

# Evaluation of the Wageningen University PhD Programme 2014-2015

Jacques Lanarès (Chair)

Alan Kelly

Amélie Mummendey

Thomas Jørgensen (Coordinator)



# **Contents**

The evaluation process	3
Wageningen University and its context	5
The learning process	7
Governance and structures	14
Framework conditions	16
Quality processes	17
Conclusions and main recommendations	19
FLIA Solutions	21



# **Evaluation Report Wageningen University**

## The evaluation process

EUA Solutions was approached by Wageningen University to conduct an evaluation of doctoral education in early 2014. In the spring of that year, EUA Solutions and Wageningen University agreed on the overall framework and developed the terms of reference for the exercise.

The terms of reference for the evaluation specified that evaluation should determine whether:

- 1. The learning targets of the Wageningen PhD programme meet international standards.
- 2. The Wageningen PhD programme has the structure and processes in place for PhD candidates to attain these learning targets.

Specifically, the review will focus on:

- A. PhD programme, procedures, regulations, criteria and organisational support structure
  - 1. Recruitment and admittance (entry requirements) of PhD candidates
  - 2. Evaluation of the PhD project proposal (quality and originality, feasibility)
  - 3. Supervision and support for supervisors
  - 4. Monitoring of progress
  - 5. Completion rate and time to degree
  - 6. Requirements to complete the doctorate
  - 7. Procedures for thesis evaluation and examination of the candidate
  - 8. Support for PhD candidates who experience problems
  - 9. Monitoring the PhD experience during the PhD study and upon exit
- B. PhD training and education
  - 1. Vision and learning targets
  - 2. Procedures, support and requirements
  - 3. Training and education offered by individual graduate schools (topic oriented), by Wageningen Graduate Schools (competences, skills, career) and externally
- C. Employability and career success of PhD graduates
  - 1. Career support for PhD candidates
  - 2. Jobs held after graduation and later career

In addition, EUA Solutions was asked to focus on the following questions relating to particular elements of doctoral education at Wageningen University:



- a. Does the four-year PhD programme of Wageningen University have added value compared to a three-year programme?
- b. Does the employed status of PhD candidates make it more attractive to do a PhD in the Netherlands compared to a student status in a bursary system?
- c. In view of the pressure to perform experienced by supervisors, should we reconsider the balance of incentives at Wageningen University?
- d. Does the present grading system for PhD thesis and defence have added value for PhD candidates and/or supervisors?

In this report, paragraphs in italics refer directly to the evaluation team's assessment of the items in these terms of reference.

After agreeing on the terms of reference, EUA Solutions appointed a team of experts according to the principles of providing high-level knowledge of universities as well as a European perspective. The experts were:

Jacques Lanarès, Vice Rector, University of Lausanne, Switzerland (Chair)

Alan Kelly, former Dean of Graduate Studies, University College Cork, Ireland

Amélie Mummendey, former Director of the Graduate Academy and Vice Rector, Friedrich Schiller University Jena, Germany

Thomas Jørgensen, EUA Solutions/Head of EUA Council for Doctoral Education (coordinator/secretary)

These experts were approved by Wageningen University to assure that there was no conflict of interest regarding their tasks.

EUA Solutions supplied the university as well as the experts with guidelines, outlining the methodology of the evaluation and providing a framework for the self-evaluation report to be provided by Wageningen University and for the site visit by the evaluation team. In addition, the evaluation team was briefed by the EUA Solutions secretariat.

In the autumn of 2014, Wageningen University produced a self-evaluation report (SER) according to the guidelines supplied by the EUA Solutions secretariat. The SER describes the main procedures of the university, their context, and provides a SWOT analyses.

The university reported that the self-evaluation process was a very useful piece of the evaluation exercise for the institution. Stakeholders within the university noted that it had raised a number of questions and stimulated internal debate. At the site visit, the evaluation team noted that the report was well known within the university and that all found it correct and comprehensive. The team also had the impression that most groups within the university had been consulted about the content of the report, except the doctoral candidates who had only been consulted regarding the SWOT analysis.



In January 2015, the evaluation team visited Wageningen University to conduct interviews and collect further material. The visit included meetings with different groups concerned with doctoral education within the university. These included the Dean of Sciences and the Academic Board, Directors of the graduate schools, supervisors, alumni (including postdocs), members of the PhD Council, and the PhD Advisors, who have a mentoring and support function. The evaluation team also met the self-evaluation group. The site visit was very well prepared and was conducted in a very positive atmosphere. All groups interviewed were well informed about the evaluation and demonstrated a constructive and open attitude during the meetings. The evaluation team found that this corresponded to the impression of a general high level of professionalism at the university. The same can be said for the efficiency with which additional material and data requested by the evaluation team was presented.

In accordance with the terms of reference for the evaluation, the evaluation team measured the information gathered from the self-evaluation report and from the site visit against on the one hand the goals of Wageningen University (in a fitness for purpose approach to quality) and on the other hand the international standards for doctoral education laid down in the Salzburg Principles and Recommendations, the team's experience of European best practice as well as relevant EU policies and documents. In addition to this compliance-oriented approach, the team also looked at the fitness for purpose of the procedures measured against the university's own goals.

In this report the team made the choice not to describe again in detail that which was included in the SER. Therefore this report should be read along with the SER and its annexes.

At the end of the site visit, the evaluation team presented the preliminary findings in an open event at the university with time for questions and for challenging the conclusions. The presentation was attended by research staff at all levels, doctoral candidates, administration staff and the Dean of Sciences.

In addition, Wageningen University has had the possibility to correct factual errors in the report before the final submission.

#### Wageningen University and its context

Wageningen University is a research-intensive Dutch university specialised in the themes food and food production, environment and health, and lifestyle and livelihood. It collaborates very closely with a number of research institutes, as the common entity Wageningen University and Research Centre. This evaluation, however, only covers the activities of the university regarding doctoral education.

Within its field, Wageningen University is in the global elite according to a number of rankings, indeed, many rankings put it as the best agricultural university in the world. The university has extensive activities with industry and an impressive range of international activities, not least within development research.

<sup>&</sup>lt;sup>1</sup> http://www.eua.be/Libraries/Publications\_homepage\_list/Salzburg\_II\_Recommendations.sflb.ashx



The university is characterised by a strong dedication to research excellence combined with an explicit mission to solve societal challenges related to its area. This mission is not only strongly present in the official material of the university, but the evaluation team also found it explicitly echoed by individuals across the university, from the management to doctoral candidates.

The evaluation team recognises the excellence of the institution, and was impressed by the university's capacity and professionalism on all levels. The comments and recommendations in this report should therefore be read as further improvements to an already very well-functioning programme.

Wageningen University has seen significant growth in the number of PhD graduations, in line with the general trend in the Netherlands, from below 100 a year in the 1980s to 200-250 a year during the last decade. These numbers constitute the critical mass expected by the Salzburg Principles and Recommendations.<sup>2</sup> This development has been accompanied by the establishment of graduate schools in the 1990s, which makes the Dutch system one of oldest and most established examples of the use of graduate schools.

Until 2014, graduate schools were subject to accreditation by the Royal Netherlands Academy of Arts and Sciences (KNAW). This accreditation was based on peer review according to the Standard Evaluation Protocol (SEP). Currently, accreditation by the KNAW does not occur anymore, but graduate schools are still peer reviewed according to the SEP.

There are considerable budgetary incentives as part of the output-based budget model at the university to compensate chair groups for the supervision of doctoral candidates, specifically an amount of € 41,600 for the research (chair) groups for each completed doctorate. If the candidate also completed his/her education programme, the budget is increased to € 56,600.

At the heart of doctoral education is the learning process of the candidates starting with their selection, and supported by a range of activities and assessment procedures, which are run by governance and management structures. The learning process takes place inside framework conditions that create the environment for learning and attaining these goals. The quality of the learning processes is supported by evaluations and monitoring activities as well as other support measures. According to this logic, the report is structured as follows:

The first chapter looks at the learning process for doctoral candidates including the intended learning targets, procedures to facilitate the learning process and finally how the attained learning targets are assessed.

In the second chapter, the report looks at the governance structures related to doctoral education: how the different levels at the institution work together and how decisions are taken.

The third chapter is dedicated to the framework conditions such as the legal status of doctoral candidates and their place in the research environment.

\_

<sup>&</sup>lt;sup>2</sup> Salzburg Principles iv, Salzburg recommendations 2.1



The fourth chapter deals with quality processes in more detail, particularly the tools for ensuring and improving quality in doctoral education and their relation to the overall quality system of the university.

## The learning process

The evaluation team looked at the learning process through the learning targets of the institution and the overall philosophy of the PhD programme, starting with the intended learning targets followed by procedures for the attainment of the learning targets and, finally, assessment of the attained learning targets.

#### **Intended learning targets**

The doctoral programme at Wageningen University is based on learning targets with the aim to attain 'T-shaped skills'; doctoral graduates are expected to have a high degree of specialist, vertical, knowledge in their particular area of research as well as broader, horizontal, knowledge and skills making them ready for a labour market beyond academia.

According to the regulations, quoted in the SER, doctorate graduates from Wageningen University should be capable of:

- "1. functioning as an independent practitioner of science, as shown by:
  - a. formulating scientific questions, whether based on social issues or scientific progress;
  - b. conducting original scientific research;
  - c. publishing articles in leading journals, publishing books with leading publishers or making a technical design;
- 2. integrating his or her own research in, or placing it within the framework of, the corresponding scientific discipline and against the background of a broader scientific area;
- 3. placing the research aims and research results in a societal context;
- 4. postulating concisely worded propositions in scientific and societal areas, formulated in such a way that they are subject to opposition and defence"<sup>3</sup>

The balance between strong support for specialist knowledge and research practice on one side and broader training activities on the other corresponds well to the Salzburg Principles, which underlines "The promotion of innovative structures: to meet the challenge of interdisciplinary training and the development of transferable skills".<sup>4</sup>

The concrete implementation of the model and the range of courses are impressive and belong among the most comprehensive in Europe.

The evaluation team found that the model of T-shaped skills was well known across the different groups of stakeholders; all groups seemed to recognise the model and perceived a great deal of

<sup>&</sup>lt;sup>3</sup> Self-study for the EUA review of the Wageningen University PhD programme, p. 7

<sup>&</sup>lt;sup>4</sup> Salzburg Principle viii



ownership of it. When asked to define what was special about doctorate education at Wageningen University, all groups referred either directly to the T-shape model, and/or to the wide range of courses offered by the university. Moreover, all groups agreed that the course offering was a particular strength for the institution, and all supported it. There was also a common sense among the stakeholder groups that research at Wageningen University was strongly connected to societal issues and challenges.

The evaluation team sees the knowledge of the learning targets and the consensus about the quality of the model as a considerable asset for the university. However, senior research staff in particular did seem to assign almost exclusive weight to the research dimension without given much attention to the broader training programme. While there is formal knowledge and ownership of the overall model in this group, it might be overly focussed on the vertical part of the T-shape, at least concerning the assessment of attained learning targets (see below).

The evaluation team interviewed six Wageningen graduates working in university or in industry research; the alumni that the team interviewed were positive about the different kinds of skills training offered at the university, and they praised the emphasis on independence in the programme. The SER contains employment data for graduates, showing a higher portion of graduates continuing to work in university research than is the norm for other institutions.

The evaluation team is duly impressed with the intended learning targets and the course offering supporting the research core of doctoral education at Wageningen University; this corresponds to the highest international standards and is further strengthened by the institute-wide identification with the model.

#### The learning process

Doctoral candidates are strongly embedded in one of the 90 chair groups at the university, which is where they experience the bulk of the learning process. Graduate schools are to a large extent seen as providers of services, mostly of courses.

#### Recruitment and admission

Recruitment happens on the initiative of senior supervisors within the individual chair groups. It was the strong impression of the evaluation team that in particular Dutch doctoral candidates with status of research assistants were hand-picked by individual senior researchers. This seemed to reflect a widespread practice of recruitment through personal contacts, often recruiting local students. Concerning international students, particularly 'sandwich' or foreign bursary holders, recruitment seemed to be done at the discretion of the individual chair groups. Several interviewees from different groups within the university expressed concern that the economic incentives for a chair group to recruit these candidates could compromise quality.

The official admissions procedure consists largely of formal requirements such as English proficiency and recognition of attained diplomas. The graduate schools also approve the individual research proposal of the applicant, which, however, is often connected to a larger research project in the chair group. While this procedure does safeguard minimum quality, it seems more aimed at ensuring this



minimum among the already chosen applicants than at actively identifying the most talented applicants in a transparent manner.

Concerning recruitment, the evaluation team was concerned about the lack of an institutional recruitment policy. Though Wageningen University has a very strong reputation in the field and strives for international recruitment, it could be risky to rely solely on this reputation without actively publicising the strengths of the Wageningen doctoral programme and without engaging in strategic recruitment measures. As the competition for talented researchers increases, Wageningen University could risk finding itself in a position where other universities are better able to attract the best talent. Although the number of doctoral candidates and postdocs interviewed during the site visit was very limited, the evaluation team took note of the fact that none of the interviewees from these groups indicated that they had actively sought Wageningen University as their first choice.

The evaluation team strongly recommends that the university formulates and implements a common recruitment strategy, building on the existing knowledge and high reputation of the individual chair groups. For instance, a strategy could, amongst other things, specify what kind of candidates they want to attract and how many, what steps would be necessary to reach these goals, and what resources would be available to implement those steps.

The evaluation team finds that admission practices fall well short of international standards. The Salzburg Recommendations clearly defines admissions as an institutional responsibility that should not be left to the discretion of individual supervisors. Moreover, the standards for open, transparent and merit-based recruitment as proposed by the European Commission's HR Strategy for Researchers are not being met at Wageningen University, and the university has not implemented several of the requirements in the European Code of Conduct for the Recruitment of Researchers, which has been signed by most Dutch universities including the VSNU for the Dutch university sector as a whole.

The evaluation team would highly recommend a review of admissions policies, embracing existing good practice in Europe and working towards the model of open, transparent and merit-based admissions as defined in the Salzburg Recommendations and EU policies. Together with a recruitment strategy, this would increase and sustain the ability of the university to compete for talent at a global level. Such a strategy would define how and where to recruit doctoral candidates and allow the university to act in a coordinated and possibly more efficient manner as an institution.

The evaluation team recognises that current admissions practices have not resulted in low completion rates or long times to degree, which may testify to a high standard of professional conduct within the individual chair groups. Nonetheless, this should not be a reason not to meet higher procedural standards practiced elsewhere in Europe.

Supervision

<sup>&</sup>lt;sup>5</sup> Salzburg II Recommendations 2.2

<sup>&</sup>lt;sup>6</sup> http://ec.europa.eu/euraxess/index.cfm/rights/strategy4Researcher

<sup>&</sup>lt;sup>7</sup> http://ec.europa.eu/euraxess/index.cfm/rights/codeOfConduct

<sup>8</sup> http://ec.europa.eu/euraxess/index.cfm/rights/charterAndCode



Supervision at Wageningen University is shared by several persons: a promoter, usually a senior researcher, who has the overall responsibility; a daily supervisor, normally a more junior member of staff who is responsible for the day-to-day supervision; and in some cases an external supervisor.

Several surveys have been conducted at various levels, which uniformly pointed to a high degree of overall satisfaction with doctoral education at Wageningen University; however they also raised specific recurring problems related to supervision.

Despite formal structures in place to facilitate the learning process, particularly the individual Training and Supervision Plan (TSP) (see under Monitoring of progress), which is quite comprehensive and detailed, there was a large variance in the quality of supervision, at times due to structural issues.

The selection of supervisors did not always depend strictly on the relevance for the research project, but was also done for reasons relating to the management of the chair group. In particular, the requirement for staff to supervise a specific number of doctoral candidates before attaining tenure would result in tenure-track staff being assigned doctoral candidates in order to reach this number rather than on the basis of research expertise.

There is a very large difference between the number of doctoral candidates per promoter in the different chair groups. In some cases this could be an obstacle to the proper use of the TSP and the go/no-go procedure (see under Monitoring of progress). About 10 % of promoters had more than 20 supervisees; out of these, 3 % had more than 30. This small group of promoters have 600-800 supervisees between them, a good third of all doctoral candidates, which is a matter of concern. Moreover, the evaluation team had the impression that doctoral candidates were mostly in daily contact with junior research staff, while access to senior staff was seen as difficult.

The evaluation team also noted an absence of systematic and recurrent training for supervisors, which could mean that doctoral candidates risk receiving the bulk of their supervision from staff that are inexperienced as well as untrained. Particularly postdocs, who were just beginning to take on supervision roles, expressed the need for more training.

Supervisors in tenure-track positions are offered a three and a half-day course in supervision, which would seem *de facto* obligatory as it is recommended for attaining tenure. The postdocs interviewed by the evaluation team did not take the course, even if they were active supervisors, nor did senior researchers. In particular, the postdocs explicitly mentioned that they were in need of training. There exists a small booklet with supervision advice, which, however, did not seem to be very well known. There were no formal institutional guidelines for supervision and fora for discussion between supervisors were informal. As with doctoral candidates, supervisors identified strongly with the chair group; the graduate school was recognised, but also here mostly as a service provider.

The topic of co-authorship and the practice of some supervisors automatically appearing as authors on the publications of doctoral candidates was mentioned several time by different groups. Some practices mentioned seemed inconsistent with international standards, such as the Vancouver Rules



established for the field of medicine. Institutional rules regarding this issue would be relevant in a document on supervision guidelines.

The evaluation team finds that the support for supervisors could be improved through new policies and practices in order for Wageningen University to be aligned with the highest European standards. The Salzburg II Recommendations specify professional development of supervisors as an institutional responsibility, <sup>10</sup> a responsibility which the team finds is not completely fulfilled by the present level of support.

For this reason, the evaluation team recommends that Wageningen University as an institution formulates specific policies regarding supervision, engaging all stakeholder groups in a discussion about supervision with the aim to establish common rules and/or guidelines, including rules on coauthorship and guidance regarding appropriate numbers of supervisees per promoter.

Moreover, supervisor training should be seen as a continuous activity with several 'entry points' for supervisors, including formal courses, peer learning, and – importantly – sharing good practices in supervision across the graduate schools. Wageningen University could also develop a 'starting kit' for supervisors including all important information and references concerning supervision. It would be recommendable to engage senior researchers in this professional development as well as giving them a more active role in daily supervision.

#### Monitoring of progress

Concerning the monitoring of progress of doctoral candidates, the main tools are the Training and Supervision Plan (TSP), which sets individual learning targets, and the go/no-go procedure, whereby a doctoral candidate is assessed after 12-18 months and a formal decision is taken to continue or discontinue the project.

The TSP functions as an agreement between supervisor and supervisee, which sets individual learning goals, indicates relevant training needs and defines for instance how often supervisors and supervisees meet, the expected timeframe in which to give feedback and when to discuss the individual progress of the doctoral candidate. The university recently added an online tool, MyTalent, to further assist with professional development of the candidates.

The evaluation team was impressed with the TSP and the way in which this relatively simple tool was used to monitor progress as well as raise awareness of professional development through the T-shaped model. The team also noted a broad satisfaction with the TSP across the institution.

Regarding the go/no-go procedure, it was reported that the decision is largely at the discretion of the supervisor, who fills out a form evaluating the progress of the doctoral candidate in attaining learning targets according to the T-shaped model, considering both the attainment of specialised research skills and generic skills.

<sup>&</sup>lt;sup>9</sup> http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html

<sup>&</sup>lt;sup>10</sup> Salzburg Recommendations 2.3



There was not a uniform agreement on the fairness and transparency of the go/no-go procedure. Some doctoral candidates indicated that the procedure was a mere formality, and that supervisors did not have reasons to discontinue projects in view of the economic incentives of keeping doctoral candidates until graduation. Some doctoral advisors, who assist doctoral candidates experiencing problems, also mentioned occasional issues with doctoral candidates not understanding the go/no-go procedure.

The evaluation team, however, noted that about 5 % of doctoral candidates did not pass the go/no-go procedure, which would indicate that the procedure is not a mere formality. Moreover, a decision to discontinue a project would only happen after the doctoral candidate had been informed about possible problems at an earlier stage.

The evaluation team finds that the use of the TSP is a very good and well implemented practice, which is likely to have contributed to the high degree of recognition and ownership of the Wageningen philosophy of T-shaped graduates.

However, while the go/no-go procedure is well developed, consistent with the learning targets, and well managed, the evaluation team recommends that the procedures and criteria could be better communicated to doctoral candidates, for example by sharing data on the number of no-go decisions with the PhD Council.

#### **Assessment of learning targets**

The assessment of learning targets is confined to the evaluation of the doctoral thesis. This is in line with standard European practice, although the evaluation team noted that the emphasis on the T-shaped skills in the intended learning targets was not mirrored in the assessment of the achieved learning targets, where the emphasis was clearly on the specialist knowledge.

A doctoral thesis at Wageningen University should include the equivalent of four publishable articles as well as an introduction and synthesising conclusion. The number of articles, however, is not an official rule, and can at times be disregarded depending on the individual research project.

The thesis is approved first by the supervisor, who sends it to the Academic Board together with a suggestion for external opponents. On approval by the Academic Board of the opponents, the thesis is sent to them for evaluation. Only if all opponents advise positively, the Academic Board will allow the thesis to be defended. The supervisor can also suggest a *cum laude* procedure with additional opponents if it is felt that the thesis is of sufficient quality.

The public defence in the Netherlands has the character of a ceremony; it is very formal and ritualised even for European continental standards. Though the ceremony itself met with little criticism during meeting at the site visit, there was widespread dissatisfaction with the five-point grading system, which Wageningen University applies to its doctoral theses.

At the end of the public defence, the thesis committee gives a grade from one to five, defined relatively to the quality of theses in the field worldwide. This means, for example, that the top grade is given only to the best 3 % and the middle grade to 35 % of the theses, according to a predetermined distribution. The *cum laude* distinction, known across the Dutch system, is the top grade,



but the evaluation team was told that it is used considerably less than in other universities in the country.

All stakeholder groups, both doctoral candidates and their supervisors as well as a part of the scientific directors, expressed frustration with the grading system. When low grades were published at the defence, they ruined the atmosphere of a ceremony otherwise aimed at celebrating the defendant. Moreover, the criteria were found to be lacking in clarity and the procedure for grading was not seen as transparent. Supervisors also found that the time used in the thesis committee to discuss the grade could be used for more relevant discussions.

The evaluation team finds that the thesis assessment procedure meets international standards in terms of safeguarding academic quality, coherence of the research and including external peer review. However, regarding the thesis, more attention could be given to concrete feedback and discussion of the research before or during the defence in order to further the candidate's awareness of their attainment of specialist learning targets.

In addition, given the emphasis on T-shaped skills at Wageningen University, attention should be given to the assessment of the attained general learning targets going beyond mere course participation. While exam based assessment of generalist skills is often not suitable, other forms could be used to enhance self-assessment and awareness, such as small projects or reports on attained skills.

Finally, the evaluation team strongly recommends the discontinuation of the grading system, which does not seem to give any added value and causes dissatisfaction across the institution. The fact that this system is only used, and therefore probably only properly understood, at Wageningen University also contributes to the lack of added value. Conversely, as the cum laude distinction is known and used in the Netherlands and beyond, this should continue to be used in line with common usage elsewhere.

#### Time to degree and completion rates

Regarding the length and success of the learning process, the evaluation team received detailed data on time to degree and completion rates. Completion rates are above 80 %, which the evaluation team found to be in line with other European systems comparable with the Dutch one, <sup>11</sup> however there are significant variations between fields. In terms of time to degree, about one fourth of doctoral candidates complete in time (considered as four and a half years, including the assessment process), but only half finished within five years.

The evaluation team finds the overall completion rates to be satisfactory, particularly in light of the rather informal admissions process. Though a time to degree of more than five years is far from unheard of in Europe, the evaluation team suggests that given the considerable resources and the good training at Wageningen University, this could be reduced even further.

<sup>&</sup>lt;sup>11</sup> Similar results were found in the UK HEFCE Report "PhD research degrees: update. Entry and completion" HEFCE 2007

 $http://webarchive.national archives.gov.uk/20100202100434/http://hefce.ac.uk/pubs/hefce/2007/07\_28/07_28/0$ 



The evaluation team was explicitly asked to assess the added value of a four-year programme as opposed to a programme of three years.

In this regard, the evaluation team finds that the four-year programme presents clear added value and that it is fit for purpose, considering the goal to produce T-shaped candidates with both broad and specialist skills. A reduction to three years would be possible depending on individual doctoral candidates, their projects, research readiness at the beginning, and their individual learning targets.

#### **Governance and structures**

The governance structures for doctoral education at Wageningen University aim to maintain the quality of doctoral education and support the learning process. They consist of the Dean of Sciences and Academic Board at the institutional level, the six graduate schools each covering a specialist area, and 90 chair groups. These chair groups are distributed over five departments, which mostly deal with administrative issues. As Wageningen University is a specialised institution, there is only one faculty for the whole university. The doctoral candidates are represented through the PhD Council, with individual representation of doctoral candidates in the graduate schools and at the institutional level.

The institutional governance by the Academic Board is understood as ensuring the academic quality. In the daily management, it reviews decisions to approve doctoral theses, and it responds to issues in an *ad hoc* manner. There were no systemic discussions or initiatives coming from the Board, and it seemed that it employs a light-touch manner concerning the management of the university, recognising the importance of the individual chair groups. Nonetheless, the evaluation team found that there was an atmosphere of openness and good communication between the Academic Board and other levels of governance.

The dialogue between the different levels seemed to a large degree to be sustained by the personal initiative of the Dean of Science, who maintained good communication with the different groups from the Scientific Directors of the graduate schools to the PhD Council. Though the personal attitude of the current Dean of Sciences supported this continuous dialogue about doctoral education, it struck the evaluation team that the formal responsibilities of the Dean of Sciences do not explicitly include this important function. Giving priority to doctoral education is at the personal discretion of the Dean, which could potentially be problematic taking into consideration the central importance of doctoral education for a research intensive university.

Most graduate schools at Wageningen University cross several departments in order to facilitate interdisciplinary collaboration. They are each led by a Scientific Director together with an executive secretary, an education coordinator and a small secretariat. These schools are responsible for most of the procedures related to doctoral education. In addition, Wageningen University has an umbrella organisation called Wageningen Graduate Schools, which coordinates the training programme.

It was clear from the interviews at the site visit that individual researchers identify most strongly with one of the 90 chair groups, which are the sites of the daily research activities. It was also clear that there was no common understanding of the concrete role of the graduate schools beyond administration and service provision.



The evaluation team noted that connection between the different levels: institution, graduate schools and chair groups (including individual supervisors) were good. Many decisions and structures were built on consensus and collaboration between the different groups. This no doubt leads to well-run procedures and a good common ownership of the Wageningen University vision and the philosophy of the doctoral programme.

However, it was the strong impression of the evaluation team that the community of researchers producing this consensus did not include postdocs and doctoral candidates, who often felt that their voice was not being heard and that they were left out of the circles where consensus was formed. The lack of formal procedures and perceived lack of influence on particular issues such as supervision and co-authorship was of special concern to these groups.

Moreover, the light-hand approach from the central management and the weight of influence of the chair groups would seem to block strategic thinking at university level. The present structures were established at a time when none of the present leaders had positions of responsibility, which means that nobody remembers the discussions and reasons for setting up this particular system. The evaluation team found it telling that questions about vision for the future seemed to raise difficulties - or at least hesitation - for interviewees at all levels. While the present system undoubtedly works well, it is questionable if a governance culture focused almost exclusively on preservation and maintenance will be able to meet systemic challenges that could arise in the future.

The evaluation team generally found that the governance structures were equipped to support the doctoral candidates in attaining their learning targets. Although the evaluation team sees some danger in the importance of consensus in the decision-making process, it recognises the national tradition in this respect and the values of such an approach. However, should Wageningen University increase the number of international staff, in line with its international research profile and student population, the institution should be aware of the national particularity of this management style.

Furthermore, looking at international standards and European best practice, the governance structures could include the PhD Council and the postdocs in a more formal manner. This would be in line with the principle of systematic inclusion of students, underlined in the European Standards and Guidelines for Quality Assurance, which also apply to doctoral education. The team questions whether the present semi-formal system of consultation is adequate and fully uses the potential of feedback from this group.

The evaluation team also found the lack of strategic vision to be worrying. Although the current system does work well, it would be beneficial to all groups to have a common discussion about the vision for doctoral education at Wageningen University in the future. The governance structures have the potential to engage in this strategic planning through the Academic Board and the central graduate school and the potential of these bodies should be fully used beyond the present activities, which seem limited to maintenance and service provision.

The team also would recommend formalising certain areas such as admission, supervision and PhD representation as well as making the formal responsibilities at the institutional level more explicit,

\_

<sup>12</sup> http://www.eqar.eu/fileadmin/documents/e4/ESG\_-\_draft\_endoresed\_by\_BFUG.pdf



such as for instance clearly defining the remit, responsibilities and duties of the Dean of Sciences in relation to doctoral education. Such a process would bring Wageningen University fully in line with the second Salzburg Principle regarding embedding doctoral education in institutional strategies and policies. The existing high level of coherence and good communication at the university would provide a good foundation for this formalisation process.

#### Framework conditions

The intentions of the framework conditions for doctoral education are to provide the best possible overall environment. Again, the team found there was a common understanding about what this meant in the sense of providing opportunities for the individual development of doctoral candidates as researchers.

In comparison with the situation many places in Europe, doctoral candidates at Wageningen University have excellent conditions. The research environment is very good, and, apart from certain issues concerning supervision, doctoral candidates seem well imbedded in the research and the environment of the chair groups, where they are treated in a collegial manner. Both students and supervisors mentioned that the employee status of doctoral candidates sustained their treatment as colleagues rather than students, and that it should be kept. Moreover, several interviewees cited the employee status for doctoral candidates as a reason to do their doctorate at Wageningen University.

As mentioned above, doctoral candidates have access to an impressive array of formal training opportunities that form an important part of their framework conditions. The TSP raises awareness of professional training in an appropriate manner, and this establishes a good balance between research and coursework of the individual doctoral candidates.

Working conditions are generally good, particularly for the doctoral candidates that are on employment contracts as research assistants, who receive internationally competitive pay and social benefits. This accounts for around half of all doctoral candidates. The rest are either externally funded 'Guest PhD Candidates', 'External PhD Candidates' who work mainly outside the university, but have a supervisor at Wageningen University, or 'Sandwich PhD Candidates' largely consisting of doctoral candidates in capacity-building collaborations with another institution. The latter group conducts research at both institutions, first in Wageningen, then in the home institution, and then finishing the thesis at Wageningen University. A very small group of candidates consists of staff members working on their PhD.

It was the impression of the evaluation team that all categories of doctoral candidates were well integrated in their chair groups and treated equally. However, the team did not have the opportunity to speak to any international doctoral candidates, so there were no direct contributions from the 'sandwich' and 'guest' categories during the site visit. Concerns were raised by some interviewees 'guest' candidates could raise quality issues. This would be because the financial compensation for admitting candidates with foreign bursaries could outweigh regard for the quality of the candidate. However, the evaluation team did not hear of any concrete examples of this, and eventual problems with the quality of doctoral candidates do not show up in terms of low completion rates.



Concerning the large number of international doctoral candidates, the evaluation team found no evidence of problems with intercultural communication. Again, the team did not meet any international doctoral candidates, and by far the majority of researchers — and particularly senior researchers — were Dutch, giving the impression that the university was a prevalently Dutch institution in terms of culture and management despite the international profile of its research activities, doctoral candidates and students. Even if no problems exist at present, it could be recommended to prepare supervisors for the challenges of an international environment, as part of their professional development.

Regulations and guidelines are also part of the framework conditions. There are several documents (individual contracts, doctoral degree regulations, PhD Guide, TPS, to name some) which clarify the "rules of the game" and mutual expectations. The documents are clear and detailed and known by the community.

Concerning the daily welfare of doctoral candidates, the evaluation team particularly noticed the work of the PhD Counsellors, who work to solve personal problems of doctoral candidates. These counsellors contributed to the team's impression of a high level of professionalism at the university, and they should be seen as an important asset for the university.

The evaluation team had a generally positive impression of the framework conditions at Wageningen University. The university complies with the Salzburg Principle that doctoral candidates should be recognised as early stage researchers with commensurate rights. Likewise, the framework conditions correspond to the European Charter for Researchers, both in terms of recognising doctoral candidates as professionals as well as promoting a stimulating research and training environment. As the evaluation of the salzburg Principle that doctoral candidates are professionals.

Following this line of recognition and integration, the evaluation team recommends that the university changes the title of the 'Guest PhD Candidate', as doctoral candidates with external funding are still an integral part of the research environment rather than 'guests'.

The evaluation team also recommends that the university keeps the employment status for doctoral candidates. This will underpin the recognition of doctoral candidates as professionals as well as giving Wageningen University a valuable advantage in the competition for research talent.

### **Quality processes**

The quality processes concerning doctoral education at Wageningen University are largely aimed at maintaining standards. During the site visit, this mission was articulated explicitly for example in the self-understanding of the Academic Board to be the gate keeper of academic quality at the institution. However, the evaluation team found little evidence of a systematic and improvement-oriented approach to quality at institutional level. Although Wageningen University has very high academic standards and performs well on many levels, quality management could well be improved.

The monitoring of doctoral education is done through several kinds of surveys (such as evaluation of training courses, exit surveys and employment surveys). It was the impression of the evaluation team

\_

<sup>&</sup>lt;sup>13</sup> Salzburg Principles iv

<sup>&</sup>lt;sup>14</sup> European Charter for Researchers, http://ec.europa.eu/euraxess/index.cfm/rights/europeanCharter



that the concept of quality was to a large extent based on quantitative indicators, such as the number of publishable papers in a thesis, completion rates, time to degree and satisfaction levels. Most of these indicators were monitored and data seemed readily available, however, the collected data was more often than not disconnected from formal procedures and responsibilities.

For example, individual graduate schools have conducted or participated in surveys concerning satisfaction of doctoral candidates and careers of graduates from 2001 onwards. From 2013, all schools have had a common survey to assess the PhD experience, although at the time of writing only three had concretely conducted the survey. These new surveys seem to have a more comprehensive approach, but the overall approach appears quite *ad hoc*. Some schools have conducted several surveys during the last decade, while others do not appear to have taken any initiatives of this kind outside the institution-wide exercises.

The examples of satisfaction surveys provided for the evaluation teams had good response rates and showed a high level of satisfaction, although some issues were raised, particularly related to supervision. It is, however, not clear what the consequences of the survey results are and the use of the data gathered does not seem systematic. One survey report did give examples of concrete initiatives to be taken, while others remain vague on the subject. Likewise, there did not appear to be any systematic communication and feedback about survey results to the doctoral candidates.

In general, and as previously mentioned, doctoral candidates did not feel that they were sufficiently heard in the decision-making process. This could be due to the *ad hoc* and rather informal way in which institutional governance works. While the evaluation team found that research staff at all levels had good communication and a common understanding about the university mission, procedures and quality standards, the informal nature of this communication led some doctoral candidates to perceive decisions as non-transparent and arbitrary. Concrete concerns about this were raised concerning the go/no-go procedure as well as the grading of theses. While the team found no evidence that these procedures were arbitrary — on the contrary there was a good, but tacit common understanding about them — the lack of transparency and inclusion of doctoral candidates could be problematic.

Despite the evaluation team's impression of a good collegial atmosphere, many good practices seemed to be confined to individual graduate schools, and there were few systematic opportunities to share these good practices, for example between the scientific directors of the graduate schools, or between the leaders of the chair groups. Much is left to individual initiatives and there is a further opportunity to support the professional development of supervisors by creating for systematic opportunities for sharing of good practices.

The evaluation team recommends that the quality system for doctoral education at Wageningen University be revised and systematised in a way that builds on the strengths and good results of the current system. The team also recommends that quality enhancement should receive a higher priority instead of the current maintenance-focussed approach.

Evaluation processes should be integrated into a formalised circle of well-defined purposes, timelines, responsibilities, feedback and action. In the view of the evaluation team, the existing ad-hoc



initiatives at the graduate school level do not correspond to the high quality level to which Wageningen University is aspiring.

Concerning international standards, the current system does not fully comply with the Salzburg II Recommendation 2.7, which underlines the crucial connection between quality assurance in doctoral education and institutional strategies, echoing Salzburg Principle ii, that doctoral education must be embedded in institutional strategies and policies, stating that "universities as institutions need to assume responsibility for ensuring that the doctoral programmes and research training they offer are designed to meet new challenges". If Wageningen University aims to fully meet these standards, it should move away from an ad hoc model and towards an institutional quality management system.

Likewise, as stated above, the limited involvement of doctoral candidates in quality assurance does not correspond fully to the European Standards and Guidelines for Quality Assurance. A revised institutional quality management system should formally include doctoral candidates in the planning, implementation and validation of quality assurance processes.

#### **Conclusions and main recommendations**

The evaluation team was generally impressed with doctoral education at Wageningen University. The institution has a high level of research, and good research environments where doctoral candidates are integrated and seen as professionals. The training programme at the university is excellent, and there is a good common understanding among all stakeholder groups about the learning process and learning targets. Moreover, social and economic conditions for doctoral candidates are very good. This translates into a high satisfaction among doctoral candidates and good completion rates.

The team likewise noted that the current governance model, although being one of the oldest graduate schools in Europe, has demonstrated a high level of robustness over the last 20 years, and it is still fit for purpose, albeit with some gaps and room for improvement.

Concerning the main questions posed to the evaluation team, the team finds that:

- 1) The learning targets of the Wageningen University PhD programme meet international standards. The learning targets are coherent with the needs for doctoral graduates in terms of combining specialist and generalist skills as well as giving attention to the larger societal relevance of the research. Moreover, the learning targets and the philosophy behind them are understood and shared across the institution.
- 2) The structure and processes in place for PhD candidates are adequate to attain these targets, with gaps concerning selection and supervision of candidates. In particular, the lack of transparency in the admissions process means that the quality of candidates is not sufficiently safeguarded, and it is not in compliance with the Salzburg Recommendation and with key EU policies, including the European Code of Conduct for Recruitment of Researchers. Likewise, the lack of continuous and systematic professional development of supervisors is of concern to the evaluation team, as is the *ad hoc* approach and the lack of clear actions and responsibilities for the monitoring and quality of supervision.



- a) The evaluation team finds that the four-year programme does have added value. However, the team also notes that completion rates could be improved, and that three-year completion could be possible depending on the individual candidate, research project and learning targets.
- b) The status of doctoral candidates as employees does make Wageningen University more attractive for potential doctoral candidates. Moreover, this status reinforces the recognition of doctoral candidates as professionals, complying with international good practice as laid down in the Salzburg Principles as well as the in European Charter for Researchers.
- c) Wageningen University might reconsider the balance of incentives away from large financial bonuses and formalised tenure requirements. The university should ensure that the allocation of supervisors is based on research relevance rather than the financial advantage for the chair group or the requirements of tenure-track staff to fulfil a certain quota of supervisees.
- **d)** The present system of grading for the PhD thesis should be abolished. The evaluation team found no added value in the system and registered widespread dissatisfaction with it among all stakeholders within the institution.
  - The evaluation team sees the potential for Wageningen University to take a qualitative step further, beyond its already very high level, by addressing the following main recommendations:
- 1) Develop a recruitment strategy and standardise the selection procedure. This would enable Wageningen University to act more coherently and be more competitive in the recruitment of high potential doctoral candidates as well as complying with the international standards of transparent, fair and merit-based recruitment.
- 2) **Improve spreading of good practices.** The university could use the existing good communication between the graduate schools to enhance the sharing of good practices across the institution, particularly concerning supervision.
- 3) **Develop a support framework for supervisors.** In order to address this key area for doctoral education, the university could envisage several solutions to meet the needs of professional development of supervisors throughout their career, from providing a 'starting kit' through to peer learning for and by senior research staff. A commonly discussed institutional set of rules and guidelines for supervision would also be recommendable.
- 4) **Consolidate the quality system.** In order to move towards a more responsive and enhancement-oriented quality system, the current disparate initiatives should be consolidated into a system with clear purposes, timelines and responsibilities.
- 5) Articulate a future vision for doctoral education at Wageningen University. While the current provision of doctoral education is at a high level, it would be useful and timely to engage all stakeholder groups within the institution in a discussion about a vision for the future of the university. This would not only address current shortcomings, but also enable the university to meet future challenges.



#### **EUA Solutions**

EUA Solutions is a tailored service created to assist a wide range of higher education institutions and stakeholders on particular issues. Designed to complement EUA's existing membership services, EUA Solutions is based on a flexible, on-demand approach to specific requests from universities, decision-makers and national authorities seeking support for change processes and policy development.

At the core of our competitive advantage lies a unique combination of strengths:

- **In-depth sector knowledge**: extensive expertise in shaping European policies in higher education and research;
- **European perspective**: the largest, most comprehensive university network in Europe, representing over 800 institutions;
- **Peer-to-peer approach**: a wide network of internationally experienced higher education experts.

The services offered under the EUA Solutions brand range from thematic analyses and strategic studies to consultancy and specialised expert advice in key areas of focus. For more details about what we offer, please see <a href="https://www.eua.be/solutions">www.eua.be/solutions</a>

The methodology is adapted as required to fit the specificities of the assignment, and to lead towards collective and individual solutions for systemic or institutional change.