



PhD Education in *Educational Sciences* in Finland: Systematic Development of the Programmes


Jari Lavonen
Department of Teacher Education,
University of Helsinki, Finland

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI Käyttämistieteellinen tiedekunta / Jari Lavonen <http://www.helsinki.fi/ok/> 1/11/2013 1


University of Helsinki (UH) in Brief

- Founded in 1640
- 11 faculties and 4 campuses within Helsinki
- Ranked among the top 70 - 100 universities in the world
- 7000 staff members
- 35 000 Masters degree students, 4 000 PhD students





PhD studies in practice



Public examination

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

3




Applying for PhD Studies/ Researcher Training

- A PhD degree can be completed in the faculties
- An application, a research and a study plan are needed
- The application is accepted by the faculty council
A recommendation of the department PhD committee is needed
- Positions:
 - PhD student position at a department
 - work in a research project
 - position in a graduate school
 - a scholarship
 - alone with own money, ...




HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI



PhD Studies


- The aim of the studies is to provide a student with
 - *an in-depth knowledge of the field of research*
 - *a capability to produce novel scientific knowledge independently.*



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/okl/>

5




The studies takes 4 years

Altogether 240 cp. or 4 years

- “formal” studies (60 cp., 1 year),
- a thesis and public examination (180 cp., 3 years).

The thesis can be


- a monograph or
- 3 – 5 articles + a summary



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI


<http://www.helsinki.fi/okl/>

6



Evaluation of the Thesis


- Before the public examination the faculty nominates two pre-evaluators.
- For the public examination the faculty nominates a custos (main supervisor) and an opponent (from a foreign university).
- The public examination is formal:
 1. a 20 min summary, given by the PhD student,
 2. a statement of the opponent,
 3. a defend
 4. final evaluation talk, given by the opponent
 5. the audience could ask questions.
- The faculty accepts the thesis.



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI




Strategy based continuous development of the quality of the PhD education



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

8



Development of PhD Education

Reports of the Ministry of Education, Finland 2006:3

1. More and younger doctors/PhDs
2. Local and international collaboration

Altogether 52 recommendations, including:

- Establishment of network-type graduate schools
- PhD studies should be completed in four years.
- Solid knowledge and skills for career in research and wider employment market (support to career planning).
- The number of full time PhD student will be increased to 2000 by 2012.
- The universities and graduate schools will cooperate with other universities, other graduate schools,
- The proportion of foreign students in graduate schools will be raised to 20% on average by 2012.

HELSINKI YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/okl/>

9



New trends in PhD education, 2012 →

- In 2012 the Ministry of Education closed the network-type graduate school system and allocate resources directly to the universities
- The University of Helsinki
 - established four doctoral schools and 30 PhD programs (one of them in educational sciences) with an aim to improve PhD education and enhancing its international visibility
 - established 200 new PhD student positions. In addition to this number, the 4,000 current PhD students at the university will join these programmes.



HELSINKI YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/okl/>

10



Finnish graduate school of mathematics, physics and chemistry education 1995-2012

In addition to high quality outcomes, the aim was to:

- shorten the time used for the studies,
- increase the international co-operation



11



A Vision of the Finnish Graduate School of Mathematics, Physics and Chemistry Education

The Graduate School aimed at ...

- bringing together the researches of Mathematics, Physics and Chemistry Education in Finland to form a pool of supervisors for educating top experts in the field.
- providing a broad scientific education
- organising national and international training and seminars.



The educational environment comprised of research groups with international profiles and international research contacts.

HELSINKI YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

12



International collaboration of the graduate school



HELSINGIN YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/okl/>

13



Joint Researcher Training between Finland and Germany

The aim of the initiative was to take researcher training on a new level through

- bringing together PhD students
- taking common courses,
- discussing students' projects and
- activating students to academic "activities".



HELSINGIN YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/okl/>

14



**Altogether 10 3-day seminars
organised in years 2008-2012**


Joint Researcher Training

Winter School 2011
Hamburg, Germany

HELSINKI YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

15



Monday, November 28th

9:00 Opening + Plenary lecture
(Prof. Dr. Cengiz Alacaci)

10:00 Paper session 1 (Schiffhauer, Kreiter, Bofah)

11:00 *Coffee*

11:15 Postersession

12:15 *Lunch*

13:15 Workshop (4 parallel sessions)

15:15 *Coffee*


15:30 Paper session 3 (Schoppmeier, Marée, Leinonen)

Sightseeing: Alster-Boat-Tour

HELSINKI YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

16




- Before the meeting
- Submission of papers and posters ([guidelines for preparation](#))
- Peer review by two students ([a guideline](#))
- Preparation of final paper and presentations
- Chair of the session reads the paper and reviews (should be able to give feedback for the presenter and reviewers)

All submissions, abstracts and full papers have been available on the website.

HELSINKI YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

17



Helsinki, June 2010

Paper guidelines

1 (5)

Paper guidelines


Authors should submit their manuscripts as a word-document ('doc' or 'docx' format) not later than **April 15, 2010** via e-form
<https://elomake.helsinki.fi/lomakkeet/20289/lomake.html>.

Manuscripts will be reviewed by doctoral students from two other countries. The review process should be completed until **May 14, 2010**. After that, the programme will be designed and the reviews will be sent to the authors. Papers will be discussed in 45 minutes sessions, in which the two reviewers will act as critical friends. The idea of the peer review system is to give feedback and possibly indicate some issues that an author could consider in his/her presentation. The guidelines for peer reviewing are in the end of this document.

HELSINKI YLIOPISTO
Helsingfors universitet
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

18



Helsinki, June 2010

Poster guidelines

1 (4)

Designing a poster - some guidelines


The poster submission will be made in two phases: first, submitting the abstract of the poster (maximum 300 words) and keywords of the study as word-documents ('doc' or 'docx' format) not later than **April 15, 2010** via e-form <https://elomake.helsinki.fi/lomakkeet/20289/lomake.html> and second, submitting the poster (in 'pdf' format) no later than **the 27th of April**.

Posters will be reviewed by doctoral students from two other countries. The review process should be completed until the **May 14, 2010**. After that, the programme will be designed and the reviews will be sent to authors. The idea of the peer review system is to give feedback and possibly indicate some issues that an author could consider in his/her presentation or improve in the poster before printing out. The guidelines for peer reviewing are in the end of this document. The reviewers will have an active role as a discussant in the poster presentation.

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

19



Paper presentations

- The oral presentation (*prepared based on the paper and feedback*) should not last more than 20 min.
- Both peer reviewers (*already given their reviews beforehand*) start discussion (15 min) that the audience are to join as well (20 minutes).
- After the paper presentation a discussion only between the chair, the presenter and the opponents (15 min).

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

20



Communicative assessment of the joint training:


assessment is for improvements (quality culture)



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/okl/>

21



Evaluation questionnaire (Essen 2012)

You have an opportunity to give feedback and share your experiences of the joint research school meeting. In order to help the organisers improve these meetings in the future, please, use 10-15 minutes to answer the following questionnaire.

General organisation (1/4)

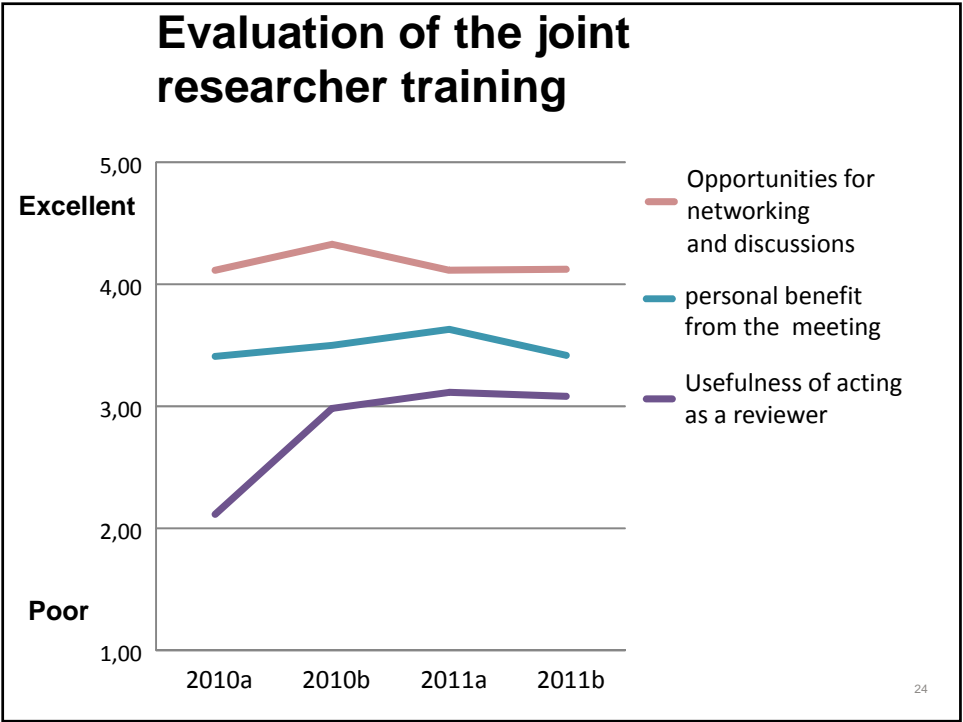
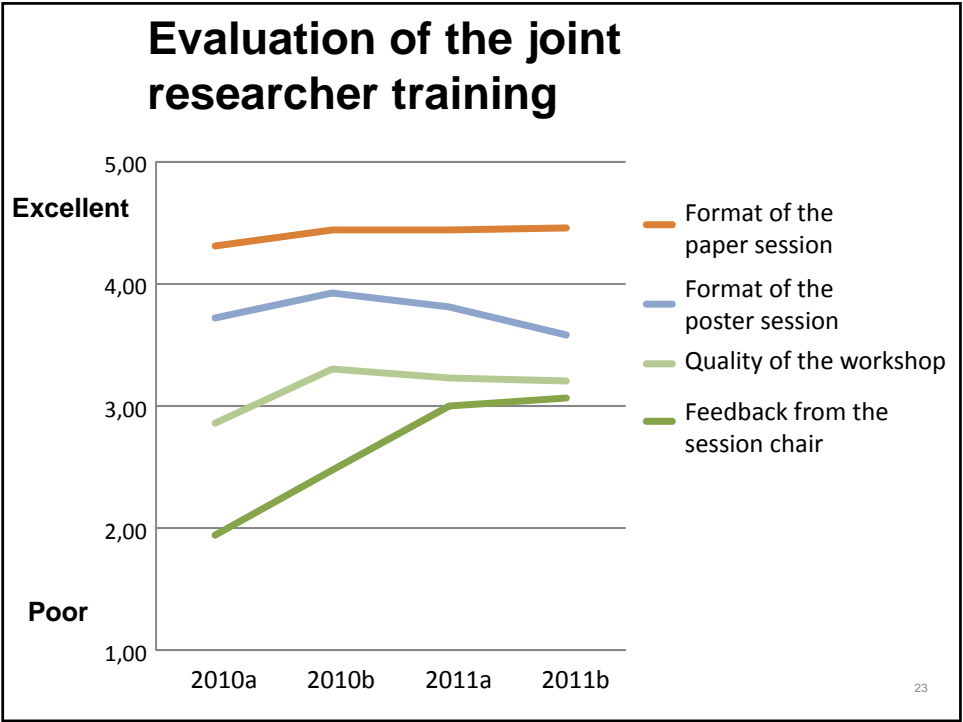
Please rate the following issues regarding the organisation of the meeting on a scale from 1 to 5 (NOTE: 1 = Poor and 5 = Excellent)


| Organisation before the meeting | 1 | 2 | 3 | 4 | 5 | no opinion |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Communication with the organisers | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Instructions for preparing the proposal | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Instructions for preparing the peer reviews | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Submission system | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Availability of information | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Quality of the website | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

Käyttätymistieteellinen tiedekunta / Jari Lavonen

1/11/2023





Peer review is challenging

All PhD students considered peer review process and active participation as positive, meaningful and useful for their own development. However, they found the review process challenging.

For me the review part was challenging. I really learned a lot by being a peer reviewer and during the feedback discussions. (2, 35/Joensuu 2011)

Very helpful to get in impression of the way, how reviewing works. (3, 54/Helsinki 2010)

I think that the set-up of extensive review improved the contributions from all parties. (2, 16/Helsinki 2010)

The peer reviews have always clearly shown the strong and weak points of my papers. Also many good questions have been raised. Practically in every joint meeting I have gotten some new insights about how to enhance the quality of my PhD project and the different aspects of it (e.g. the data analysis or theoretical background). (2, 40/Joensuu 2011)

The review system is very thorough and fruitful. It is a great way of processing the presentations. (2, 42/Hampuri 2011)

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI



Active participation in an academic reflective discussions

The PhD students who gave a presentation or/and work as a opponent experienced active participation in an academic reflective discussions.

Acting like an opponent or presenter will help me in terms of academic defending. (3, 10/Hampuri 2011)

fruitful system to comprehend this academic pattern (2, 31/Hampuri 2011)

My own presentation helped me a lot to cope with unexpected situations and questions. The other presentations were also helpful in getting an insight into the processes. (3, 12/Rovaniemi 2009)

It was very exciting to act as an opponent, but useful too. (2, 53/Rovaniemi 2009)

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

26



Role of supervisors and chairs

All PhD students find the function of a chair persons (supervisors) unclear.

The guidelines for reviewers were quite good, but there should be guidelines for how to act as a chair as well. The behaviour of the chairs was not very consistently so that some people got really confused. (1, 7/Rovaniemi 2009)

I think the role of the chair was not clear to everyone - at least chairs acted rather differently. (2, 42/Rovaniemi 2009)

Clarify the role of chairs. (2, 42/Rovaniemi 2009)

I think that in the future, the chairs as well should get very clear instructions on what is their task and what is not. (3, 12/Rovaniemi 2009)

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

27



How to increase quality of the supervision, research and collaboration?

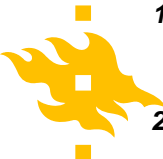
Our further trends...



HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

<http://www.helsinki.fi/ok/>

28

- 
1. **Recruitment and selection of PhD students.** Selection is based on the research plan, publication and study plan. The plan should be in the focus areas of research of the community.
 2. **Supervision of PhD students:** A main supervisor and one to two other supervisors. The environment comprises research groups with international profiles and researcher contacts. The supervisors publish in together with PhD students in journals.
 3. **Good practises, research group collaboration, courses and quality assurance in PhD education.** The PhD student and supervisors participate in the seminars or other activities two or three times a year. Emphasis on quality culture
 4. **Collaboration with national and international graduate schools/PhD programmes and training courses.** An important part of the PhD education will be organized through research projects and joint activities, such as international joint seminars, courses e.g. in research methodology.
 5. **Assuring good career prospects for the PhD students.** The PhD education aims at supporting PhD students in acquiring a wide-range of research knowledge and skills in addition to concentrating on a specific research area: PhD students are to become expert, autonomous researchers in the future.



