UNIVERSITIES: FROM LOCAL INSTITUTIONS TO GLOBAL SYSTEMS?

- IMPLICATIONS FOR STUDENTS, STAFF AND INSTITUTIONS

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ROOM FOR ACADEMIC CREATIVITY?

Are universities responding to the challenges of today?

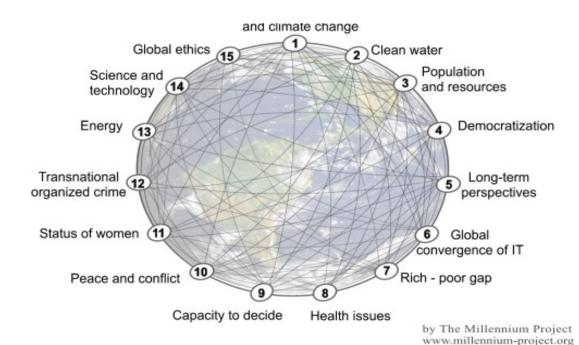
- Grand global challenges
- a EUROPEAN response
- Trends in Industry
- Universities at cross roads
- Freedom and control in universities
- Questions to answer







15 GRAND GLOBAL CHALLENGES





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A **EUROPEAN** RESPONSE

THE LUND DECLARATION (2010):

- Identifying the grand challenges, and delivering quality and research-based solutions
- Political commitment (2015)
- Speed up solutions to Grand Challenges through "Alignment, Research, Global Collaboration and Achieving Impact" (2015)

HORIZON 2020 (2013)

- Industrial Leadership
- Social Challenges
- Excellence in Science



TRENDS IN INDUSTRY

INDUSTRY 4.0

In an Industry 4.0 environment industries customize products under the conditions of high flexibilized (mass-) production. Six fundamental principles:

- Interoperability
- Virtualization
- Decentralization
- Real-Time Capability
- Service Orientation
- Modularity



UNIVERSITIES AT CROSSROADS

Universities are key in national innovation systems. The main resource for a country's endogenous growth is its human and cultural capital (Romer, 1990). Universities play an important role but not the only role in maintaining and building this resource (Boulton and Lucas, 2008):

- 1. Complexity in demands
- 2. Diversity of students
- 3. Brains on the move brains in the cloud
- 4. Making sense of massification



1: COMPLEXITY IN DEMANDS

Universities are institutions placed between strong and changing forces, such as it is described in Burton Clark's triangle (OECD, 2008): caught between government, market and academia:

- Requests for evidence to support policies
- Financial constraints and external funding structures diversifies academic freedom within institutions
- Business contracts are not patient
- Who owns the universities? Is there a National (and European) vision for education and research?



2: DIVERSITY OF STUDENTS

Global citizen students integrated with the general population and articulating higher education systems internally, with schools and labor markets:

- Traditional (young) national students will still be an important group
- International mobility full degree students increase in numbers
- Virtual students will out number on-campus students
- On-the-job students are increasingly important because of changing labormarket demands
- Life-long-learners, including 3rd and 4th age students, are seeking further education
- What would be the average age of a 2050 student?



3: BRAINS ON THE MOVE - BRAINS IN THE CLOUD

No institution is better than the sum of its human capital. Countries with a high percentage of sedentary researchers tend to be at the periphery of global knowledge exchange systems (Kamalski et al. 2013 and 2016):

- Discrepancy between long term academic employment and rapid change
- Brain circulation benefits all
- New career parthways
- What does a balanced academic staff profile look like?



4: MAKING SENSE OF MASSIFICATION

The institutional organisation is being experimented with. Emergence of transnational colleges and campuses, network institutions and institutions without tenured faculty:

- Mass universities, diversification in mission, and emerging new models
- Universities collaborate by creating new institutions that are designed to be flexible, interdisciplinary and train graduates to adapt to society's demands
- Universities establish elite colleges on campus and recruit international students for special programs as well as for exchange or enrolment in traditional programs
- Who will be the citizens of the learned republic anno 2100?



FREEDOM AND CONTROL IN UNIVERSITIES

In many countries reforms have resulted in less state control, more autonomous systems but also to expanded reporting and accounting, which often limits freedom and is being perceived as control.

- Strengthened (professional) executive management
- Increased distance to leaders and loss of influence from collegial bodies
- Challenged transparency in communication
- Greater diversification of cultures
- Increased participation of individuals from outside the university
- How to balance line management and academic leadership?



QUESTIONS TO ANSWER

One scenario is that higher education is becoming universal and national institutions are becoming global systems, which will recruit brain power from the cloud.

- Who owns the universities? Is there a National (and European) vision for education and research?
- What would be the average age of a 2050 student?
- How does a balanced academic staff profile look like?
- Who will be the citizens of the learned republic anno 2100?
- How to balance line management and academic leadership?
- Will new university governance models enable and stimulate academic creativity?



THANK YOU

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DEBATE

From lecture halls and laboratories to MOOCs and freely accessible life-long learning?

From formal instruction to informal coaching?

From physical campuses to virtual campuses?

From (tenured) professors to dispersed groups of research and teaching staff?

From class teaching to self-designed learning?

From supply of degree programs to courses on demand?

• From local (national) universities to transnational institutions for R&I, and Education?

From ministries of education to ministries of societal development?

From UNESCO to WTO?

