



**LUND**  
UNIVERSITY

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Faculty of Engineering

## LTH's Pedagogical Academy

University teachers (excluding postgraduate students) at the Faculty of Engineering (LTH) are invited to have their teaching qualifications assessed with the aim of being accepted into LTH's Pedagogical Academy. Those accepted into the Academy will be awarded the distinction of *Excellent Teaching Practitioner* (ETP), and an immediate rise in salary. Moreover, the department to which they belong will receive an increase in their undergraduate teaching grant. The payments are of the same magnitude as those made upon the promotion of a lecturer to senior researcher (*docent*). The economic model for the Pedagogical Academy is described in detail in Enclosure 3.

Applicants wishing to be admitted to the Academy must show how they have, over a period of time, consciously and systematically, endeavoured to develop means of enhancing students' learning in their discipline, and how they have made their own experience in teaching available to others in the academic community. Applicants must also be able to analyse and reflect on their teaching practices with the aid of pedagogic literature and other sources of information, and show how they have used these to develop their thoughts concerning teaching and the learning process.

### Aims

The main aim of the Academy is to afford a higher status to pedagogical development at LTH. Teachers and students, present and prospective, should be given a clear message that LTH is an institute of higher education which focuses on students' learning and which systematically strives to improve the quality of its teaching. This will be achieved in the following ways.

- Good, ambitious, quality-conscious teachers will be recognised as having achieved a high level of pedagogical competence and will be rewarded by an increase in salary. It is to be made known both within and outside the institute that LTH is investing in enhancing the quality of teaching and the learning process.
- The departments from which teachers have been admitted to the Academy will be deemed to have a better ability to provide good teaching from a learning perspective. Moreover, departments that actively support their teachers in the development of their teaching skills will doubtless find it easier to recruit and retain good teachers, and thus good students. For this reason, such departments will receive an additional financial contribution for every employee who achieves this level of pedagogical competence.
- The Pedagogical Academy will promote positive development, and it will be made clear that it pays to invest in developing sound knowledge in teaching methods, especially in the lecturer's own subject, and in ensuring well-prepared and well-executed teaching based on the perspective of the students' learning.
- Teachers will document, analyse and in other ways critically evaluate their teaching methods and the learning ability of their students, so that the results of this process can serve as the basis for further development.
- It is assumed that the teachers accepted by the Academy will continue to contribute to the pedagogical development at LTH. This may be realised through active participation in LTH's pedagogical debate and development, and by acting as mentors for younger teachers.

This will take place in line with national and international development regarding the perception of teachers in higher education (Boyer, 1990; Healey, 2000; Knight, 2002; Kreber, 2000; Kreber, 2002; Trigwell et al., 2000; Abrahamsson, 2001; Fransson and Wahlén, 2001).

### **The evaluation process**

The evaluation process is divided into various parts which are described in detail in Enclosure 2. The most important component is the applicant's teaching portfolio, which forms the framework for the description and analysis of the applicant's teaching practices. This portfolio is to be formulated according to the criteria described below. Furthermore, all examples of teaching practices are to be supported by testimonials, references or other documentation. The same applies to other claims made in the portfolio. Apart from the portfolio, the application is to include a recommendation from the applicant's head of department and a CV with a section dedicated to the description of pedagogical activities.

### **The teaching portfolio**

This portfolio consists of a personal document and examples of the applicant's teaching. In the personal document the applicant presents his or her reflections on teaching and learning. The document is to be based on the applicant's own experience and knowledge of teaching and learning. It should provide insight into how the applicant sees the relation between learning and teaching in the context of the teaching he or she carries out, and should reflect the applicant's personal teaching philosophy. The portfolio shall also include descriptions of the applicant's teaching accomplishments. Examples should be given from practical teaching experience, which are related to the applicant's teaching philosophy. The applicant is to motivate the choice of examples and the way in which they are applied in practice. The examples should be described so that it is possible to determine *what*, *how* and *why* certain things were done or took place. The applicant should choose relevant examples from practical teaching experience in order to illustrate the issues he or she deems to be important according to his or her own teaching philosophy.

The presentation and assessment of pedagogical qualifications using a teaching portfolio is today an established method which has been reviewed in scientific publications (Seldin, 1997; Apelgren and Giertz, 2001; Giertz, 2003; Magin, 1998). Teachers at LTH will be offered instruction in composing a teaching portfolio. These courses will be given regularly. The course will follow the guidelines for teaching portfolios described in this document, but is in no way connected to the process of acceptance to the Academy.

### **Criteria for assessment**

In their teaching portfolio, applicants shall describe, analyse, discuss and present information relevant to the following.

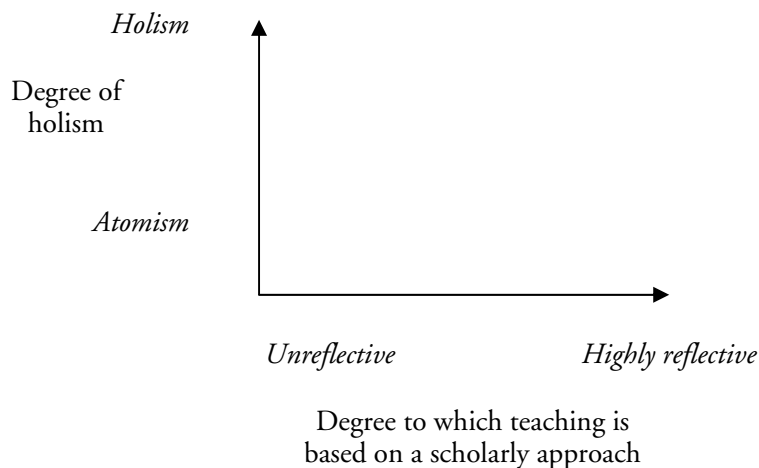
1. ***Focus on the students' learning process***
  - The applicant's teaching practices based on the learning perspective
  - The applicant's teaching and learning philosophy and teaching activities as an integrated whole
  - The applicant's practical teaching in relation to the students
2. ***Clear development over time***
  - The applicant's efforts in his or her teaching, to consciously and systematically develop students' learning, and their ability to learn how to learn
  - The applicant's ideas and plans for continued development as a teacher
3. ***A scholarly approach***
  - The applicant's reflections on his or her teaching activities using higher educational theory and knowledge of didactics relevant to his or her discipline
  - The applicant's search for and creation of knowledge concerning the students' learning process in his or her own teaching
  - The applicant's collaboration with others, the sharing of knowledge and experience in teaching and student learning through discussions, participation in conferences, publications, etc.

These criteria are discussed in more detail in Enclosure 1.

### The basis for assessment

The applicant's qualifications are qualitatively assessed based on the criteria listed above. The applicant should give examples of the aspects he or she wishes to be assessed on; in other words, he or she should describe, reflect and motivate his or her teaching activities in relation to students' learning in the subject in question.

The teaching portfolio will be assessed from two perspectives: the degree to which a *holistic view* has been adopted, and the degree to which a *scholarly approach* has been applied.



The vertical axis extends from atomism to holism. A holistic view means that the applicant can demonstrate a comprehensive view in his or her teaching portfolio. It is to be made clear which aspects of their practical teaching experience the applicant considers to be most important; why the applicant considers them to be important; how they are related to each other; and how they are related to the whole.

*If the portfolio describes an atomistic approach where the focus is on separate aspects of the applicant's teaching activities, and where they are described without being related to each other or to the whole, the applicant cannot be considered for acceptance into LTH's Pedagogical Academy.*

The horizontal axis shows the degree of scholarly approach, and extends from *unreflective* to *highly reflective*. *Highly reflective* means that the applicant can show in his or her portfolio that their teaching practices are based on the results of a scholarly approach, and it is clear which theories and methods have been adopted; why these have been used; the conclusions the applicant has arrived at; how these conclusions have affected the applicant's personal teaching philosophy and how they have affected teaching in practice; as well as the ways in which these results and insights have been communicated to the teaching community (in the first place, in engineering subjects).

*If the portfolio fails to demonstrate the use of reflection or if it shows that the applicant does not analyse or question his or her outlook on learning, teaching, knowledge of the subject, the traditions of the subject or the context of the teaching, the applicant cannot be considered for acceptance into LTH's Pedagogical Academy.*

### Acceptance

Those applicants whose qualifications are deemed sufficiently good are awarded the distinction "*Excellent Teaching Practitioner*". This is formalised in a certificate signed by the Dean of LTH. The teacher will also receive an increase in salary, and his or her department will receive additional undergraduate teaching funds.

Once awarded the distinction of ETP, a teacher cannot lose it, but is expected to continue to strive towards improved teaching practices at LTH. This places demands on those who have achieved this

distinction. Apart from continuing to work on their own development, they should also act as advisers for other teachers contemplating application to the Academy, and as pedagogical partners in dialogues with others within their department. They should also contribute in other ways to vitalising the pedagogical debate, and have the responsibility of spreading information on LTH's Pedagogical Academy. Furthermore, a lecturer who has been awarded the distinction of ETP may be called upon in the future to assess other applications.

### **Rejection**

The main aim of the Pedagogical Academy is to promote the development of teaching and learning at LTH. Those whose qualifications are not yet considered sufficient are encouraged to continue their efforts in teaching, with the focus on student learning, and to develop their teaching portfolio, with the aim of submitting a new application at a later date.

### **Enclosures and references**

Enclosure 1: Discussion of the Criteria and Assessment

Enclosure 2: The Assessment Process

Enclosure 3: The Economic Model for LTH's Pedagogical Academy

References

## Enclosure 1

## Discussion of the Criteria and Assessment

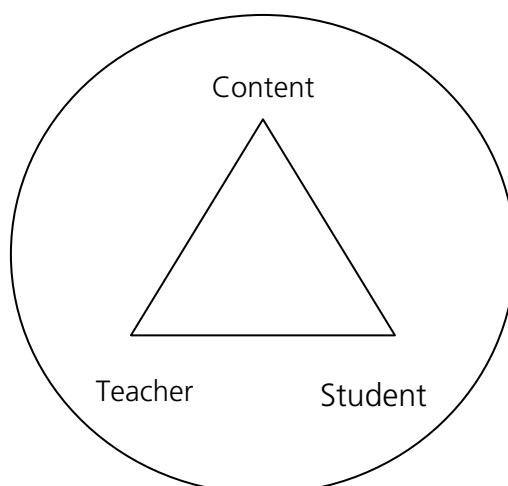
In order to be able to qualitatively assess the qualifications of the applicant, the merits considered important by the applicant are to be presented for evaluation. The following criteria have been defined for acceptance into LTH's Pedagogical Academy and for the title of *Excellent Teaching Practitioner* (ETP).

1. ***Focus on the students' learning process***
  - The applicant's teaching practices based on the learning perspective
  - The applicant's teaching and learning philosophy and teaching activities as an integrated whole
  - The applicant's practical teaching in relation to the students
2. ***Clear development over time***
  - The applicant's efforts in his or her teaching, to consciously and systematically develop students' learning, and their ability to learn how to learn
  - The applicant's ideas and plans for continued development as a teacher
3. ***A scholarly approach***
  - The applicant's reflections on his or her teaching activities using higher educational theory and knowledge of didactics relevant to his or her discipline
  - The applicant's search for and creation of knowledge concerning the students' learning process in his or her own teaching
  - The applicant's collaboration with others, the sharing of knowledge and experience in teaching and learning through discussions, participation in conferences, publications, etc.

Being awarded the distinction of ETP means that the teacher in question has excelled in teaching, and this has been recognised and rewarded. The teacher has a professional approach to teaching in practice and his or her teaching is based on students' learning.

What is being rewarded is thus not the use of any particular pedagogical method or a special form of pedagogical instruction. Rather, teachers are recognised who, in a systematic and reflective way, have worked to improve the goal of teaching, namely students' learning. It follows from the above that teachers intending to apply to the Academy should have been active in higher education for a number of years, and have reasonably broad experience. Lack of quality cannot, however, be compensated for by quantity.

Didactics is the art or science of teaching (e.g. Uljens, 1997; Kroksmark, 1989) and is sometimes visualised in terms of the didactic triangle (see below) where the teacher, student and content correspond to the points of the triangle. The triangle can also be placed in a circle to show that teaching always takes place in a context. In the analysis and assessment of the content of the applicant's portfolio, the didactic triangle is used to analyse the degree of holism and to differentiate between levels of complexity.



The didactic triangle can be used for different degrees of complexity. At the lowest level it is used to differentiate the three components – Content, Teacher and Student – as a basis for the discussion of these separately. On the next level, the didactic triangle can be used to focus on the relation between the components in the discussion of, for example, the student's relation to the content or the teacher's relation to the student. On a higher level of complexity it can be used to see how the components and relations interact to form a whole, and how this whole is affected by the context. One can discuss, for example, how the problems set by the teacher make use of, or do not make use of, the students' existing knowledge in the subject, or how the teacher develops his or her teaching methods based on the results of an investigation (carried out by the teacher) into a problematical concept which the students interpret in widely differing ways.

In the teaching/learning situation a student approaches the subject through the teacher's choice of literature, teaching and examination methods, practical experience, timetable, etc. By using the didactic triangle it is also possible to differentiate two different perspectives of teaching based on different views of knowledge, learning and responsibility: the *learning perspective* and the *teaching perspective*.

- In the *learning* perspective the active acquisition of knowledge by the student is central, which means that the teacher plans and executes his or her teaching so as to make use of the students' understanding and experience, as well as their own processing of knowledge in the subject. The student is regarded as actively seeking knowledge and jointly responsible for the learning process created by teaching.
- In the *teaching* perspective, the student is the receiver of well-defined knowledge, which means that the teacher plans and executes his or her teaching in such a way that the subject is presented as given. Teaching based on this perspective leaves very little room for the student to actively build up his or her own knowledge. The student plays a passive role as the receiver of information, and responsibility in the learning process is placed solely on the teacher.

There is today a great deal of literature that describes the learning perspective and a body of empirical information that confirms its advantages in relation to the student learning process (e.g. Barr and Tagg, 1995; Marton and Booth, 1997; Bowden and Marton, 1998; Biggs, 2003; Prosser and Trigwell, 1999; Trigwell, 2001; Säljö, 2000).

LTH's Pedagogical Academy advocates the learning perspective. This means that when planning, executing and evaluating all forms of teaching, the teacher should focus on the student's encounter with that which is to be learned, and that the teacher should play an active role in creating the conditions necessary for "pedagogical resonance" in this encounter. According to Trigwell and Shale (2004) pedagogic resonance is described as the bridge between teacher knowledge and student learning, or the mutual understanding between teacher and student, based on the student's experience and the teacher's knowledge of the subject.

A scholarly approach involves continuous problemizing of teaching methods and approaches. Efforts are made to find better solutions or explanations. The scholarly approach forms the core of *all* academic activities – thus also teaching. With the aid of the expression, *scholarship of teaching and learning*, research at university teaching level has come to recognise this as a requirement for pedagogical development (Boyer, 1990; Kreber 2000, 2002; Trigwell et al., 2000; Healey, 2000, 2003; Trigwell and Shale, 2004). An appropriate model for LTH's Pedagogical Academy is a taxonomy presented by Kreber (2002). In this, the pedagogical activities of teachers are characterised in terms of *teaching excellence*, *teaching expertise* and *scholarship of teaching*. Teaching excellence means that the teacher supports student learning in an excellent way, but this is done without reflection or a theoretical framework. Teaching expertise includes the former, regarding the quality of teaching, but is extended to include knowledge obtained from reflection on research into university teaching. Scholarship of teaching is based on the two previous characterisations, as well as the fact that the teacher shares his or her experience and knowledge with others through publishing articles and conference contributions, and giving seminars, etc. At this level, a teacher has a scientific approach to teaching, including peer review, critique and evaluation, and he or she contributes actively to

the build-up of knowledge concerning university teaching and to the body of didactic knowledge in his or her own subject.

LTH's Pedagogical Academy uses the term *Excellent Teaching Practitioner* to make clear that the teachers awarded this distinction are qualified at all levels of Kreber's model, i.e. that they are good practitioners in their profession as university teachers.

Continuous development in the role of teacher means not only keeping abreast of knowledge in one's subject, but also learning from the experience of other teachers and the results of relevant research into university teaching, and applying this knowledge in one's own work. This applies to teaching in one's own subject as well as higher education in general. The greatest value of experience lies in showing the way for future actions. It is therefore natural for a good teacher to have ideas on the future development of teaching and student learning.

## Enclosure 2

## The Assessment Process

Applications are to be made to LTH's ETP Committee. Teachers wishing to apply to the Academy should submit the following:

- a teaching portfolio,
- a CV, with a special section dedicated to pedagogical activities,
- the recommendation of their head of department, and
- testimonials to discussions with two reviewers.

The applicants will also be interviewed.

### **The teaching portfolio**

The teaching portfolio consists of a personal document and examples of the applicant's teaching practices. In the personal document the applicant presents his or her reflections on teaching and learning. Examples should be given from practical teaching experience, which are related to the applicant's teaching and learning philosophy. The applicant is to motivate the choice of examples and show how they are applied in practice. The applicant should choose a number of relevant examples from their own teaching in order to illustrate the issues they deem most important, according to their own, personal teaching and learning philosophy.

The total length of the portfolio should be 10-12 pages.

### **A CV with a special section dedicated to pedagogical activities**

The CV is to be formulated such that the assessors can form an opinion of the applicant's teaching activities, pedagogic training and other relevant experience and qualifications.

### **The recommendation of the head of department**

The application shall also include a written recommendation from the head of department. This allows the head of department to attest to the fact that the teacher in question is an excellent teacher, and has no shortcomings in his or her relation to students or colleagues.

It is also natural to provide the head of department with the opportunity to express an opinion on the pedagogical abilities of the applicant. This can be regarded as part of the effort of LTH to make the quality of teaching and student learning an important aspect for its departments.

### **Testimonials to discussions with two reviewers**

The applicant is also to include testimonials confirming that he or she has had discussions on the content of the teaching portfolio with at least two teachers who have already been awarded the distinction of ETP. These two teachers act as reviewers. The applicant may choose whom he or she wishes to discuss the portfolio with, and is responsible for arranging the discussions.

The discussions with the reviewers are to be focused on the portfolio in regard to the criteria described in this document. The reviewers are not required to assess the portfolio. The aim of this process is primarily to improve the quality of the portfolio.

### **The interview**

The interview is a complement to the recommendation of the head of department and the portfolio submitted by the applicant. It is especially important that the interview confirms that the applicant's teaching and learning philosophy and actual practice form an integrated whole. The interview also follows the portfolio in such a way as to allow the applicant to go into detail regarding the examples given.



### **LTH's ETP Committee**

LTH's ETP Committee consists of the Assistant Dean (chair) the Assistant Dean for Undergraduate Studies, two teachers and two students. The teaching representatives are appointed by LTH's Dean, and the student representatives by the Students' Union at LTH. This Committee has the overall responsibility for the ETP process and assigns duties to the Assessment Group. The ETP Committee makes all decisions on awarding ETPs based on the findings of the Assessment Group.

### **The Assessment Group**

The applicant's qualifications are evaluated by a group of teachers (the Assessment Group). This group is made up of teachers who have already been awarded the distinction of ETP, and who have undergone specific instruction in the assessment process. The members of the group are appointed by the ETP Committee. The Assessment Group may also include a representative appointed by the Students' Union at LTH. A pedagogical expert, appointed by the ETP Committee, is also affiliated to the Assessment Group. This Group provides recommendations to the ETP Committee as to whether the applicant should be accepted or not.

## Enclosure 3

## The Economic Model for LTH's Pedagogical Academy

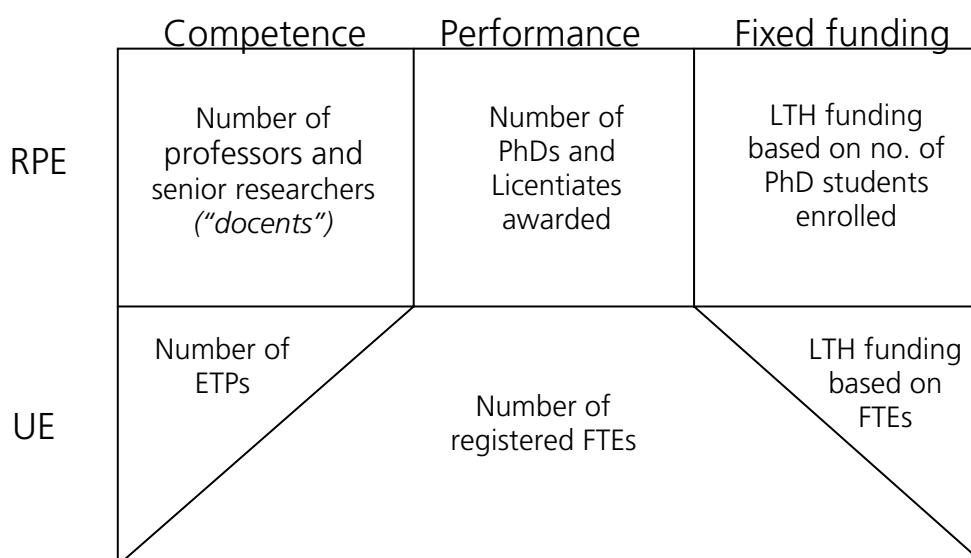
**Introduction**

The Pedagogical Academy is financed by the budget for undergraduate teaching. The economic model employed means a reduction in the amount awarded to LTH's departments for the performance of their students (in terms of full-time equivalents, FTEs). This model reinforces LTH's ambition to achieve a high level in the quality of teaching while not exceeding its financial framework. The costs associated with the Pedagogical Academy today are equivalent to about 0.5% of the allocation for undergraduate teaching.

**Description of the model**

The figure below illustrates how the existing model for the distribution of funds for research and postgraduate education (RPE) can be applied to the distribution of funds for undergraduate education (UE). The RPE model is a modern, transparent model, divided into the areas *competence*, *performance* and *strategy*, and also leaves room for future modifications. This can naturally be applied to undergraduate teaching. Funds awarded for *performance* account for the largest proportion of departments' financing of undergraduate teaching.

Funds awarded for *competence* are related to those awarded for RPE through equating the award for an ETP with that of a senior researcher (*docent*). This also underlines the fact that LTH values competence in both teaching and research.

**Discussion**

According to LTH's budget for 2004, the amount available for undergraduate teaching was SEK 417 900 thousand. In 2004, the amount made available to the Pedagogical Academy was SEK 1750 thousand. At the present time, departments are awarded SEK 50 thousand for each teacher who has been officially declared an ETP. Moreover, the teacher receives an increase in salary of SEK 1300 per month.

In 2004 LTH's departments were charged with producing about 5800 full-time equivalents (FTEs). For each FTE a department receives about SEK 53 thousand. It is assumed that the number of ETPs will increase in time, although not at the same high rate as hitherto. If the number of new ETPs at LTH is assumed to be 10 per year, the cost associated with this would be SEK 500 thousand per year. This cost will be covered by reducing the amount given to departments for each FTE. This will mean a reduction in

the funds for FTEs of about 0.1% per year. This reduction will naturally only affect those departments where no teachers have been awarded the status of ETP.

This model sends a clear signal to LTH's departments that they must have ETP competence in relation to the number of students they teach (FTEs). It also underlines the fact that departments that make a conscious effort to increase the competence of their teachers will be rewarded. At the same time, it can also be noted that departments without ETPs will suffer only a modest reduction in undergraduate funding.

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