SELECTION & ADMISSION OF DOCTORAL CANDIDATES

MANUAL FOR DOCTORAL PROGRAMS, GRADUATE AND RESEARCH SCHOOLS

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1. Introduction¹

Answering the question "which aspect of the PhD supervision is the most difficult?" we answer: the selection of doctoral candidates. We did participate in dozens of selection procedures. We have evaluated hundreds of (aspirant) candidates and concluded many of them were fit to start with a PhD trajec-

Box 1

Core issues in selection and admission.

How to organize the admission of candidates? Major issue: individualized or collectivized procedure.

How can we find the best selection practices in our own environment?

What to do in case of doubts?

What are the admission criteria?

Which procedural principles will be respected?

Core issue I: we know the risk indicators, but how to detect potential drop outs during the selection?

Core issue II: what to do in case of doubts?

tory. Our misjudgments were not uncommon. Some of the admitted candidates have been unable to finish the dissertation trajectory. Perhaps, some of the rejected candidates have defended a dissertation however. Why is this part of our job so difficult? What can a director of a doctoral program do to raise the quality of the selection to a higher level? These are the questions we will answer in this chapter.

This chapter is mainly based on our own years of experience. Almost nothing is written in detail about the selection of candidates. In her book Supervising the Doctorate, Sara Delamont (2005) is an exception with a chapter entitled ominously *A rather unpromising consignment: selecting successful students and building a research culture.* One of the most insight-providing studies took place in another field, the selection and evaluation of teachers. Those who are interested in the details, we refer you to Bolton's *Selection and Evaluation of Teachers (1973)*. The principles presented therein are, with a

small translation, of direct relevance for our selection work. Bolton's most important sentences are probably the following: "It is axiomatic that no selection program can be effective unless the number of candidates is substantially greater than the number of positions...A systematic selection program cannot compensate for an inadequate number of candidates. The recruitment program must provide an applicant pool that is adequate in number and diverse in characteristics" (p.61). This is often the problem in our recruitment and selection work.

2. Benchmarks

Research on doctoral programs seldom reports on the admission of doctoral candidates. We don't dispose of selection benchmarks in terms of 'good practices'. An exception of a limited scope is the ARDE rapport Accountable Research Environments for Doctoral Education (EUA, 2013). In many countries, the admission has become a collective responsibility and a regulated aspect of the doctoral programs. The days of the individual professor who decides about the acceptance of a candidate have come to an end.

Looking in the kitchen drawer of top doctoral programs, we can specify this picture. The Netherlands Organization for Scientific Research (NWO) is subsidizing graduate programs that take new initiatives in the organization of their doctoral programs. In terms of recruitment and selection, the top programs share the main body of the following characteristics.

¹ Editing, comments & suggestions: courtesy of prof. K.T. Wann, Cardiff University. Comments and suggestions: courtesy of dr. Lucas Zinner, Vienna University.

PhD talent is already scouted in pre-PhD educational programs. By way of rotations, they get acquainted with different research options and supervisors. The following three principles are central to the selection procedures: (a) with support by a potential supervisor and, sometimes, a special educational program, the candidate has written a research proposal; (b) the candidates will give a presentation on their research ideas, followed by (c) an interview with an admission committee. The procedures are always 'open'ones. *In house* candidates will not receive preferential treatment. They have to prove themselves in competition with external talents. 'Strangers' i.e. colleagues who won't be involved directly in the project and supervision, take part in the procedures. Nowhere, is the acceptance of a candidate delegated to the potential supervisor. In the evaluation of the candidate's capacities, the following criteria are central: earlier study results (grades), proficiency in English, recommendations by respected colleagues,

Box 2.

The situation varies across Europe but almost 90% of the ARDE survey respondents did claim to have written regulations and procedures for admission of doctoral candidates. Of these, approximately 60% stated that admission procedures for doctoral candidates are decided by an institutional body such as an admissions committee, and 79% stated that their regulations concerning admission procedures are publicly available, on a website for example. A rather small proportion of respondents, 8%, commented that professors in their institutions were permitted to freely take on doctoral candidates as supervisees without consulting any institutional body; six of the seven German respondents stated that this was the case in their institution.

As to the question of whether institutions had the power to change the procedures relating to admissions, 83% of the survey respondents revealed that they do have such power, and, of these, 38% stated that they have concrete plans to implement changes in the admission procedures in their institution.

and finally and most importantly, the research proposal.

3. Why is the selection so important? The costs of failures.

The reasons for professional selection practices are simple and clear.

- Financial and time consequences of wrong admission decisions are enormous.
- We want to avoid deep regret on the side of the candidate who, at the end, apparently has worked in vain for years to fulfill a dream, an ambition.

Box 3.

Factors causing errors. Errors organizations may commit.

- (a) careless treatment of candidates
- (b) hyperdependence on expert opinions
- (c) misjudgement of job requirements
- (d) resort to stopgap appointments
- (e) stereotyping of prospective candidates
- (f) disregard for the organizational personality
- (g) disregard for the candidate's personal compatibility with present staff

(Bolton, 1973, p. 83)

• Not admitting, is much easier than finishing our supervision in case of a candidate's stagnation. Here we refer to the ATLAS-complex. For the average supervisor, admitting an error after having accepted a doctoral candidate is not an easy task. We prefer muddling over the miserable, active termination of a project.

A cost-benefit analysis will clarify the damage caused by a thoughtless admission of candidates. Let's take a close look at the situation of a candidate who has been admitted, muddling through for four years in the doctoral program and not graduating at the end – the real

horror scenario. We have calculated the price we pay for such a project. The price differs per type of doctoral candidate, and may differ per country.

Let's start with the misery and shame on the side of the candidate that accompanies this failure. Who doesn't know the ex-candidate who avoids his or her ex-supervisors and peers, skirting around the former institute? Who doesn't know the stories about the tensions to which this may lead in the private situation?

Next, let's have a look at the invested time. In the Netherlands, the average part-time candidate - combining dissertation work with other professional activities — needs 77 months for the dissertation trajectory. If this project fails at the end, the candidate has invested 6.800 hours of his or her life in this enterprise.

There are also full time candidates, working at their dissertation for four years as employee or supported by a scholarship. If, eventually, the dissertation becomes unattainable, the candidate has behind him or her 8.000 hours of working on a non-completed dissertation. Disinvestments of time also play an important role on the side of the supervisors. Let's assume the candidate had two supervisors. If the candidate works in vain on the dissertation for between 4 and 6 years, the two supervisors will have invested around 400 hours in the supervision.

We proceed to the financial aspects. Let us study the Dutch example. An average dissertation project on basis of an employee position is costing around \in 200.000 plus research costs. This is an enormous amount for the tax-payers, a private client or a national science foundation if the project fails eventually. We, as directors of graduate schools or supervisors, may be blamed if the candidate has been accepted thoughtlessly, or if we have shown a lack of courage to send away a candidate in time. Add to this financial damage, the missing \in 93.000 every university receives upon completion of a dissertation. The candidate is not experiencing personally this type of financial damage and this differs in cases where candidates are paying a fee for their participation in the doctoral program. The rates will differ enormously per country, but the damage for candidates and parents can amount to considerable sums of money. We also have to mention the possible loss in terms of prestige. More and more, graduate schools who apply for external subsidies will be evaluated in terms of completion rates. If less than 7 to 8 of 10 candidates are graduating, it will be unavoidable that graduate schools pay a subsequent price.

Rarely, directors of graduate schools look in this way at their accounts of profit and loss. In many situations, this has to do with the deficient collection of data on completion rates and the time to degree. In many countries, what is missing is a more business oriented check of investments and outputs. In this respect, it is of the utmost importance to organize the admission procedures as thoroughly as possible. Key-factors are the presence of excellent supervisors and an impeccable scrutinizing of the candidates.

4. Why it is so difficult?

Before we present our Selection Principles, we will analyze why selecting candidates is so difficult as regards its substance. Let us start with the international candidates. They are located at (great) distance and are sending us their written applications. Often, we decide to deal with their application without a face-to-face meeting. Sometimes, a Skype interview is our last resort, being of course a less robust alternative.

Often, we are also in a hurry, or we think others are expecting that from us. That plays a part if we are recruiting candidates for projects subsidized by third parties. We want the project to start as quickly as possible, even if excellent candidates are not available. Few directors of supervisors have the power to

ask the client for a delay in the start date because of a prolongation of the recruitment procedure. Selecting a candidate becomes also more difficult if the potential supervisor has a preferred candidate for the project and isn't open to questions and doubts from the side of colleagues also involved in the procedure. Sometimes, we see the features of an academic patronage hindering the cool objective judging of candidates.

Box 4. Why is it so difficult?

Often we suffer from a lack of strong candidates

How to assess the qualities of an unknown candidate?

The reliability of the references

How to assess those most important qualities: stamina, perseverance, independence, frustration tolerance, co-operation potential, development potential, openness, potential for appropriation of project

The (un)reliability of information collected by interviews

Our inclination to avoid risk: inbreeding

Pressure from financing parties....the project has to begin

didates in the category in between! Actually, it is impossible to come to a well-considered decision on the basis of a bit of written information and a once-only meeting with those candidates. The essential question is what we will do in case of doubt. To "see the candidates at work" is the one and only strategy that works in that situation. Unless we want to fall back on the rude and lazy "when in doubt, don't". How we can organize "seeing the candidate at work" will be discussed later.

We finish this paragraph by summarizing the conditions that will have to be fulfilled to finish a dissertation project successfully. First of all, there is the substantial knowledge of the candidate and the potential to deliver an original contribution in the relevant field. However, knowledge and originality are not enough. The candidate should display personal qualities as well. Barbara Lovitts has described them in her lucid research-based "The Transition to Independent Research: Who Makes It, Who Doesn't, and Why" (2008). She mentions patience and willingness to work hard, initiative and persistence, and Intellectual Curiosity. There are also the traits associated

Close to this, lies the wish of potential supervisors to keep the selection of candidates in their own hands. "In the end, I am the one who has to work with this candidate for the coming four years. Others shouldn't interfere in my decision process."

Finally, we mention the danger of a lighter admission procedure in case of candidates bringing their own money, for example a governmental scholarship. How difficult it is to evaluate them as thoroughly as candidates in whom we invest our own money.

However, there are also substantial complications. It is difficult to reach a thorough judgment of the candidate's qualities by way of written material and, ideally, a life interview. Committees do recognize the top 10% of the candidates, those exceptional cases in which we conclude within 10 minutes: start, right now, with your PhD trajectory. We also identify the bottom 30 or 40% of the pool of candidates. But how long do we ponder over the can-

Box 5.

Factors causing errors. Susceptibility of persons to errors.

- (a) leniency: bias that reduces the importance of
- negative characteristics exhibited by a candidate (b) halo effect: bias in favour of a candidate resulting from on his/her desirable characteristics
- (c) central tendency: the tendency of individuals to use average judgments
- (d) errors of logic: inconsistent interpretations of similar characteristics, e.g. integrity and truthfulness (e) contrast: the tendency to rate a candidate low in
- an area the rater considers him/herself strong
- (f) overgeneralization: the assumption that the same kind of behaviour will be exhibited in all types of people at all times
- (g) faulty weighting: the tendency of professionals to weight inappropriately some factors used in making predictions
- (h) confounding: simultaneous consideration of more than one characteristic
- (i) premature closure: distortion of subsequent information because of early conclusions (Bolton, 1973, p. 82)

with the capability to make the transition (the ability to deal with frustration, fear of failure, tolerance of ambiguity, and ability to delay gratification). Finally, we mention self-esteem and self-confidence, and motivation. But there is more to say. No candidate meeting those criteria, will be able to function well if the environment is not ok. By this we mean as well as the meso-level of the doctoral environment (course program, facilities, contact with peers) as the all-important supervision. If the supervision doesn't meet a set of criteria or is not qualified in terms of topic expertise, a successful dissertation project becomes unlikely.

5. Types of applicants

Let us illustrate the problems we have with selecting our candidates by sketching different types of potential PhD candidates. We did work with them during a nine month program introducing the students to the writing of a PhD proposal. All of them passed a fairly strict selection procedure; we were having high expectations of them, and we rated them among the top of their cohort. After 9 months, we could distinguish in a group of 18 talented students the following types:

The Certain Winners, the students who 'have it', the students who bend assignments to their will and did surprise us repeatedly - the candidates for a PhD project.

Next, we worked with the The Conditional Candidates

Passive Talents - certainly, the student is talented, but is passive, waits for our instructions again and again

The Talented Topic Hopper - just when this talent had chosen a nice topic, the candidate enters our office announcing the project will be completely different.

Talented Rule Breaker – the talented student who doesn't stick to the rules of the game, who ignores deadlines, who fights a delayed battle of independence, creating much irritation with surrounding supervisors and lecturers.

The Fragile Talent – who is feeling very uncertain, constantly needing our reassurance.

Finally, The (Provisional?) Non-Candidates

Feeble Minimalists - the candidate who is cutting corners

Talented Disappointers (5x!) – actually, the most remarkable category, the students who have been selected without any doubt, but starting to disappoint us during the program. Two causes were dominant. Combining study work with private activities that take up much time, combining the main study with other study interests: in short not giving enough time to the development of a PhD proposal (the Non-Focuser). Or the other category, the student who isn't feeling good, is having rough times privately and is dropping out now and then.

We came to this typology during a long period of co-operation. We did not see the weaknesses during the admission procedure. These experiences do illustrate the big problems we are confronted with. It is impossible to get a nuanced picture of qualities and risks during a procedure based on an examination of some written material, mostly insipid references and a meeting of, let's say, 45 minutes.

6. Selection principles

6.1. Inventory of best departmental practices

Experienced supervisors have collected much knowledge about the best way to select candidates. The biggest mistake a director can make is to assume that a 'selection policy 'has to be built from scratch. Every director will realize that experienced colleagues have developed a successful selection style and have laid down their own selection principles. For example, we know supervisors who refuse categorically to confine themselves to Skype interviews. They always want to meet the candidates. On the other side, there will be colleagues who are underperforming. Supervisors just starting will need the support of experienced colleagues and will learn a lot from successful selection practices. The director may support them by organizing supervisor meetings and by mapping 'best practices'.

We developed two tools helping you to start a discussion in your organization about strengths and weaknesses of the current selection practice. ["Analysis of selection experiences generic" & "Analysis of Selection Practice"].

6.2. Systematic application of principles of selection

As a director you want to guarantee that candidates for PhD positions can count on a comparable and careful treatment, in whatever unit of your organization. Decreeing selection principles and the exchange of best practices is essential.

The principle of systematics is also important at the micro-level of the selection committee. In Box 5, we summarize Bolton in his sketch of how things may go wrong. We know how difficult it will be for a director to realize e certain degree of systematics at the level of the meetings with the candidates.

The availability of a document written by the candidates that informs us about the candidate's ideas about the project is essential. Such a document gives an overview of the most important research questions, the state of the art as regards the topic of research, hypotheses or claims, necessary data and methods of data collection. In many cases, a candidate will apply for a position within a research project developed by others. In that case, we should challenge the candidate to write down his / her observations as regards the elements of a sound project description, as mentioned along the lines above. We claim that a careful decision about the candidacy is impossible without such documents. By asking the same kind of information from all candidates, we open the way to a more precise comparison. We will reduce the risk of focusing on either a specific strength or a weakness, forgetting other important aspects.

Does a systematization of the procedure guarantee unanimity? No. A committee will agree on the top 10% of candidates in no time. That also applies for "the bottom 30%". The pondering and the doubts will focus on the group in between. The major purpose of systematization

Box 6

Possible structure of an interview

- 1. Introduction (who is who, why he or she is present)
- Goal, length and structure of the meeting and explanation of the procedure (more than one interview, reasons for that, etc., etc)
- 3. Introduction of the department, graduate school.
- Questions about the substance of the project the candidate proposes, or the project for which the candidate is applying.
- 5. Motivation of the candidate.
- 6. Questions from the candidate.
- Conditions: starting date, period of notice, working hours, financial conditions. The information can also be given after a decision has been taken.
- Informing the candidate with respect to when he or she will be informed about the decision of the committee.
- Closure of the interview.
 (Source of inspiration: HR department TuDelft)

is to have a look on the candidates from different angles, revealing strengths and weaknesses as clearly as possible.

We offer you and your selection committees a tool inviting the participants in the selection process for a multi-dimensional and systematic comparison of the candidates. This tool provides a point of departure, however you will have to bend it to the characteristics of your organization, amending, reducing and completing it. ["Strengths and weaknesses of PhD applicant"]

6.3. Open procedure or finding other ways to avoid "easy admission"

Any selection procedure is based on the principle of an open procedure. We take big risks by just accepting a candidate for a PhD project without comparison with other ones. Your colleague may propose to accept a candidate without an open procedure because his or her admission will be the logical outcome of any procedure. If your colleague is right, the candidate will hold his or her ground in competition with whoever are external candidates. Thus, no reason to fear an open procedure. We also do not want to see a good student just "swimming into" a PhD trajectory without being conscious of what it means to work on a four year project. In case of intensive collaboration in earlier research activities, the leniency mentioned before is lurking, the bias that reduces the importance of negative characteristics exhibited by a candidate. A supervisor can be so enthusiastic that possible weaker qualities are overlooked. As Hume wrote in 1739: "All kinds of reasoning consist in nothing but a *comparison* and a discovery of those relations ...which two or more objects bear to each other". In other words: every good reasoning starts with comparison, and that also applies to the selection of doctoral candidates.

Two quotes do illustrate these "easy admissions". In both cases, the candidates did already leave the doctoral program after a short time. And thus, we may speak of a senseless investment of time and money.

Candidate 1. Has been 'seduced' to 'doing a PhD, because there was no job yet....'. He was invited for this PhD position, five months before finishing his MSc program. Real luxury. He didn't really ask himself if this would be what he really wanted. The option was just crossing his path".

Candidate 2. Doctoral candidate did start his dissertation project after 'cum laude' graduation in the research group of X. Because of his excellent study results, X invited him for a PhD position in a project starting just after the completion of Master program. The topic was not completely in line with his graduation project. It took him several months to reach the knowledge level necessary for this project. The lack of knowledge did lead to delay in the first stage of his project.

In this second case, we also see the risk of a stopgap admission. Though the supervisor will have been aware of the gap between project demands and the candidate's qualities, he apparently did feel such a time pressure that he did not allow himself more time to check whether more suitable candidates would be available.

With the Law on the Open Procedure, we also prevent intellectual inbreeding. We avert the easy choice for the candidate we know already so well, but who might not surprise us with a creative input in the research project of our group.

6.4. Test availability of topic expertise at the department

Easy admission is a risk if external candidates are turning to us with their own financial means, for example a governmental scholarship. We could be tempted to accept the candidate, even if we are not being completely sure whether the necessary substantial expertise is available in our research group.

6.5. Create transparency with respect to criteria

We list criteria that need to be found in the standard repertoire of every committee. The candidate is:

- o authorized to enter the PhD trajectory (by prior training, such as MA, MSc, MPhil)
- o possesses a high level language proficiency (to be confirmed by IELTS, Toefl scores etc.)
- o is knowledgeable of the field of study
- o is capable to position the new project in a disciplinary tradition (making connections with questions not yet answered by others, debates, etc.)
- o knows how to show the relevance of the proposed research
- o is intrinsically motivated
- o relies on prior research experience, showing (by report or thesis)
 - practical intelligence, creative intelligence
 - ability to work with deadlines, timely completion
 - ability to work for a long period on one topic (patience)
 - ability to deal with setbacks
 - consciousness
 - good writing (in English)
- o has written a PhD proposal or elaboration of / comments on project or proposal, developed by the supervisor, department, etc. (see annex)
- o can show convincing grades
- possesses relationship capacities [can listen, respects suggestions but shows independence, communicates regularly]²

Below you will find an overview based on the work of Sarah Delamont. She sketches the essential selection criteria, indicating how we may check whether a candidate meets them.

The selection criteria What to expect from PhD candidates, cf. Delamont		
Skills & Abilities	Testing during interview. Specific references.	
	Carry out experiment	
Motivation (not just drifting into PhD)	CV not showing false starts	
Ability to work independently	Exploring biography of former research. Scruti-	
	nize CV for evidence of working autonomously.	
	Asking referees	
Creativity and ideas of their own	Inviting to display ideas about the new project.	
	Research proposal.	
Writing ability	Studying examples of written work. Asking refer-	
	ees.	
Critical of previous work	Testing ability to provide critical commentary on	
- -	key work in the discipline	
Good degree results in undergraduate studies	•	

² Further reading: Barbara Lovitts (2008) The transition to independence. Who makes it and who don't.

In this overview we miss the ability to appropriate a project developed by, for example, the future supervisor.

The ability to bend a pre-fabricated outline into a project really owned by the candidate. In other words: the ability of appropriation.

Writing assignment: formulating comments on a project outline

6.6. Slowdown in case of haste and doubt...

Sometimes, committees function under time pressure. An external party has put financial means at our disposal, your research group works with international partners and has to observe deadlines; these can be circumstances giving your selection committee a feeling of haste. Joining together of haste and a lack of adequate candidates is a recipe for stopgap appointments. Registering of haste is one of those 'red flag moments' that should be a source of great concern. You may offer your colleagues the support of a well-considered slowness, rather not accepting a candidate than accepting one who fills you with worries and doubts from the first day. In case of haste and doubts

- Let the committee members take their time
- Ask the third party that pays your project, with whom you collaborate if they prefer your accepting a doubtful candidate to taking some more time to find a strong one
- > Broaden the selection committee
- > Let them ask for more information from the candidate
- ➤ Facilitate the invitation of a candidate for a test period (prior to formal admission to PhD trajectory)
- ➤ Make the committee answers questions like: can missing qualities be remedied (during PhD trajectory [by whom, in which way], or should this be done prior to admission?

6.7. Aim at "flying start"

Dissertation Paradise does not exist. We always work under time constraints. A subsidy can be terminated, our institution can have a regime restricting the period for working on a dissertation, or a client can be expecting results. The more indirect, and contract funding finance our doctoral candidates, the more we lose flexibility of time in the planning of the projects. "Take your time, start reading, read more and at the end of, let's say, your first year you propose a well-defined research project". Those days are over. As a director we have several 'defense lines' to avoid delay, and to restrict time to degree. A strict regime of monitoring progress, pushing our supervisors to work very hard on the planning, selecting the best possible candidates are logical measures. However, our experience teaches that success is not guaranteed. The best way to make the dissertation process into something that is under control, is to aim at a flying start for first year candidates. During the selection process, a candidate should be able to present a thoughtful set of research ideas, preferably in the format of a research proposal. Or, in the case of a project developed by staff members, to comment in detail on the strengths and weaknesses of that plan. The process of the internalization of the project should have started before the start of the doctoral trajectory. In paragraph 7, we will present several options to support future candidates in this respect.

6.8. Take into account prior experiences with candidate

A good way to get to know a candidate, is to consult colleagues who had gained experience with him or her in earlier situations. Those colleagues may be lecturers from your own institution who worked with the candidate, for example within the context of a Master Thesis or Research Internship. Did the candidate study elsewhere? Then the observations by the local colleagues are important. It will be wise if a committee consults them only after having studied the candidate's qualities themselves. In that way, the committee will be able to ask specific and personalized questions. Often, that information brings in more valuable information then letters of reference sent in together with an application.

6.9. By all means meet and see the candidate

"I had a Skype-interview with a French candidate. She left a good impression on me, and I praised myself for having found such a talent for my EU project. The day of her arrival came. The desk clerk called me: Ms. X has arrived. I went downstairs to welcome her close to the entrance. We walked the twenty meters to the elevator and we talked a bit. During those twenty meters, I realized that accepting her had been the biggest mistake ever in accepting a PhD candidate. Skype ...it will never be the sole possibility for contact with a potential PhD candidate". We also remember the report by a supervisor who met a candidate in Shanghai, after having interviewed her by Skype. The life meeting was very enriching, bringing much information that had not become available during the Skype-interview.

Skype is used very often in the evaluation of international candidates. Of course it can play a useful role in determining to what extent we should take a candidate seriously. Ideally, the Skype meeting is

part of a set of four steps in the selection process.

First, we assess the candidate on the basis of written material, among which a document offering insight into the candidate's concrete research ideas. By the way, in view of the last suggestion a motivation letter is not enough. On the basis of the written material, a first elimination takes place.

Second, is an option to interview the remaining international candidates by way of Skype. Hereafter, probably some more candidates will drop out.

Third, decide which candidates your committee will meet in person. In case of international candidates, there are two options. They can visit your institution, or your colleague visits the can-

Box 7.

- 5 day program for 6 Chinese candidates. Law School, University of Tilburg.
- 1. Tour on Tilburg campus. Introduction to Library.
- 2. Writing an essay about the research plans. (assignment was not announced before).
- 3. Individual half hour meetings with directors of program ("external members of selection committee")
- 4. Individual 45 minute meetings with potential supervisors.
- $5.\,20$ minute presentations by individual candidates, plus 20 minute discussion.
- 6. Individual half hour meetings with English editors (deeper testing of English proficiency).

After this program, the director of program collected the judgments and impressions of all the faculty participants in this process and formulated a draft of a decision about the admission.

didate. In such a meeting, the proficiency in English will be tested. We may discuss the qualities of the candidate, including the elaboration of research ideas. By making the candidate give a presentation, we will also get an impression whether the candidate stands firm.

Personal meetings with international candidates do not happen often enough, because of financial considerations. Against this, we pitch the costs of an ill-considered acceptance. In principle, the candidate will invest four or five years of his or life in the PhD project. It involves huge investments of time and money on both sides. If a candidate is not prepared to travel to us for an in-depth discussion of his or her candidature, we may doubt the candidate's motivation. If we ourselves are not prepared to support

the candidate financially to make this meeting possible, this tells us something about the nonchalance with which we take this kind of decision.

In box 7, you will find an example of admission program' for Chinese candidates who came as a group to Tilburg University as part of the decision making process of their application.

6.10. Seek for different perspectives on candidates

Earlier, we mentioned the socio-psychological phenomena that may occur during the meeting of a selection committee with a candidate. Quoting Bolton, we mentioned:

- a) leniency: bias that reduces the importance of negative characteristics exhibited by a candidate
- b) halo effect: bias in favor of a candidate resulting from on his/her desirable characteristics
- c) faulty weighting: the tendency of professionals to weight inappropriately some factors used in making predictions
- d) premature closure: distortion of subsequent information because of early conclusions

Perhaps, you recognize that situation. A committee 'falls in love 'with a candidate because we feel strongly drawn to a specific quality. Or the candidate captures us with a very unusual, but very attractive presentation. Or we know already so much about the candidate that we can't believe it can go wrong.

In contrast, we still remember that interview during which a colleague hit out at a specific answer. We felt intuitively that other qualities of the candidate remained underexposed. And we all know that colleague who grumbled in that situation, but did let pass his uneasy feelings for sake of not wanting to spoil the atmosphere in the meeting.

We have experience with a promising interview model. Instead of meeting the candidate with the plenary committee, it is valuable to organize meetings with the candidate in consecutive, one to one meetings. Your committee will get a richer picture of the candidate, going deeper into given answers becomes easier and a candidate can come back to issues raised in earlier meetings. Individual committee members can ask more questions and probe into given answers. The meeting will be more relaxed. Every committee member gets more scope, in comparison with the pushing that characterizes so many plenary meetings. Besides, the risk of a 'premature closure' of the conversation becomes less. We also pay a price. We know the situation wherein a colleague brought up a point that opened our eyes. After the one to one meetings, this has to happen in the plenary committee without the committee having a previous opportunity to see the response of the candidate.

In our model, the committee will meet at the end of the day to take a decision that probably will do more justice to a balanced weighing of strong and weak qualities of the candidate. All in all, this procedure will not cost the committee members more time.

7. Golden rule: Seeing the candidate work

If it is at all possible, the committee likes to see the candidate in action in relation to the project or the project proposed by the candidate. In the first place, we think of writing a research proposal or commenting on a research idea by ourselves. 'In action' means that we will see the candidate present his or her ideas in a meeting where also others can be present, before defending them in an interview with the committee. Some institutes or programs invite candidates for a visit of several days during which they can pay visits to labs and research groups.

We may test the candidate's assertiveness, initiative and independence by asking the reaction to a re-

search relevant article by the potential supervisor. Technical knowledge may be checked by discussing an article the candidate should be able to understand given the future project. The best way to get an idea of the candidate, is to see him or her work in a pre-PhD trajectory. In that way, we can test the candidate's familiarity with the literature and the ability to search for relevant publications. We will see initiative in contrast to playing a waiting game. We can check the ability to plan one's work and to comply with deadlines. Above all, we can see whether candidate and supervisors do click. Self-selection is an important aspect of this approach. A number of candidates will conclude a PhD trajectory is not an attractive option.

8. Application support

Graduate programs, research schools and graduate schools can assist potential PhD candidates in the writing of a research proposal. This is certainly the case if the candidates' research ideas play an important role in the selection process. No Master student will display naturally the capacities to deliver an elaborated dissertation plan. By offering some sort of support, we might achieve a higher quality of application and a broader pool of talents. We distinguish the following assistance perspectives: we limit ourselves to giving global guidelines in the form of application requirements: we do not offer support in the preparation of an application. "In that way, we get the best insight in the qualities of a candidate. The PhD process is a matter of 'sink or swim'. It's better they get accustomed to that from day 1. The one who keeps upright all by oneself, is proving to be made of the right stuff".

The preparation is an integral part of the educational program that precedes the PhD trajectory. The preparation of a research idea is the central point. We may choose the option of students working on a

research idea with advice by individual scientists. In addition to this, we know the variation of extra support for students in the form of a program like "How to design your PhD proposal". If we offer support to our own students, there will arise easily an 'insiders – outsiders issue. External applicants will have to compete against our own students the latter probably being prepared much better on the application requirements. That involves the risk of a preferential treatment of our internal candidates and the closing off for external talents. The or-

Box 8

This workshop had a three days program, spread over a period of 6 weeks. The first day, general tips were given with respect to the writing of a proposal and the procedure. Also, first meetings with external advisors took place. The second day, the applicants did discuss elaborated proposals with the advisors and senior scientists gave presentations. The third day, the candidates presented their research plan in presence of the fellow candidates and members of the selection committee. The meetings with the external advisors in particular were appreciated very much.

(Source: Evaluatieprogramma Mozïek programma 2004).

ganization of short term programs for all the applicants might be an answer to that. An example are workshops offered by the Netherlands Organization for Scientific Research (NWO, see box 8). Of course, the basic principles of such a program can have different formats. The heart of the matter is that we offer applicants insight into the details of the selection procedure, the criteria, the meetings to be expected with the committee members and feedback on their plans.

Disposing of great reservoirs of talented candidates is the only reason to abandon these sorts of support. And we are not in that position very often.

9. The role of the director

In closing, we will deal with the role of the director already indicated briefly here and there. The relationship between director and supervisors is characterized by natural tensions, manifesting themselves nowhere so tersely as with respect to the admission of PhD candidates. Professional autonomy versus control and steering, that is what it's all about. The professionals decide whether they throw in their lot with someone. We should keep away from assigning candidates to supervisors or departments. Potential supervisors should always get the opportunity to evaluate candidates themselves. In line with this, we never force a supervisor to start working with a candidate he or she is not having faith in.

These points of departure do overlap with those formulated by Ely & Jennings (2005) in their book about problems that may be encountered while undertaking a postgraduate study. Referring to the possible prevention of problems, they mention for example:

- Paying attention to personalities and topic expertise when matching a supervisor and a candidate.
- Preliminary meetings with candidates considering a PhD project, so that they can be made aware of its particulars
- Strict adherence to English language requirements, for example in the case of overseas students.
- Careful scrutiny of references, particularly through contacts with the referees, and detailed appraisal of the candidate's background knowledge.
- Refusing to accept a candidate on to an ill-conceived research program.
- Selection of candidates to be based on perceived student ability and availability of supervisors, and not on institutional pressures.
- Involvement of more than one party in the admission procedure.
- Supervisor's awareness of the value of advice and support from departmental colleagues in case of acceptance of a candidate

This does not mean that directors should delegate the selection to their colleagues without a set of the rules of the game. The director may expect that candidates for positions in whatever part of the organization may assume a similar and fair treatment. We always work with open procedures. We only accept candidates whom we are able to advise properly in terms of scientific expertise. More than one scientist must always be involved in judging the qualities of a candidate who has to write down his, or her, ideas about the future project. In case of doubt, we probe deeper and we resist haste. In the final round of the decision process, we always talk with the candidate, and not only by Skype. The director is informed about every admission decision, mentioning the substantive considerations and the procedure that has been followed. With respect to this report, it is not meant to give the director the opportunity to revoke the decision. The report will make it possible to record the candidate in the school's database and to collect information that will make it possible to improve future procedures, the enhancement of the organizational learning capacity.

11. Tools (available in request)

- > SWOT analysis form for analyzing departmental or graduate school selection practices
- ➤ Analysis for selection practices by staff members
- ➤ Guide for interviewing candidates

- Form for scoring strengths and weaknesses of applicants
- ➤ Research Proposal Form for applicants
- > Form for getting comments of applicant on project developed by institute and it's staff members

11. Further reading

Sara Delamont, Paul Atkinson, Odette Parry (2005), Supervising the Doctorate, A guide to success. Society for Research into Higher Education & Open University Press

Adrian R Eley, Roy Jennings (2005), Effective Postgraduate Supervision, Improving the Student / Supervisor Relationship. Open University Press

Dale L. Bolton (1973), Selection and Evaluation of Teachers. McCutchan Publishing Corporation.