

Guideline for the assessment of a doctoral thesis

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Introduction

The doctoral degree (a research doctorate) is the highest academic degree that can be achieved at a university in Denmark. While the PhD degree is achieved after successful completion of a research programme under supervision, the doctoral degree is awarded in acknowledgement of:

- the author's considerable scientific insight and maturity, and,
- the author having contributed substantially to the advancement of science with the dissertation, cf. section 3 (2) in the *ministerial Doctoral Order*.

Assesment of a Danish Doctoral Dissertation

The Doctoral degree constitutes the highest academic degree in Denmark, and a <u>substantially</u> higher scientific and academic level is required as compared to that of for a PhD degree. It is stated in the Ministerial Order no. 750 of 14 August 1996 on Doctoral Degrees that it *must* be demonstrated i) that "the author has shown considerable scientific insight and maturity" and ii) that "the author has contributed substantially to the advancement of science" with the dissertation. These criteria must be fulfilled separately for i) the compressed account and for ii) the body of included scientific publications (unless the dissertation is a monography). It is expected that the compressed account has the format of a comprehensive scientific review, in which the (sub)field in question is reviewed and the discoveries by the author are presented and discussed appropriately in this context.

What is expected from the assessment report?

The compressed account and the publications must be assessed separately.

The assessment report – which must be written in English - should include:

- A cover with:
 - The author's name, the title of the thesis, the composition of the assessment committee.
 - A description of the elements constituting the thesis.
 - If the dissertation or part of it is the result of collaborative work, the author's contribution to the work must be defined appropriately according to the coauthor declarations.
- Evaluation of the compressed account (review) of the thesis (1-3 pages):
 - An assessment of whether the author has provided a comprehensive, wellstructured summary of his/her own research findings appropriately and timely related to other published work in the scientific field of the thesis.

- Finally, the evaluation of the compressed account (review) should conclude whether it has contributed substantially to the advancement of science.
- An assessment of the individual articles (approx. 1-2 pages for each paper) with a detailed assessment of each article, considering:
 - The originality and relevance of the hypothesis/problem addressed,
 - whether appropriate and sufficient methodology has been employed,
 - whether the presentation and interpretation of the results obtained is scientifically satisfactory,
 - whether the findings and conclusions are discussed in a relevant and timely context of present knowledge at the time of publication.
 - Finally, the overall assessment of each article should critically conclude whether the paper represents a significant contribution to the field.
 - Note that publications, which have previously been assessed as part of the author's own previous academic degrees, may not be included in the assessment of the present doctoral thesis.
- An overall assessment of the thesis (1/2 page), which should include:
 - The conclusion must explicitly in one or two sentences, describe the significant scientific progress and discoveries contributed by the dissertation.
 - An assessment of all major aspects of the thesis, including the hypothesis/problem addressed, their importance to the field, originality of the work presented in the thesis, findings achieved, and major conclusions drawn.
 - An assessment of whether the author 1) has demonstrated considerable scientific insight and maturity and 2) has contributed substantially to the advancement of science with the thesis. The Assessment Committee is kindly asked to use these two exact phrases in the conclusion, if appropriate.
- A statement that unequivocally conclude whether the committee finds that the thesis should be accepted for public oral defense or not. In case of a non-acceptance phrases like "... the Thesis is not acceptable in its present form..." should not be used.
- If there is a difference of opinion between committee members about the recommendation, the members shall report singly or in groups.

It is essential that the final conclusion is consistent with the conclusions stated for the individual elements in the thesis (compressed account and individual publications).

How is the work of the assessment organized?

The assessment consists of a written report and a public oral defense.

Responsibilities of the chairperson

- The chairperson must organize the work among the members, collect the contributions and complete the report so that it appears as a joint work and takes an objective form.
- The chairperson e-mails the report to doctoral-degree@sund.ku.dk on behalf of the entire assessment committee with the other members cc, thereby confirming that all members of the committee agree on the content of the report.
- The chairperson is requested to ensure that the deadline for submitting the report is met.

Responsibilities of the other committee members

- The other members shall review the doctoral thesis and contribute to the assessment report and
- will be appointed as official opponents at the public oral defense if the doctoral thesis is accepted. The public defense typically takes place in Copenhagen.
- Comply with deadlines provided.

Guidelines for the author of the thesis

The Doctoral degree constitutes the highest academic degree in Denmark, and a <u>substantially</u> higher scientific and academic level is required as compared to that of for a PhD degree. It is stated in the Ministerial Order no. 750 of 14 August 1996 on Doctoral Degrees that it *must* be demonstrated i) that "the author has shown considerable scientific insight and maturity" and ii) that "the author has contributed substantially to the advancement of science" with the dissertation.

These criteria must be fulfilled separately for i) the compressed account and for ii) the body of included scientific publications (unless the dissertation is a monography). It is expected that the compressed account has the format of a comprehensive scientific review of the (sub)field in question including the authors own results appropriately in this context.

Thus, in the compressed account of the thesis (Dansk: Den sammenfattende redegørelse), the doctoral candidate should present state of the art as well as future perspectives of the

research (sub)field, including a discussion of the most significant challenges and unanswered questions in the field. The authors own findings and discoveries should be an integral part of this, demonstrating the impact of the author's scientific contribution.

Overall, It is recommended that the structure of the compressed account conforms to that of corresponding review articles in peer reviewed international literature in the field, and optimally may be published as such.