The art of selecting PhD candidates

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Outline of the presentation

- Why is selecting the right candidate so important and difficult?
- We know which candidates we want to avoid.
- Doctoral qualities making the difference.
- Possible selection techniques.
- No good selection without a pool of candidates.
- A Dutch revolution: a new Master-PhD nexus.
- Preparing a PhD Proposal in the new structure.
- The proposal course at Master level – a report from a practitioner.
- Tools for selecting Research Master & PhD candidates.
Why is selecting the right candidate so important? And so difficult?

- Financial consequences of wrong admission decisions are enormous
- Not admitting is much easier than finishing our supervision in case of candidate’s stagnation
- Premature termination of the project is a miserable thing
We have a good feeling for essential qualities and warning signs

Three sources
1. In the selection kitchen of a Research Master program
2. Warning signs, as perceived by supervisors from Zagreb, Zürich, Utrecht
   - not having a thesis
   - handing in written work that is just in a stage of a first draft
   - not following advices
   - losing contact with the supervisor
   - lack of independence
   - complicated working context
What to expect from PhD candidates. Cf Delamont

<table>
<thead>
<tr>
<th>Expectations</th>
<th>Ways to test</th>
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<tbody>
<tr>
<td>Skills &amp; Abilities</td>
<td>Testing during interview. Specific references</td>
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<tr>
<td>Motivation (not just drifting into PhD)</td>
<td>CV not showing false starts</td>
</tr>
<tr>
<td>Ability to work independently</td>
<td>Exploring biography of former research / project</td>
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<tr>
<td>Creativity &amp; ideas of their own</td>
<td>Inviting to display ideas about new project</td>
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<tr>
<td>Writing ability</td>
<td>Studying examples</td>
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<tr>
<td>Critical of previous work</td>
<td>Testing ability to provide critical commentary on key work in discipline</td>
</tr>
<tr>
<td>Good degree results in undergraduate studies</td>
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The ability to appropriate a prefab project

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<th>Ways to test</th>
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</thead>
<tbody>
<tr>
<td>The ability to bend a pre-fab rough detailed project outline to a project really owned by the candidate. In other words: the ability of appropriation.</td>
<td>Writing assignment: formulating comments on a project outline</td>
</tr>
</tbody>
</table>
Possible selection techniques

- Carry out an experiment
- Asking referees
- Studying CV
- Scrutinize CV for evidence of working autonomously (dissertation project)
- Inviting applicants to display their ideas
- Asking candidate about experiences with writing
- Asking referees about student’s writing abilities
- Studying examples of written work
- Asking for a research proposal
- Exploring with candidate if they can provide commentary on key work
No good selection without a pool of candidates

Dale Bolton:

Not working on the reservoir of talents will lead to a deterioration of the selection process
A Dutch Silent Revolution and it’s consequences for selection practices

- Hallmark: the sliding of the first phase of the Ph.D. trajectory into the final stage of the Master program

- Cornerstones of the new policy
  1. Creating talent pool and scouting
  2. The Bachelor / Master / PhD nexus
  3. Expansion and segmentation of the selection process
  4. Collectivization of selection responsibilities
  5. Testing (assumed qualities, potential working relationships)
Research-oriented science education in NL

- **<2004**
  - Doctoraalopleiding (5y)
  - PhD project (4+y)

- **2004**
  - Bachelor (3y)  Master (2y)
  - PhD project (4+y)

  Educational institutes

  Graduate School of Science

  Research schools

- **2010**
  - Bachelor (3y)  Master (2y)  PhD project (4y)

- **Future (?)**
  - Bachelor (3y)  Master + PhD (2y+4y) or PhD (5y)
Selection criteria for admission to Research Master program or Research Track

- Grades: 7.5 and higher or Top 20% of students (003) or Top 5-10% (049)
- Satisfactory GRE score and/or GMAT score 005
- CV
- Motivation.
- Potential to become a PhD candidate
- Background in specific field, 003.
- Prior training in clinical and research skills.
- Prior training in methods and statistics 021
- Scientific originality
- Proficiency in English
- Creativity and perseverance 005
- Ability to reason logically and express their thoughts on paper in a clear, concise and logical way 038
The characteristics of the new PhD culture

- Scouting of talent starts in Bachelor program
- Selective admission to Master program
- Freedom of topic choice on the candidate’s side
- Avoiding a tunnel vision on research possibilities: rotations
- The heart of the program: developing a research proposal
Two ways to support the preparation of a research proposal at Master level

- Delegation of support to individual supervisors
- Collectivized support of proposal development in combination with individual supervisors
PhD Proposal Course – report from a practitioner

- Information about the technicalities
- The real issue: the topic exploration
- Two stages: topic exploration & proposal composition

Exploration:
- Literature search
- Critical appraisal
- Literature review
- Interviewing experts

Product: A Well Reasoned Topic Choice
Students’ experiences

- experience a different style of studying
- don’t start with one well focused topical interest
- pondering leads to feelings of uneasiness and uncertainty, sometimes to experiencing a crisis
What we know about the students’ qualities at the end of the Research Master programme

- The Certain Winners 5x
- The Conditional Candidates 6x
  - Passive Talents
  - The Talented Topic Hopper
  - Talented Rule Breaker
  - The Fragile Talent
- The (provisional?) non-candidates 7x
  - Feeble Minimalists
  - Talented Disappointers 5x!
Dominant features in Dutch selection practice (see Handout)

- **Material**
  - Grades
  - CV
  - Motivation letter (admission to Master)
  - Reference letters
  - Research proposal (admission to PhD)

- **Procedural techniques**
  - Weighing grades; NB: learning curve
  - Studying written material
  - Studying proposal qualities
  - Interviewing

- **Collectivized procedures**
Annexes
Why is selecting candidates so difficult?

- reasons of macro-context
- reasons of inflexible project requirements
- reasons of professional autonomy
- reasons of micro-politics and patronage
- reasons of missing breeding grounds, the missing pool of talents
- reasons of problems of predicting success or failure
- reasons of insufficient selection techniques
My supervisor designed the entire project
My supervisor designed most of the project, my contributions were minimal
My supervisor and I co-designed the project
I designed most of the project, my supervisor's contributions were minimal
I designed the entire project

<table>
<thead>
<tr>
<th></th>
<th>Humanities</th>
<th>Law, Economics, and Governance</th>
<th>Geo Sciences</th>
<th>Social and Behavioral Sciences</th>
<th>Life Sciences</th>
<th>Natural Sciences</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>My supervisor designed the entire project</td>
<td>18%</td>
<td>27%</td>
<td>49%</td>
<td>32%</td>
<td>31%</td>
<td>47%</td>
<td>34%</td>
</tr>
<tr>
<td>My supervisor designed most of the project, my contributions were minimal</td>
<td>11%</td>
<td>11%</td>
<td>16%</td>
<td>14%</td>
<td>31%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>My supervisor and I co-designed the project</td>
<td>16%</td>
<td>19%</td>
<td>19%</td>
<td>27%</td>
<td>27%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>I designed most of the project, my supervisor's contributions were minimal</td>
<td>25%</td>
<td>23%</td>
<td>10%</td>
<td>16%</td>
<td>8%</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>I designed the entire project</td>
<td>24%</td>
<td>20%</td>
<td>6%</td>
<td>8%</td>
<td>1%</td>
<td>3%</td>
<td>6%</td>
</tr>
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PhD candidates with Research Master background
From: Sonneveld/Hello/vdSchoot 2011

I do not work at a graduate school
I do not know at which graduate school I work
Natural Sciences
Life Sciences
Social and Behavioral Sciences
Geo sciences
Law, Economics, and Governance
Humanities
The selection for the PhD position in the new system

The selection procedures are dominated by:
- a) minimal bureaucratic steering at the micro level
- b) collectivization of the selection responsibility
- c) dominant role by highly ranked researchers
- d) minimal professionalization of the selection process
- e) minimal role for external experts in the selection process
- e) dominant types of information:
  - written information
  - oral information (interview)
  - grades
  - research proposal (vis à vis PhD)
  - reference letters
  - CV
  - [motivation letter (vis à vis Master)]