Innovating Higher Education: the Role of Lifelong Learning

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Overview

Questions:

1. Why should higher education become more innovative?

2. What is the role of lifelong learning
   - To help to address higher education’s shortcomings?
   - To make universities more innovative?
Preliminary remarks

• Innovating learning will be critical for the construction of the knowledge-intensive and innovative post-crisis economy
• Lifelong learning is not (only) about the participation of adults, but about redesigning the learning patterns of learners in a different way
• Lifelong learning is not only about beautiful principles, values and rhetoric
  – Let’s look at realities, evidence and data
Why innovate higher education?

• Economic effectiveness:
  – Attainment levels, growth and prospects
  – Employment and skills utilisation

• Social effectiveness and equity
  – Social capital
  – Social values

• Internal efficiency
  – Success rates
Growth in university-level qualifications

Approximated by the percentage of the population that has attained tertiary-type A education in the age groups 25-34 years, 35-44 years, 45-54 years and 55-64 years (2007)

- 2000's
- 1990's
- 1980's
- 1970's

Countries included:
- Canada
- United States
- New Zealand
- Estonia
- Finland
- Australia
- Norway
- Sweden
- Netherlands
- Switzerland
- United Kingdom
- Denmark
- Japan
- Germany
- Iceland
- Belgium
- OECD average
- Luxembourg
- EU19 average
- Ireland
- France
- Spain
- Slovenia
- Greece
- Austria
- Poland
- Korea
- Slovak Republic
- Czech Republic
- Italy
- Mexico
- Chile
- Brazil
- Turkey
- Portugal
Figure 2.8. **Percentage of the population aged 25-44 who were graduates in 2005, and projections for 2025 based on trends in the last 10, 20 and 30 years**

Source: CERI/OECD, 2008
Chart A1.1. Proportion of population in skilled jobs and proportion of population with tertiary education (2006)

The chart depicts the proportion of the 25-to-64-year-old working population in skilled jobs and the proportion of the 25-to-64-year-old population with tertiary education (2006).

Tertiary attainment (5B, 5A/6)   Skilled jobs (ISCO 1-3)
Effectiveness

• Higher education in Hungary is not effectively producing enough higher qualified people
• Expected growth rates for the coming years are lower than what society needs
• Many skilled jobs have to be done by people without tertiary level qualifications
Chart A8.1. Economic returns for an individual obtaining upper secondary or post-secondary non-tertiary education, ISCED 3/4, and for an individual obtaining tertiary education, ISCED 5/6, as part of initial education (2005).

The chart shows the net present value of investments in education discounted at a 5% interest rate.

- Private net present value of investing in upper secondary or post-secondary non-tertiary education
- ▲ Private net present value of investing in tertiary education

Thousands USD equivalent
Deteriorating youth unemployment

[Graph showing youth unemployment rates and the OECD average.]
Effectiveness

• A tertiary level qualification still has a high return (for men) – because of its scarcity?
• But labour market is adapting to low skill supply: slowing demand for tertiary qualified people and preference for younger low-qualified
• In general, rapidly deteriorating youth unemployment as a consequence of the economic recession
• Conclusion: there is a real economic need for upgrading skills to tertiary level qualifications
SOCIAL OUTCOMES
Marginal effects of education on political interest

![Chart showing marginal effects of education on political interest from below upper secondary to upper secondary and from upper secondary to tertiary for various countries like Czech Republic, Greece, Turkey, Germany, Sweden, Norway, Finland, Slovak Republic, Belgium, Spain, Poland, Netherlands, Ireland, Denmark, Portugal, and Switzerland.](chart)

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Marginal effects of education on social trust

From below upper secondary to upper secondary

ESS 2004
- Turkey
- Germany
- Greece
- Czech Republic

ESS 2006
- Finland
- Slovak Republic
- Ireland
- Sweden
- Denmark
- Belgium
- Poland
- Portugal
- Norway
- Netherlands
- Spain
- Switzerland

From upper secondary to tertiary

ESS 2004

ESS 2006
Changes in value systems

Figure 8.5. Global value change – more secular, more oriented to self-expression

Factor analysis of value positions of different generations in different regions

Secular-rational values

0.60

0.50

0.40

0.30

0.20

0.10

0.25 0.35 0.45 0.55 0.65 0.75

Self-expression values

Korea and Japan
Central and Eastern Europe
Southern Europe

Before 1921
1921-30
1931-40
1941-50
1951-60
1961-70
After 1980
Northern Europe
Anglo-Saxon countries

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Social outcomes

• In many countries higher education has an important impact on social capital, measured as political interest and interpersonal trust
  – Less in Central- and Eastern-European countries?
• Higher education contributes to changes in social value systems towards secular-rational values and self-expression values
  – Also less marked in Central- and Eastern-European countries?
Social outcomes

- Could enhanced lifelong learning opportunities strengthen the development of social capital and the change in value systems in countries in transition?
INTERNAL EFFICIENCY AND EQUITY
Failure remains a huge problem…

Proportion of students who enter a tertiary programme but leave without at least a first tertiary degree (2005)

%
Figure 2.5a
Difference in socio-economic background between top performers and strong performers

Countries are ranked in descending order of the difference in the PISA index of economic, social and cultural status (ESCS) between the top and the strong performers.

Note: Significant differences are highlighted with a darker tone.

Source: OECD PISA 2006 Database, Table A2.5a.
Efficiency and equity

- Failure is still a very important issue in Hungarian higher education, indicating a low internal efficiency in bringing students to successful completion
- High impact of social-economic and cultural status on achieving excellence
- Conclusion: a lot of talent is wasted by lack of efficiency in educational processes
  - Can lifelong learning provide alternative pathways and second chance opportunities?
HOW CAN LIFELONG LEARNING HELP TO INNOVATE HIGHER ED?
Age of new entrants in tertiary education

- Age at: 20th percentile
- Age at: median
- Age at: 80th percentile

Countries listed include Japan, Belgium, Korea, Ireland, Italy, Poland, Germany, Netherlands, Austria, Mexico, Turkey, EU16 average, OECD average, Czech Republic, Finland, Denmark, Spain, United Kingdom, Switzerland, Hungary, Australia, Slovak Republic, Greece, Sweden, United States, Norway.
## Tertiary education as lifelong learning institution

Share of 30-39 year olds among relevant age cohort enrolled in tertiary education

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UK</td>
<td>15.8%</td>
</tr>
<tr>
<td>2</td>
<td>Australia</td>
<td>14.0%</td>
</tr>
<tr>
<td>3</td>
<td>Sweden</td>
<td>13.3%</td>
</tr>
<tr>
<td>4</td>
<td>Finland</td>
<td>13.1%</td>
</tr>
<tr>
<td>5</td>
<td>Denmark</td>
<td>7.8%</td>
</tr>
<tr>
<td>6</td>
<td>USA</td>
<td>5.2%</td>
</tr>
<tr>
<td>7</td>
<td>Poland</td>
<td>4.6%</td>
</tr>
<tr>
<td>8</td>
<td>Ireland</td>
<td>4.0%</td>
</tr>
<tr>
<td>9</td>
<td>Portugal</td>
<td>3.8%</td>
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<tr>
<td>10</td>
<td>Spain</td>
<td>3.6%</td>
</tr>
<tr>
<td>11</td>
<td>Switzerland</td>
<td>3.6%</td>
</tr>
<tr>
<td>12</td>
<td>Austria</td>
<td>3.3%</td>
</tr>
<tr>
<td>13</td>
<td>Italy</td>
<td>3.2%</td>
</tr>
<tr>
<td>14</td>
<td>Netherlands</td>
<td>2.7%</td>
</tr>
<tr>
<td>15</td>
<td>France</td>
<td>2.6%</td>
</tr>
<tr>
<td>16</td>
<td>Germany</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
Hungarian higher education institutions are doing reasonably well to attract older students

But numbers alone are not enough...

– Is the learning experience of adult students leading to more success?

– Is the teaching experience with adult students also changing and innovating the university?
Lifelong learning innovating HE

- Competences and curricula
  - Do we teach the right knowledge and skills for a rapidly changing world?
- Learning modes, styles and behaviour
  - Do we organise higher education according to the learning styles and behavioural patterns of people?
- Pedagogies
  - Moving from pedagogy of failure to pedagogy of success
Changing skills demand

Economy-wide measures of routine and non-routine task input (US)

Source: Levy and Murnane, 2005
Changing skills demand

Distribution of employees across organisation classes (2005)

Source: Holms, Lorenz, Lundvall and Valeyre

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21st Century Skills

- Cf. Microsoft-Intel-Cisco ATC21S project

Creativity and innovation
Critical thinking
Problem solving
Communication
Collaboration
Information fluency
Technological literacy
Learning modes and styles

• The importance of flexible learning paths
• Recognising prior learning and competences
• From credit systems to flexible credit accumulation systems
• Part-time, open learning arrangements
  – Independent of time and place
  – Technology-supported
• Learning and teaching arrangements adapted to diversified learning styles of students
Old (or not so old) paradigm

- **Selection of the gifted**
  - ‘Only small minority has the necessary abilities’
    - The impact of education is ceiled by the limited availability of innate abilities
    - Distribution of innate abilities follows normal distribution, so learning outcomes have to be distributed in the same way
  - Early tracking and streaming to select the best
  - Concentration of educational efforts and resources in elite institutions for the few
  - ‘Pedagogy of failure’ for the many
Future paradigm

- **All talents to the highest possible level**
  - Excellence is not contradictory to equity
  - Some countries are capable of raising achievement at both ends of the performance scale or even to enhance excellence while decreasing inequity
  - Effective learning demands pedagogical differentiation and less standardisation
  - Less prescription but ensuring conditions to transform every school in effective school
  - ‘Pedagogy of success’ for all!
Conclusions

- Stronger lifelong learning policies and practices in higher education can help to improve and strengthen its economic effectiveness, its social role and its impact on value change in a modernising society.

- Lifelong learning should be the laboratory of innovative practices and pedagogies which in turn can innovate higher education.
Thank you!

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