safety.

The modern university is focused on efficiency and competition. Education is test-centric, with factual knowledge and sound methods, learning for tests and for future success. Research seeks to be standardised, with testing and applying natural laws and using quantitative methods. There is great competition for research grants and success is measured via rankings and impact factors, for example. In terms of governance, operations and culture, it focuses on rapid and quantitative growth in functional buildings, entrepreneurial activity. Sustainable development is a management task.

The postmodern university focuses on dialogue with stakeholders and learners. Its education is learner-centric, focused on competencies, self-reflection, dialogical seminars and project-based learning in which learning is for personal growth. Research is inter and transdisciplinary with action research. It is focused on understanding social dynamics through dialogical processes through qualitative methods. In terms of governance, operations and culture, this type of university is a place for diverse and like-minded people through community and individual expression. Sustainable development is seen as a community task focused on the third mission.

The integrative university is focused on systemic solutions, co-creativity and sustainable development. Education is system centric and holistic, focused on a whole-person approach through research-based, co-creative and mindful learning. Research is co-creative, transdisciplinary, focused on real-life solutions through open science and living laboratories approaches. Governance, operations and culture focus on physical and virtual integration of different societal and ecological systems, with a whole system approach to sustainability. This type of university is rare.

This typology is based on worldviews seen from a systemic development perspective. Therefore, complexity grows as the types of universities discussed above develop. Later types incorporate earlier types, these types can be dominant but not exclusive, and worldviews can be adopted temporarily, and types change over time.

4 PESTLE analysis

4.1 Political

When writing about MOOCs, Yuan and Powell (2013, 15) identified a set of drivers and trends in higher education that probably stand the test of time.

- 1 Globalisation and the increased momentum for internationalisation in higher education.
- 2 Worldwide growth and increasing demand for access to higher education.
- 3 Changing learner demographics, experience and demands of the dramatically increasing numbers of lifelong adult learners.
- 4 Increased access to personal technology and social media.
- 5 The need for changes in cost, affordability and economic models for higher education.

Higher education is already experiencing a period of unprecedented change worldwide. In particular, the cost of funding HE has become a focus of national policy with most governments looking for new funding mechanisms, reduced costs and improvements in the quality of teaching and learning. There is significant momentum behind the concept of free and open access to high-quality university learning, and it is likely that content and courses will continue to be promoted, resulting in more MOOCs and other types of open education approaches emerging. However, there is also a need to rethink current higher education structures and policies that obstruct innovation.

Following the MOOC development to provide flexible access to university courses and microcredentials, the UK government has recently announced a policy scheme, “Skills boost for local communities”. It is to help more people benefit from high-quality higher education in their hometown and support the Open University partners with further education providers to create more training to fill skills gaps and raise job prospects across the country.

“Backed by £10 million of Government funding, the scheme will support colleges to put on a wider range of technical courses, supporting more people to secure high skill, high wage jobs, growing the economy to help tackle the cost of living.”

(Department for Education, 2022).

This skills development initiative is intended as a ‘pump primer’ for another UK initiative

from the UK Office for Students, which provides a funding mechanism for students wishing to learn at the time of need. That is, how and when they study over a lifetime of work enabled by a Lifelong Loan Entitlement (Sept 2020). The intention is that this model empowers citizens, removing barriers to learning by allowing learners to choose the particular skills demanded by employers that will enable them to thrive in the employability marketplace.

These initiatives could be seen as an attempt to deliberately disrupt the marketplace through a funding intervention, something previous governments attempted through initiatives such as foundation degrees, the failed UK eUniversity in 2003, and higher apprenticeships, which appear to be thriving.

The Manchester Met student focus groups believed that “league tables are elitist – they should focus on individual biographies and the space travelled for an individual whether it is personal or academic” and that access to education should be fair and meritocratic and not dependent on wealth or status, and flexible and any-paced learning will increase equality.

4.2 Economic

It follows that there is a need for new business models and innovations in higher education to address the challenges of social and economic conditions in the longer term.

A useful theoretical lens to apply is that of the Theory of Disruptive Innovation (Bower and Christensen, 1995), which is based on an analysis of previous disruptive innovations (those that significantly change the business landscape) and explains the conditions for disruptive innovations. These innovations are distinguished from sustaining innovations, which improve existing products or services.

The question that arises is where will these disruptions come from? From the Theory of Disruptive Innovation (TDI) we can see that it is unlikely that existing providers of HE will be sufficiently agile to leverage the combination of technology and new business models required to be truly disruptive. Instead, change in HE will come from a new entrant to the marketplace (Powell et al, 2015). New providers will find it easier to build a new business model (staff, finance, organisational models, ways of teaching, IT systems, decision-making, etc) based on technological innovation and thus challenge established providers. Key to this theory is the idea of new providers gaining a foothold on overlooked segments of the marketplace by creating a new product or service at a lower price or with more suitable functionality, and then moving up market as the product or service is improved. For existing providers, “a key strategic survival challenge is to recognise different types of innovation and be able to determine which are sustaining and which are disruptive” (Powell et al, 2015) and then to work out how they can respond to them.

Manchester Met student focus groups recognised that costs are and will continue to be a significant barrier to access to HE and that technology provided for opportunities to significantly reduce or even eliminate this as a barrier. They also believed in making the provision of education the same standard and quality regardless of educational establishment and geographical context: “there should be one standard of education of the same quality just different types”.

4.3 Technological

The Manchester Met Learning and Research Technologies group, although optimistic about the potential of technology, also had a cautious philosophical perspective to share. A concern about what might be lost, the commodification of learning and the removal of the sense of belonging that many feel strongly, in part through physical interactions in a place with fellow students and academics broadening their horizons. Without predicting what will happen, technologies identified as having likely future impact are those around:

- + artificial intelligence to teach students in a personalised and responsive way without the costs associated with human interventions
- + block chain technology for the recording and sharing of student achievements from a wide variety of sources, including a rich back-story of where and with whom they have studied
- + institutional transparency around everything: business processes, carbon footprint, environmental impact, etc
- + the promise of augmented and virtual reality for teaching will be finally realised through the metaverse
- + seamless integration of different modes of learning face-to-face, online, synchronous, and asynchronous
- + liberating staff from administrative chores to have more time to focus on high-quality relationships or conversely simply different forms of administration or other activities not teaching related

In summary, the potential of technology to finally provide a truly personalised learning experience.

The students had strong aspirational views around what technology could deliver, ranging from ideas such as a 'virtual helper', the ability to study in an immersive way from any part of the world, and the belief that technology could play a significant role in addressing inequalities between different groups of learners from an equality, diversity and inclusion perspective.

4.4 Socio-environmental

To provide an overview of the global socio-environmental context for this project, the PESTLE analysis in this area is focused on the Sustainable Development Goals (SDGs). The SDGs are a set of goals, targets and indicators developed through a participatory approach. This was done by focusing on local, national and international needs. The SDGs were adopted in 2015. The 17 SDGs provide a framework that suggests the current state as well as future foci of environmental, social and economic practices and policies. Although the SDGs are the most current framework for the integration of environmental, social and economic aspects, sustainable development is its overarching model.

Sustainable development is a wicked problem, meaning it is complex, difficult to define and for which it is uncertain whether there are appropriate solutions (Hensley, 2020). The United Nations recognises that sustainable development is still one of the key global challenges (Holden et al, 2017; United Nations, 2016). The SDGs Report 2021 suggests that reliable country data is still unavailable across the world, especially for areas where there is need for active support to address the SDGs. This problem increased during Covid, for instance due to countries postponing their national census. The following text provides an overview of key developments regarding the SDGs (United Nations, 2020):

- + SDG 1. The first-time extreme poverty rise during this generation was linked to the Covid-19 pandemic and four billion people are yet to have social protection support. The target for SDG 1 is likely to be missed, as shown in recent models
- + SDG 2. The number of undernourished people has increased between 2014 and 2020 (607 million and 720/811 million respectively). 2.37 billion people have no food or cannot have a healthy diet on a regular basis
- + SDG 3. The Covid-19 pandemic stopped or reversed progress regarding health and life expectancy. This is after a decade of progress in reproductive, maternal and child health
- + SDG 4. Education indicators data has shown progress in the last 20 years before the Covid-19 pandemic. However, the pandemic has stopped education progress widely
- + SDG 5. Women are underrepresented in national parliaments, local governments and managerial positions (25.6%, 36.3% and 28.2% respectively). One in three women continue to be subjected to physical and/or sexual violence at least once in their lifetime
- + SDG 6. Two billion people lack access to safe drinking water, 3.6 million people lack access to sanitation facilities that are safe. Between 1970 and 2015, natural wetlands have declined by 35%
- + SDG 7. A third of the population can only use dangerous and inefficient cooking systems. Only 25% of electricity, 9.2% of heating systems and 3.4% of transport comes from a renewable source
- + SDG 8. One point six billion people have informal jobs that lack a social safety net
- + SDG 9. There are 1,235 researchers per million inhabitants and 2.2. trillion invested in research and development but these numbers need to increase to have sufficient capacity to find solutions to global issues
- + SDG 10. Refugee numbers have more than doubled since 2012 (311 refugees for every 100,000 people in 2020). In 2020, records show that at least 4,186 people died or disappeared in migratory routes across the world
- + SDG 11. There are more than one billion slum dwellers in the world. Most of them reside in Eastern and South-Eastern Asia, Sub-Saharan Africa, Central and Southern Asia

- + SDG 12. The global 'material footprint' has increased by 70% between 2000 and 2017. One million plastic bottles are bought every minute. Fossil fuel subsidies threaten the achievement of the SDGs and Paris Agreement
- + SDG 13. The global average temperature in 2020 was 1.2°C above pre-industrial baseline. This suggests that the world is off-track to stay below the target of 1.5 °C. Climate finance has increased by 10% between 2015-2016 and 2017-2018
- + SDG 14. The livelihoods of more than three billion people rely on oceans but acidification, ocean warming, fishery collapse, eutrophication and plastic and marine pollution constitute a severe threat to people, animals and plants
- + SDG 15. More than 37,400 species are threatened with extinction. The world has lost 100 million hectares of forest in 20 years
- + SDG 16. Child labour increased to 160 million in 2020. This constitutes the first increase in 20 years. One in three trafficking victims were children in 2018
- + SDG 17. Net Official Development Assistance reached its highest level at \$161 billion in 2020. This is still short of the official target within the SDGs. Remittance flows to low- and middle-income countries reached \$540 billion in 2020, which is above predictions.

Manchester Met student focus groups expressed strong views about the importance of the environment in the future of HE. They recognised issues such as carbon footprint and the impact of an institution on the locality in terms of sustainable development and there is the need “to create a sense of identity and build community” (student focus group).

Concluding PESTLE analysis

As SSMP, when we reflect across our inquiry we find a picture emerging of a 'system of choice' where, instead of the prevalence of a single model of higher education, there is a possibility of three distinct missions of institutions that would impact differently on the planet and, as a result, would attract staff and students with different value sets. Figure 1 characterises possible missions of universities in the context of the Sustainable Development Goals: post-neoliberal, technocentric and socio-ecological universities.

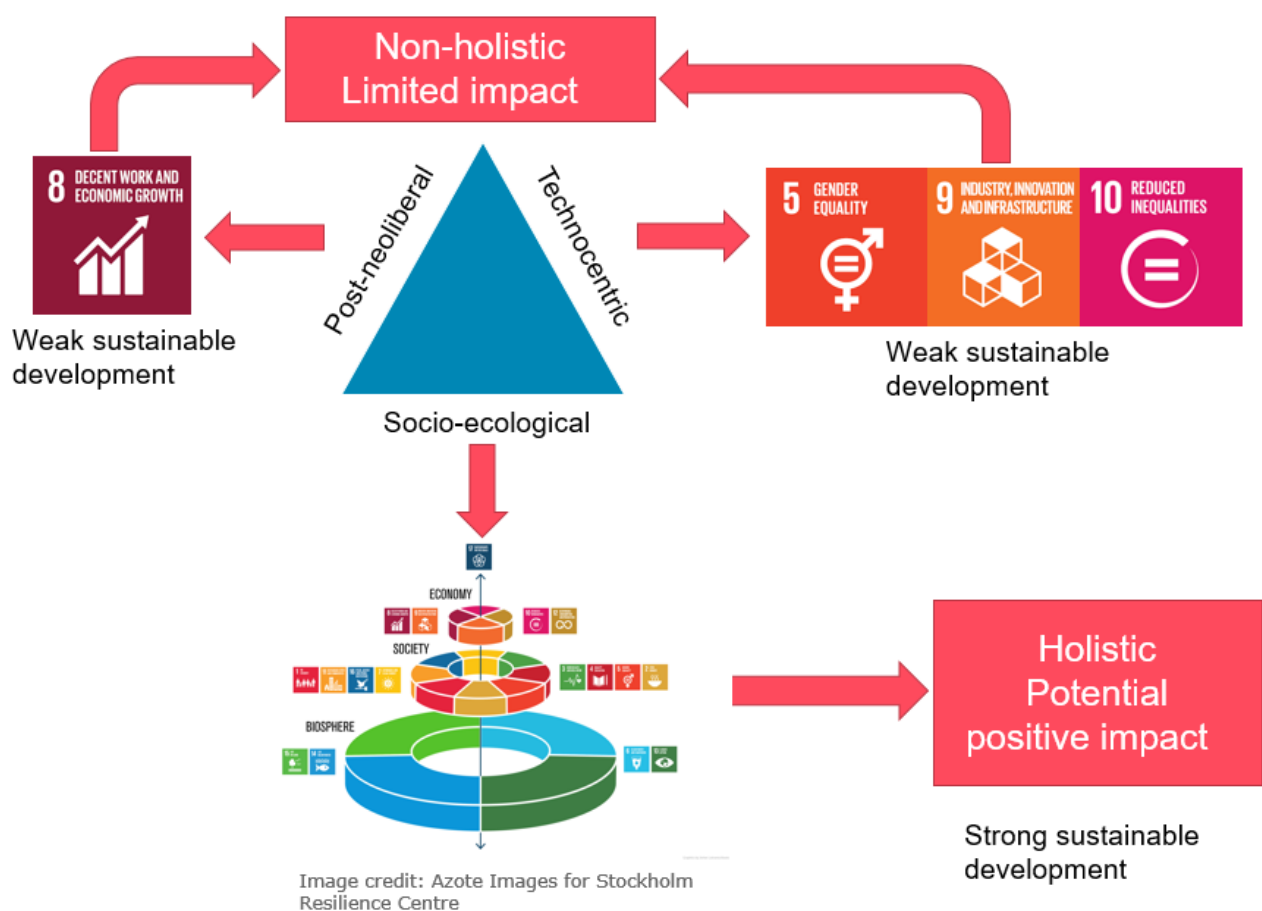


Figure 1. Possible missions of universities in the context of the Sustainable Development Goals.

5 Student experience

5.1 An HE system of choice

Making education accessible to all ‘**allows everyone to succeed**’

Socio-ecological: Naheed has decided to come to university to study international tourism. They are very concerned about the environment that they live in and the impact of their individual carbon footprint. Because of this they were **attracted to join this particular institution because of its commitment to becoming carbon neutral** and due to its reputation as one of the greenest universities in the UK. Naheed is aware that international business study will require a broad understanding of global contexts. However, **Brexit has made them more hesitant to travel**, but because of the university’s commitment to environmental sustainability they offer virtual international placements, and the campus is close to home. For these reasons, Naheed feels their carbon footprint will be reduced as there is less travel involved. They have therefore selected an institution that aligns with their values. For Naheed, **the university will be eco-friendly and increasingly environmental ecosystems are going to be of utmost importance in terms of where you are working and where you are studying.**

Post neo-liberal: Paul has strong views about education being accessible for everybody, based on merit and accommodating of individual needs. He views economic growth as achieved through working together as a society, which will enable a solution to the environmental challenges faced. Paul believes **league tables are elitist – they should focus on individual biographies and the space travelled for an individual whether it is personal or academic.** What is of most importance to Paul is the need to build connections and networks with people; key to this is the desire to **create a sense of identity and build community.** Paul is concerned that the provision of education is the same standard and quality regardless of educational establishment and geographical context **there should be one standard of education of the same quality, just different types.** Paul feels **placements shouldn’t be a year away from study, there should be opportunities to make courses faster, more focused with more opportunities for employer experience.** For example, **on the job training is important and this will even be more so in the future. A degree is not enough – employers want at least two years’ experience.** One of the key determinants for Paul in choosing where and how to study is the provision of mental health support. Paul would like to **feel pride because of the approach to mental health**, and acknowledges that **“this is going to be a bigger problem in the future and whichever institution has more of a mental health infrastructure will determine who chooses to study there”.**

Technocentric: Sam believes that everyone should have an equally high-quality education wherever they live and whatever personal and economic circumstances they inhabit. Making education accessible to all **allows everyone to succeed. In Sam's view, access to education should be fair and meritocratic and not dependent on wealth or status.** They believe **flexible, and 'any' paced learning will increase equality.** For this reason, Sam does not feel the need to affiliate to just one provider but instead chooses to gain credit from multiple providers. This has been made possible by significant technical innovation and the creation of an open market for learning. Therefore, **learning is possible anywhere in any location. The student can be anywhere – on their phone, outdoors or in another country.** Robotic assistance in learning plays an important part in Sam's education where **the teacher will teach the main topic, but the robot assistant will help with the rest. This will make education more accessible to all, both rich and poor would access the university equally and education will be more about improving lives then making people career ready.** Technological innovations are an enabler that will allow this 'Liberty, Equality, Fraternity'.

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