Higher Education and the World of Work: European Experiences and Debates

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Higher Education Needs Knowledge on Graduates’ Employment, Work, Knowledge utilisation as a feedback in order to reflect the consequences of one of its core activities, i.e. those of knowledge transmission, in the domain of curricula, teaching and learning. This holds true irrespective of the extent to which the higher education systems as a whole, certain types of institutions, types of study programmes or fields or study have a “vocational”/“professional” or “academic” emphasis.
### Major Research Approaches and Themes

1. Employment trends and “demand“
2. Investment in education, educational attainment and in income
3. Socio-biographic background, educational attainment and career
4. Employment and work of graduates
5. Transition
6. Work assignments and utilisation of skills
7. Job satisfaction
8. Careers
9. Employers’ expectations
Major Research Findings in Economically Advanced Countries (1)

1. Employment surveys relying on “objective measures” often note “over-education” and “mismatch”
2. Employments surveys addressing “over-education” as well indicate significant proportions of under-education
3. Analyses on education and income provide a divergent picture; some studies note substantial returns for educational investment
4. Most graduates not employed in jobs directly “matching” their educational level and field are employed in neighbour areas (“horizontal and vertical substitution”)
Major Research Findings in Economically Advanced Countries (2)

5. Increase of long transition period
6. Growing emphasis on “transfer”, “key” and “competences”
7. Diversity between countries regarding the role of “general” and “specific” knowledge
8. Diversity between countries regarding reputation of higher education institution, grades etc.
9. Increase of “flexible” or “precarious” employment
Major Research Findings in Economically Advanced Countries (3)

10. Job expectations and job satisfaction are predominantly “intrinsic” and “professional” (interesting and demanding tasks, utilisation of knowledge, disposition, learning opportunities)

11. In the majority of countries, perceived utilisation of knowledge and job satisfaction is higher in public sector and in the professions than in private industry and commerce

12. Low utilisation of knowledge is often stated by graduates from highly specialized studies

13. Many graduates reporting “inadequate employment” choose their job voluntarily (i.e. not determined by labour market problems)

14. Different motives (“professional”, “academic”, “status and income”, “routine and job security”, “social chance”, etc.) have in impact, though not without limits, on professional choice, careers and job assignments
## Two Major Ambivalences in the Worldwide Debates on Higher Education and the World of Work

<table>
<thead>
<tr>
<th>The quantitative ambivalence:</th>
</tr>
</thead>
<tbody>
<tr>
<td>On the one hand: Expansion of higher education is beneficial for economic growth</td>
</tr>
<tr>
<td>On the other hand: “Over-education” (employment problems faced by graduates)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The functional ambivalence:</th>
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<tbody>
<tr>
<td>On the one hand: Call for professional relevance of study programmes and study or for “employability”</td>
</tr>
<tr>
<td>On the other hand: Concerns about too little emphasis on academic learning, general education, and benefits beyond the labour market, about sub-ordination on current employers’ and neglect of critical function as well as of preparation for indeterminate work tasks and of innovation in general</td>
</tr>
</tbody>
</table>
## Design of the Studies

<table>
<thead>
<tr>
<th></th>
<th>CHEERS</th>
<th>REFLEX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Countries</strong></td>
<td>12</td>
<td>16+</td>
</tr>
<tr>
<td><strong>Year of graduation</strong></td>
<td>1995</td>
<td>2000</td>
</tr>
<tr>
<td><strong>Year of data collection</strong></td>
<td>1999</td>
<td>2005</td>
</tr>
<tr>
<td><strong>Participation</strong></td>
<td>Ca. 40,000</td>
<td>Ca. 40,000+</td>
</tr>
<tr>
<td><strong>Additional studies</strong></td>
<td>About 400 interviews with graduates and employers</td>
<td>Focus groups with university leaders and employers</td>
</tr>
</tbody>
</table>
Employment Conditions (1): Unlimited Term Four–Five Years After Graduation (%)

Source: CHEERS 1999 and REFLEX 2005; INCHER-Kassel
Employment Conditions (2): Full-time Employment Four–Five Years After Graduation (%)
Low Level of Overeducation in Europe (1)

Appropriate Level of Education is Below Tertiary Education – (4–5 Years After Graduation; %)

Source: CHEERS 1999 and REFLEX 2005; INCHER-Kassel
Teichler: Higher Education and the World of Work

Study and Work in Europe 1999 and 2005 (%)

<table>
<thead>
<tr>
<th>Year of graduation and country</th>
<th>High use of knowledge and skills</th>
<th>High utility of study for job tasks</th>
<th>High job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNI-Long Other</td>
<td>UNI-Long Other</td>
<td>UNI-Long Other</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>44 42</td>
<td>41 48</td>
<td>63 60</td>
</tr>
<tr>
<td>France</td>
<td>31 24</td>
<td>46 34</td>
<td>65 63</td>
</tr>
<tr>
<td>UK</td>
<td>66 48</td>
<td>56 49</td>
<td>52 57</td>
</tr>
<tr>
<td>Netherlands</td>
<td>53 50</td>
<td>70 60</td>
<td>74 70</td>
</tr>
<tr>
<td>Norway</td>
<td>72 75</td>
<td>78 79</td>
<td>79 78</td>
</tr>
<tr>
<td>Spain</td>
<td>48 48</td>
<td>55 54</td>
<td>60 58</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>74 70</td>
<td>43 47</td>
<td>70 68</td>
</tr>
<tr>
<td>Finland</td>
<td>80 75</td>
<td>62 53</td>
<td>64 67</td>
</tr>
<tr>
<td>Netherlands</td>
<td>76 70</td>
<td>57 50</td>
<td>68 67</td>
</tr>
<tr>
<td>Norway</td>
<td>80 82</td>
<td>71 67</td>
<td>72 75</td>
</tr>
<tr>
<td>Switzerland</td>
<td>77 71</td>
<td>53 55</td>
<td>73 67</td>
</tr>
<tr>
<td>Spain</td>
<td>66 69</td>
<td>41 42</td>
<td>63 64</td>
</tr>
<tr>
<td>Czech Rep.</td>
<td>68 62</td>
<td>49 45</td>
<td>72 68</td>
</tr>
</tbody>
</table>

Source: CHEERS 1999 and REFLEX 2005; INCHER-Kassel
High Level of Job Satisfaction 1999 and 2005
Four–Five Years After Graduation (%)

Source: CHEERS 1999 and REFLEX 2005; INCHER-Kassel
Stability of Work Requirements: 1999 – 2005 (arithm. mean)

- Time management
- Working under pressure
- Working in a team
- Computer skills
- Planning, co-ordinating and organising
- Learning abilities
- Creativity
- Documenting ideas and information
- Analytical competencies
- Reflective thinking, assessing one's own work
- Leadership
- Negotiating
- Foreign language proficiency

Source: CHEERS 1999 and REFLEX 2005; INCHER-Kassel
Competence Development During the First 5 Years After Graduation (arithm. mean)

- Computer skills
- Learning abilities
- Working in a team
- Planning, co-ordinating and organising
- Working under pressure
- Time management
- Documenting ideas and information
- Reflective thinking, assessing one’s own work
- Creativity
- Analytical competencies
- Leadership
- Negotiating
- Foreign language proficiency

Source: CHEERS 1999 and REFLEX 2005; INCHER-Kassel
No Support for the Grand Major Universalistic Assumptions (1)

- No trend toward increasing “over-education“ or “mismatch”
- No shortage of highly educated labour on the way towards a “knowledge society”
- No confirmation of the dualistic perception: insufficient attention for science/engineering demands vs. over-attention to humanities/social science
No Support for the Grand Major Universalistic Assumptions (2)

- Neither clear "degreeocracy" nor open market of skills
- No "bad university" and "good short professional studies"
- No clear "homo oeconomicus"–driven link between higher education and the world of work
Towards Complex Analyses of the Relationships between Higher Education and Graduate Careers

Three Conceptual and Methodological Construction Sites of CHEERS and REFLEX

- Towards sophisticated approach towards “match”
- Towards a meaningful measurement of job requirements and competences
- Towards a credible measurement of how much and how higher education “matters”
<table>
<thead>
<tr>
<th>The World of Work and the Responsibilities of the University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The subordinated university</td>
</tr>
<tr>
<td>2. The “ivory tower” autonomous university</td>
</tr>
<tr>
<td>3. The knowledgeable, reflective university</td>
</tr>
<tr>
<td>4. The pro-active university</td>
</tr>
</tbody>
</table>