Unica Master Class Dubrovnik

Doctoral training and the mission of a university

Inga Bostad, Pro-Rector
The idea of a university

Newman: “the diffusion and extension of knowledge rather than its advancement”
Næss: “If you are always certain where and in what direction truth is to be found, empathy with the unknown is impossible”
**Martha Nussbaum:**
“Given that economic growth is so eagerly sought by all nations, especially at this time of crisis, too few questions have been posed about the direction of education, and, with it, of the world’s democratic societies.” (Nussbaum 2010, p.6)

“the ability to think critically; the ability to transcend local loyalties and to approach world problems as a “citizen of the world”, and finally, the ability to imagine sympathetically the predicament of another person” (2010, p.7)
The role of the Universities: Education for what?
• Facts forgotten
• Values need practice
• Global Citizens
Capitalization on intra-institutional diversity – the design of a new strategy plan

• UiO Strategy2020
• Long-time horizon, to kindle creativity
• An integrative plan with no breakdown on discipline or theme, no breakdown on task (education, research, science communication)

• The result: a strategy plan that should foster interdisciplinarity, counteract disjunction and serve as an antidote to "fragmentation"
Strategy2020: Five “universities” in one

1. A university transcending borders
2. A university for research-based education
3. A university in society
4. A university in action
5. The university of my choice
The Mission of the PhD - the case of Norway
Phd mission

• Contribute scientifically to what is a common good
• Enforce creativity, curiosity and ethical reasoning
• Develop reflective (ethical) innovation
• Academic freedom
PhD Mission

• Level of education is a key factor
• Increased focus on the relevance, knowledge and skills of PhD
• Increased volume of PhDs
  = Increases research and development
  = Disseminate competence in research and development to different sectors and professions
  = Balance between supply and demand of PhD is being challenges – a mismatch of competence
The institutional landscape

Norwegian Ministry of Education and Research

The Research Council of Norway

National Association of Universities and Colleges

Universities

Specialised university institutions

University colleges

PhD-education

Academic staff
PhD candidates
Doctoral degree holders

Additional PhD training sites:
Institutes
Hospitals
University colleges

Health Authorities

Norwegian Agency for Quality Assurance in Education (NOKUT)
The Norwegian PhD education

• Institutions:
  – 23 HEI with right to confer degrees
    • 4 universities, 9 specialized universities
    • University colleges

• Programmes:
  – 112 programmes
  – 92 specialization tracks
Institutions and programmes

- PhD regulation
  - University board
    - 23 higher education institutions with right to confer degrees
  - PhD programme plans
    - Faculty
      - 112 programmes
  - Study plans
    - Specialisation tracks
      - 92 specialisation tracks
Number of PhD candidates more than doubled in Norway

Source: Database for Statistics on Higher Education (DBH). - Annual registration. - Field grouping is undertaken at NIFU.
Number of degrees

Source: The Doctoral Degree Register, NIFU
Economically active doctoral degree holders (13,261)

Public sector 74%

- Education 40%
- Health and soc. services 16%
- Public administration etc. 7%

Private sector 26%

- Primary industry 0.4%
- Oil, gas, mining 3%
- Industry 5%
- Private service 11%

Research and development 18%

Source: Doctoral Degree Register, NIFU, and data on labour force and employment, Statistics Norway
PhDs outside academia

• 70 percent: research important part of job

• 30 percent: no tasks related to research

• Increase in number of jobs that do not involve much research - consequences for PhD education
Recruiting PhDs to industry sector – what seems to be important?

• The real competence and skills of the candidate (Realkompetanse)
• Research and innovation effort in the actual enterprise
• Previous collaboration between enterprise and university/research institute
Experience with PhD candidates in innovation projects of enterprises

• Industry can be involved in long-term knowledge development
• Maintain and strengthen research networks in universities and research institutes
• Contribute to new networks and contacts
• Important work force for small, research-intensive enterprises
• Application of PhD and research results in the innovation activities of an enterprise
• Regarded as a good opportunity to test and possibly recruit researchers to the enterprise
PhDs in industry - interest in recruiting PhDs..?

- **Industry perspective**
  - Innovation style and sector of performance in Norway
  - Increasing focus on research costs
  - Weak incentives for PhD candidates

- **Higher education institutions**
  - Qualifying future employers from the HEI sector
  - How can PhD competence and skills be applied

- **Candidates**
  - Little knowledge about career opportunities
National PhD evaluation 2012

Positive:

• Increased capacity
• Streamlining
• Good practices in organization and management of PhD training

Challenges:

• Completion rates, time-to-degree, high age of graduates
• Quality of training courses
• Supervision
• Internationalisation
The UiO context

- 8 faculties = 8 programmes, large number of specialization tracks
- Common regulation of minimum requirements,
- Faculties relatively autonomous
- More than 3000 candidates registered, half of them employed by UiO
- High diversity with relation to academic field, culture, history, organization and size
## Doctoral Degrees at University of Oslo

<table>
<thead>
<tr>
<th>Faculty</th>
<th>2003</th>
<th>2011</th>
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<tr>
<td>Theology</td>
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<td>6</td>
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<tr>
<td>Law</td>
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<tr>
<td>Medicine</td>
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<td>Humanities</td>
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<tr>
<td>Mathematics and Natural Sciences</td>
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<tr>
<td>Dentistry</td>
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<td>Social Sciences</td>
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<td>61</td>
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<tr>
<td>Educational Sciences</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>234</strong></td>
<td><strong>425</strong></td>
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</table>
The UiO review

- Embedded in the new 2020 Strategy
- Ambitions: Internationally attractive PhD
- Working group of professors, students and administration staff
- Focus on personal and professional development
- Supervisors’ role an important aspect
Activities

• Candidate survey
• 2 pilots
• Information about ongoing activities
• Engage with faculties, candidates, management and administration for input and discussions
• New platform for UiO PhD
Aims

• Support PhD candidates: scientific, professional and personal development
• Critical: quality and size
• Interdisciplinarity
• International collaboration
Principles (1)

- Analytic, creative and competent - with academic/scientific and personal integrity.
- PhD education embedded in an international research environment of critical mass
- The research environment is the most important arena for development of the candidate
Principles (2)

• PhD education should reflect and contribute to research diversity
• PhD education should be just as useful for candidates looking to work for the industry, public sector or NGOs as for candidates aiming for a career in research
Were you satisfied with the PhD programme?

- Yes, to a high degree
- Yes, to a certain degree
- Not satisfactory

[Bar chart showing the distribution of responses:]
- Series 1

[Bar chart details not fully transcribed in this response.]
Quality of taught courses

- High quality
- Medium quality
- Variable

Series 1
Demand for generic skills courses

- Academic writing
- Scientific publishing
- Finishing your PhD
- Language training
- Literature research
- Communications skills
- Starting up your PhD
- Project management
- Leadership for young scientists
- Supervision
- Entrepreneurship
- Teamwork
- Career development
- Time management
- Teaching skills
- Grant application
- Project management
- Starting up your PhD
- Communications skills
- Literature research
- Language training
- Finishing your PhD
- Scientific publishing
- Academic writing
Pilot I: Introductory course – generic skills

• PhD study at UiO: What does it mean and how do you get started? Presentations and comments
• Communication and presentation of the PhD project Presentation and exercise
• Experiences from the PhD period
• Project planning and self management
  Presentation and exercise based on the individual PhD project
Satisfaction with supervision

- Yes, to a certain degree
- Yes, to a certain degree
- Satisfactory
- Not satisfactory

Series 1
Pilot II Supervisory training

- Responsibilities, roles and relations in PhD supervision
- Collaboration, communication and diversity in the relation between supervisor and PhD candidate
- How can UiO be excellent in PhD supervision?
The institutional challenge (1)

- More equal conditions for PhD candidates
- Coordination of activities between academic fields and programmes
- Profile and visibility
- More coherent organizational responsibility concerning quality and efficiency
- Accountability
- Interdisciplinarity, innovation and internationalization
Recommendations: The candidate and the research project

- Affiliation to research community of high quality and critical mass
- Interdisciplinary and international opportunities – Museum modell!
- Information and access to resources (university and collaborative institutions)
Recommendations: Supervision

• Clarify roles and responsibilities
• Supervisory training
• Create informal arenas for input, reflections, discussion and exchange of experiences
• Handbook for supervision (for supervisor and candidate)
Recommendations: Training part

• Develop a comprehensive generic skills programme
• Involve supervisor in the candidate’s selection of courses and progression
• Facilitate information and access to courses offered in other programmes
• Supportive structures
• Support candidate initiatives and activities (financially, practically)
Recommendations: Visibility and relevance

- Strengthen visibility and attractiveness of UiO as a supplier of doctoral education
- Provide more and better information on PhD activities, courses, conferences and other events
- Inform candidates of the possibilities and available means at an early stage of the PhD period
- Strengthen the collaboration with external institutions
- Financial support to PhD candidates who have projects with innovative potential
Recommendations: Career development

• Communicate career possibilities in the knowledge society
• Communicate to potential employers the value and skills of a doctoral holder
• Offer comprehensive generic skills programme that supports a variety of careers
• More knowledge about the careers of the doctoral degree holders
Recommendations: Quality assurance (1)

- Clarify roles, duties and responsibilities of candidate, supervisor, faculty and administration
- Use yearly progression reports more thoroughly to evaluate the candidate’s work in relation to the programme description
- Clarify and communicate responsibilities and routines for addressing potential problems, complaints and conflicts. Ensure independent and confidential follow-up of these issues.
- If a candidate wishes to switch supervisor, there must be clear routines on how to do this.
- Underline the duty of the responsible parties to arrange for the evaluation process to take place without delay
- Document and share examples of good practice
Recommendations: Quality assurance (2)

- Improving the quality system by coordinating and routinizing the following activities:
  - A mandatory start-up seminar for new candidates, introducing them to the facilities and resources, including a generic skills training programme
  - A mid-term evaluation including the candidate’s progress and evaluation of the course programme (comes in addition to yearly reports to employers and funders)
  - Yearly appraisal meeting between candidate and employer (university, external employer)
  - A final evaluation after submitting the thesis
Recommendations: Organization

• Don’t fix what is not broken.
  - Faculties do prioritise the PhD education
• Build on the strengths of the current situation
  - Great satisfaction with the «core» dimensions of the PhD training
• PhD service centre to support and develop the PhD education in cooperation with faculties
• The centre should have an academic focus – perhaps the status of an academic/professional unit?
Key tasks of a center? (1)

- Provide generic courses across faculty boundaries
- Provide a structure of academic and social support for the PhD students who need it
- Provide information and spread good practices to faculties and dr.programs
- Provide information to prospective PhD students and other stakeholders
Key tasks of a center? (2)

• Support internationalization of the PhD education – also regarding ”internationalization at home”
• Support students with career guidance
• Support faculties by providing courses to supervisors and other people responsible for PhD education
• Support faculties/UiO by running a QA-system on PhD education
Further steps

• The follow-up of the review will be handled by the university boards by late October

• Implementation of single measures from 2013

• The scale, priorities and achievement depend on available resources
The Paradox of Pedagogy?
“So whenever I say, ‘To every argument an equal argument is opposed’, what I am virtually saying is, ‘To every argument investigated by me which establishes a point dogmatically, it seems to me there is another argument which opposes it (...).’
The student body entering, participating in and completing higher education at all levels should reflect the diversity of our populations. (Bologna)
Sva marga
The Mission of the PhD
- the case of Norway

Inga Bostad, Pro-Rector