TENDANCES ET DEFIS DANS
L’ENSEIGNEMENT SUPÉRIEUR

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Outline

• Overview of major trends

• A few figures

• Focus on digitalisation

• Focus on the improvement of teaching and learning
trends and issues
Trends and issues in OECD countries

• Expansion of tertiary education
  – Quality and relevance of education
  – Quality and productivity of research

• Private provision and funding in higher education
  – Cost-sharing arrangements (public authorities, households, business sector)
  – Call on the public purse of the expansion in a context of competing priorities (ageing, public debt, etc.)

• Globalisation
  – Increased competition between institutions and systems
  – Increased collaboration as well
  – Importance of being in international knowledge flows
Trends and issues in OECD countries

• Governance
  – Trend towards more institutional autonomy
  – Policy instruments to steer at a distance (indicators, etc.)

• Openness of higher education
  – Inclusiveness of higher education systems (low SES, minorities, lifelong learning)

• Digitalisation of societies
  – Taking advantage of new technologies
  – Preparing students for a new digital economy

• Teaching and learning
  – Equipping students with skills for innovation-driven societies
  – Teaching effectively a diversity of students
a few trends
incentives
Those with tertiary education are still more likely to be employed...

Employment rates of 25-34 year-olds, by educational attainment and programme orientation (2016)

Source: Education at a Glance 2017
...and earn on average 56% more than those with upper secondary level attainment


Source: Education at a Glance 2017
expanding participation
66% of adults were expected to enter tertiary education for the first time in 2015

First-time tertiary entry rates (2005, 2015)

Source: Education at a Glance 2017
Most will graduate with a bachelor’s degree

Distribution of first-time tertiary graduates by level of education (2015)

- Bachelor’s or equivalent
- Master’s or equivalent
- Short-cycle tertiary (2-3 years)

Source: Education at a Glance 2017
More young adults are getting higher education degrees

- First-time tertiary graduation rates for national students younger than 30 (2005, 2015)

<table>
<thead>
<tr>
<th>Country</th>
<th>2015</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Slovenia</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>New Zealand</td>
<td>42</td>
<td></td>
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<tr>
<td>Finland</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Netherlands</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>38</td>
<td>38</td>
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<tr>
<td>Norway</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Austria</td>
<td>35</td>
<td></td>
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<tr>
<td>Portugal</td>
<td>35</td>
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<tr>
<td>United Kingdom</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>31</td>
<td></td>
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<tr>
<td>Czech Republic</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Source: Education at a Glance 2017
Adults with tertiary-educated parents are twice more likely to reach that level themselves than those without.

Share of 30-44 year-olds who completed tertiary-type A or an advanced research programme, by parents' educational attainment (2012 or 2015)

Source: Education at a Glance 2017
funding and expenditure
Between 2010 and 2014, expenditure on tertiary institutions increased twice as fast as enrolments…

Index of change in expenditure (current prices) and number of students in tertiary institutions for all services (2010 to 2014)

Source: Education at a Glance 2017
Private expenditure on tertiary education has been increasing

Change in private expenditure on tertiary educational institutions, 2010 = 100 (2005 and 2014)

Source: Education at a Glance 2017
And now funds 30% of total expenditure on tertiary institutions on average across OECD

Distribution of public and private expenditure on educational institutions (2014)

- Public expenditure on educational institutions
- Household expenditure
- Expenditure of other private entities
- All private sources

Source: Education at a Glance 2017
globalisation
International student mobility now increases at a slower pace

Total foreign students enrolled in tertiary programmes, whole world (millions)

Source: Education at a Glance 2017
EXPORT strategies

Revenue generation
Ex: Australia, New Zealand, UK (non-EU), US (undergraduates), Malaysia

Skilled migration
Ex: Germany, France, UK (EU), US (postgraduates)

IMPORT strategies

Capacity building
Ex: Malaysia, Singapore, Honk Kong-China, China, Indonesia, Oman, Dubai

Mutual understanding

Intensity of economic rationales
Globalisation

• Convergence of governance practices?
  – Harmonisation, recognition, Quality Assurance
  – The raise of international standards and accreditation (AACSB, EQUIS, AMBA for business schools, a few in other areas)
  – Private and competitive funding, accountability
  – Withdrawal of the nation state?

• Global area of higher education
  – International rankings
  – International actors: EU, WTO, etc.
Globalisation

• People mobility
  – Increasing migration
  – Increasing highly skilled migration
  – Student and academic mobility
  – Mobility of programmes and institutions

• Liberalisation and competition
  – Trade in higher education, GATS
  – Economic competition for students and for first mover advantage
  – Economic competition for talented staff (research)
digitalisation
Digitalisation and technology

• E-learning: an impact on the student experience
  – More flexibility of access
  – Access to university services (library, etc.) at a distance
  – Blended learning still to be invented, but some changes in higher education pedagogy (e-portfolios, problem-based learning, etc.)

• Longitudinal information systems and use of learning analytics
  – To improve the study experience and outcomes
  – To deal with admissions
  – Blockchain technology for digital degrees

• Potential huge impact on research and science
  – Cyber-infrastructures are revolutionising science
  – E-journals, e-books, e-resources are revolutionising research and access to knowledge
digitalisation and new business models
Open universities

- Distance learning institutions with different business models and levels of openness
  - Usually open to older students with no school degree
  - Degree-granting, but provide non-degree courses and other informal credentials
  - Mainly and increasingly based on online education
  - Often a role of open knowledge dissemination – through MOOCs and other means
Open and distance learning institutions: can be major or niche providers

(Minimal) Share (%) of HE enrolments in open and distance learning around 2015

<table>
<thead>
<tr>
<th>Country</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>40</td>
</tr>
<tr>
<td>Turkey</td>
<td>28</td>
</tr>
<tr>
<td>China</td>
<td>25</td>
</tr>
<tr>
<td>India</td>
<td>17</td>
</tr>
<tr>
<td>Spain</td>
<td>13</td>
</tr>
<tr>
<td>United States</td>
<td>11</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>8</td>
</tr>
<tr>
<td>France</td>
<td>7</td>
</tr>
<tr>
<td>Korea</td>
<td>6</td>
</tr>
<tr>
<td>Germany</td>
<td>3</td>
</tr>
</tbody>
</table>
Open and distance learning institutions face some challenges

- Decrease of enrolments in open and distance learning institutions in the US and the UK

- What is changing (in the OECD)?
  - Bricks and mortars increasingly provide an offering of distance and learning courses
  - Insufficient marketing and ability of OUs to show their competitive advantage in delivering online courses?
  - Competition from informal providers?
Number of MOOCs, 2012-2016

Source: Class Central
An expanding, but still relatively concentrated offer

Course distribution by provider, 2015

- Coursera and edX represent over 50% of the offer
- Most courses are offered by prestigious institutions, but not only
- Usually free of charge, no qualification requirement, and possibility to get a “certificate of completion” for a fee
An offer mainly in English

Course distribution by language, 2015

English: 76%
Spanish: 8%
French: 5%
Chinese: 3%
Arabic: 2%
Russian: 1%
Japanese: 1%
German: 1%
Other: Portuguese, Italian, Turkish, Dutch, Hebrew, Czech, Korean, Estonian, Basque...

Source: Class Central
edX MOOC users' by education level, 2012-2013

Source: EdEX
Learners’ motivation to enrol in a MOOC, 2015

- To learn more about a topic or area
- To 'test' online education
- To know what a MOOC is
- To know the content of the course
- To obtain a certificate
- To be part of an online learner community
- To improve professionally

Source: Class Central
The exploration of new business models mixing formal and informal HE

- From MOOC to formal degrees:
  - edX MicroMasters -> Master’s degrees
  - Kiron (Germany) for refugees
  - India: up to 20% of MOOC in undergraduate education

- Competency-based education
  - Western Governors University

- Towards an informal higher education?
  - 42 (France): open enrolment (with other selection criteria), no teaching, no degrees
teaching and learning
Skills and education for innovation

« 21st Century Skills »
Skills that tertiary-educated professionals report as very important in their job

Percentage of employees reporting the following skills as very important in their job

<table>
<thead>
<tr>
<th>Skill</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use time efficiently</td>
<td>61.7</td>
</tr>
<tr>
<td>Perform under pressure</td>
<td>60.8</td>
</tr>
<tr>
<td>Work productively with others</td>
<td>58.6</td>
</tr>
<tr>
<td>Make your meaning clear</td>
<td>56.9</td>
</tr>
<tr>
<td>Use computers and internet</td>
<td>56.5</td>
</tr>
<tr>
<td>Coordinate activities</td>
<td>55.0</td>
</tr>
<tr>
<td>Master of your own field</td>
<td>54.2</td>
</tr>
<tr>
<td>Acquire new knowledge</td>
<td>53.4</td>
</tr>
<tr>
<td>Write reports or documents</td>
<td>50.0</td>
</tr>
<tr>
<td>Come with new ideas/solutions</td>
<td>48.0</td>
</tr>
<tr>
<td>Analytical thinking</td>
<td>46.5</td>
</tr>
<tr>
<td>Mobilize capacities of others</td>
<td>41.8</td>
</tr>
<tr>
<td>Willingness to question ideas</td>
<td>40.5</td>
</tr>
<tr>
<td>Present ideas in audience</td>
<td>40.4</td>
</tr>
<tr>
<td>Alertness to opportunities</td>
<td>40.4</td>
</tr>
<tr>
<td>Negotiate</td>
<td>40.3</td>
</tr>
<tr>
<td>Assert your authority</td>
<td>40.2</td>
</tr>
<tr>
<td>Write and speak a foreign language</td>
<td>30.6</td>
</tr>
<tr>
<td>Knowledge of other fields</td>
<td>22.7</td>
</tr>
</tbody>
</table>

Source: Avvisati, Jacotin and Vincent-Lancrin (2014), based on REFLEX and HEGESCO data
Critical skills for the most innovative jobs (according to tertiary-educated workers)

Likelihood (odds ratios) of reporting the following skills: people in the most innovative jobs vs. least innovative jobs

- Come with new ideas/solutions: 3.90
- Willingness to question ideas: 3.00
- Present ideas in audience: 2.81
- Alertness to opportunities: 2.71
- Analytical thinking: 2.60
- Coordinate activities: 2.58
- Acquire new knowledge: 2.51
- Mobilize capacities of others: 2.42
- Make your meaning clear: 2.36
- Master of your own field: 2.36
- Write reports or documents: 2.36
- Write and speak a foreign language: 2.35
- Use computers and internet: 2.35
- Work productively with others: 2.20
- Use time efficiently: 2.19
- Perform under pressure: 2.19
- Negotiate: 2.15
- Knowledge of other fields: 2.09
- Assert your authority: 2.08
- Acquire new knowledge: 2.05
- Assert your authority: 1.83

Source: Avvisati, Jacotin and Vincent-Lancrin (2014), based on REFLEX and HEGESCO data
What individual skills should education systems foster?

**Technical skills**
(know-what and know-how)

**Social and Behavioural skills**
(Self-confidence, energy, perseverance, passion, leadership, collaboration, communication)

**Creative and Critical Thinking skills**
(Critical thinking, observation, curiosity, ability to make connections, imagination, ...)


Source: Avvisati, Jacotin and Vincent-Lancrin (2014), based on REFLEX and HEGESCO data
Strong points of higher education

Ranking of 3 top strong skills by graduates

1. Make your meaning clear
2. Present ideas in audience
3. Coordinate activities

Source: Avvisati, Jacotin and Vincent-Lancrin (2014), based on REFLEX and HEGESCO data
Weak points of higher education

<table>
<thead>
<tr>
<th>Skill</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>write and speak a foreign language</td>
<td>1</td>
</tr>
<tr>
<td>negotiate</td>
<td>2</td>
</tr>
<tr>
<td>assert your authority</td>
<td>3</td>
</tr>
<tr>
<td>present ideas in audience</td>
<td>4</td>
</tr>
<tr>
<td>use computers and internet</td>
<td>5</td>
</tr>
<tr>
<td>knowledge of other fields</td>
<td>6</td>
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<td>write reports or documents</td>
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<tr>
<td>come with news ideas/solutions</td>
<td>9</td>
</tr>
<tr>
<td>alertness to opportunities</td>
<td>10</td>
</tr>
<tr>
<td>use time efficiently</td>
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</tr>
<tr>
<td>perform under pressure</td>
<td>12</td>
</tr>
<tr>
<td>analytical thinking</td>
<td>13</td>
</tr>
<tr>
<td>willingness to question ideas</td>
<td>14</td>
</tr>
<tr>
<td>work productively with others</td>
<td>15</td>
</tr>
<tr>
<td>coordinate activities</td>
<td>16</td>
</tr>
<tr>
<td>make your meaning clear</td>
<td>17</td>
</tr>
<tr>
<td>master of your own field</td>
<td>18</td>
</tr>
<tr>
<td>acquire new knowledge</td>
<td>19</td>
</tr>
</tbody>
</table>

Source: Avvisati, Jacotin and Vincent-Lancrin (2014), based on REFLEX and HEGESCO data
Weak points of higher education

Ranking of 3 top weak skills by graduates

- write and speak a foreign language
- negotiate
- assert your authority
- present ideas in audience
- use computers and internet
- knowledge of other fields
- mobilize capacities of others
- write reports or documents
- come with news ideas/solutions
- alertness to opportunities
- use time efficiently
- perform under pressure
- analytical thinking
- willingness to question ideas
- work productively with others
- coordinate activities
- make your meaning clear
- master of your own field
- acquire new knowledge

Source: Avvisati, Jacotin and Vincent-Lancrin (2014), based on REFLEX and HEGESCO data
Taking teaching and learning more seriously?

- Most higher education institutions have no systematic professional development (or training) for their faculty.

- Teaching centres to support faculty tend to be very small (when they exist).

- Budget to improve teaching and learning seems difficult to mobilise within institutions.

- Will there be more accountability on that front?
New OECD project on improving teaching and learning in HE

• Network of higher education institutions internationally to:
  – Articulate a common language on creativity and critical thinking
  – Freely develop and document pedagogies to improve students’ creativity and critical thinking
  – Develop professional development for faculty
  – Evaluate the effects of their pedagogies on a variety of outcomes

• Contact me if interested
conclusion
Concluding remarks

• A few opportunities for administering universities:
  – Take advantage of the opportunities of the digitalisation (diagnostics, seamlessness of administrative processes, access to resources)
  – Take advantage of the slowdown of international mobility to improve the quality of services

• A few challenges:
  – Ensure the main mission of HEIs, teaching and learning, is met while the sector is likely to continue its expansion
  – Increase of funding with little visibility of the increase in the quality of the service
  – Redefine what the benefits of a face to face education is compared to a mere digital certificate of competence
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THANK YOU

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