
CALL FOR PROPOSALS

IT in higher education 14

The Knowledge Foundation invites on-going or previous Knowledge Foundation initiatives under the programmes of Research Profiles, Profiles+, Knowledge Foundation Centers, or Industrial Graduate Schools to apply for financing to develop internet-based course modules for second-cycle courses.

If you have questions about the call, please contact:

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**We require your application
no later than 3 p.m. (15:00)
on 30 January 2015**

For technical support, contact:
info@kks.se

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About the Knowledge Foundation

The Knowledge Foundation finances research at Sweden's new universities and HEIs for the purpose of strengthening Sweden's competitiveness. We provide funding when research is conducted in collaboration between academic researchers and business sector partners.

Background of the programme

“Internet-based learning” refers to methods involving information technology (IT) and modern communication technology to strengthen learning processes, making them more learner centred and more effective. Courses for internet-based learning are web-based, interactive courses combining imaging, graphics, film, text, and sound and involve web-based tools, e.g. discussion sites, blogs, and wikis in combination with advanced software for simulation, analysis, visualisation, etc. There are great opportunities to utilize authentic data for discussion and analysis.

Perhaps one of the most important results from research collaboration between the academic and business sectors is the recruitment of qualified personnel. Through research collaboration in second-cycle courses education, making it accessible over the internet, the conditions are enhanced for developing expertise among people already active in the business sector. Linking the business sector with advancements in internet-based learning can increase the opportunities for using authentic data and case studies.

Higher education institutions (HEIs) currently face increased competition, not least as regards second-cycle education. Profiling research and higher education is a prerequisite for HEIs to meet the global competition. Internet-based learning offers greater opportunities for the HEIs to involve high-level international expertise in educational offerings. Close associations between strong research areas and second-cycle courses can strengthen the conditions for attracting researchers and students to the profile areas.

Internet-based learning creates flexibility in terms of space and, to some extent, time. This increases the opportunities to combine professional activities and studies. Internet-based course modules developed jointly by business partners and HEIs provide opportunities for companies to use course modules in professional development. Internet-based course modules may include components involving participation of leading national and international academics or experts in the areas that are closely associated with the subject content of the course module.

Internet-based course modules that are developed in collaboration between companies and HEIs create opportunities to increase pedagogic quality in teaching, e.g. through examples or cases from companies' experience. The participants' prior knowledge, learning activities, together with the learning outcomes can be a basis for continuous improvement in the design of courses. Internet-based course modules can be offered to other HEIs as well as to companies. Creative Commons¹ (CC) and open educational resources (OER)² provide a legal framework for this. Internet-based courses enable ambitious individuals to improve their qualifications, or change professional orientation.

There is a steady increase in open course material and the number of higher education programmes available through internet-based learning. This represents yet another type of competition for the new HEIs, which means that they are not only competing with other Swedish universities and HEIs but also with world-famous institutions such as MIT, Stanford, Cambridge, and Oxford. Internet-based learning (also referred to as e-learning or technology-enhanced learning) is clearly becoming a competitive factor for HEIs. In addition there is competition from new, fully virtual universities established in Europe and globally.

Increasingly more second-cycle courses students are working part-time or full-time. New forms of education – especially internet-based courses – can facilitate studies for many more students in this category. These forms of courses are also important since students with professional experience can provide valuable practical contributions to education. New forms of teaching create opportunities for students to become involved in education in a new way – not only as consumers, but also as participants and partial producers of educational material.

Investment costs for flexible learning are often high. Incentives for HEIs to develop internet-based courses at the second-cycle courses are weak since the number of students at the master's level is low in relation to the investment costs. Incentive for teachers to develop internet-based course elements are often weak in terms of economics and professional qualifications. This may also be due to lack of experience with modern, relevant technology.

¹ Creative Commons (CC) is a non-profit organisation devoted to expanding the range of creative works available for others to build upon legally and to share. The organisation has released several copyright-licenses known as Creative Commons licenses free of charge to the public. These licenses allow creators to communicate which rights they reserve, and which rights they waive for the benefit of recipients or other creators.

² Open educational resources (OER) are digital materials that can be re-used for teaching, learning, research and more, made available free through open licenses, which allow uses of the materials that would not be easily permitted under copyright alone.

Society is changing; new technology and new business models change the conditions for many business and social sectors. This also includes the educational sector.

The development of internet-based learning is mainly financed by HEIs prioritising their own funds. Course offerings are extensive, but mainly involve the basic level and primarily focus on social sciences and the humanities. The courses offered are not always clearly connected to the research profiles of the HEIs. With this targeted call for proposals, the Knowledge Foundation intends to increase the opportunity for new HEIs to strengthen their profiles by offering advanced-level education. Even the programme description of the Knowledge Foundation (1994) expressed support for research and education profiles for HEIs and for strengthening the ability of HEIs to recruit students outside of their immediate area. Promotion and utilisation of information technology is one of the Knowledge Foundation's missions.

Purpose and objective of the programme

The programme IT in higher education aims to stimulate the development of internet-based course modules in second-cycle courses,

- with clear links to current research within profiled areas in specified programmes funded by Knowledge Foundation
- with orientations that respond to the needs of the business sector
- with increased pedagogic quality
- as part of the HEI's long term strategic plan.

The programme should result in internet-based course modules in second-cycle courses that are developed in collaboration between companies and HEIs. The course modules should be characterised by high pedagogic quality through innovative use of modern technology, connections with international expertise, and connections to business activities.

The course modules developed must be included in advanced-level education at the HEI in question and must be offered to other HEIs and to businesses for professional development.

Who may apply?

The call for proposals targets HEIs. Applicants must have an overall responsibility for education as vice chancellor or dean.

The call for proposals represents a tool for strategic work and offers the opportunity to include internet-based education in second-cycle courses to strengthen and further develop the HEI's profiled research areas.

The strategic tool can be used in combination with on-going or previous Knowledge Foundation investments in the following programmes: Research Profiles, Profiles +, Knowledge Foundation Centers, or Industrial Graduate Schools.

How should the funds be used?

Funds from the Knowledge Foundation can be used to finance 75 % of salaries for researchers and teachers employed at new HEIs as well as direct project-related costs, e.g. facilities and material. This means that the HEI must co-finance 25 % of these costs.

Funds can also be requested for hiring the external experts needed to raise the pedagogic quality of the course module addressed by the application. This cost is financed by the Knowledge Foundation and does not need to be co-financed by the HEI.

The application must present a budget that covers the entire project. This includes a report on funding from the Knowledge Foundation and contributions from the HEI. The budget should present the direct costs of the project. In its funding decision, the Knowledge Foundation may reduce the budget. Costs accrued before or after the approved project period cannot be accepted.

Budgeting of funds must comply with the instructions presented in the document, Guidelines on Approved Expenditures (see www.kks.se).

The application should not include the added amount for OH. This will be calculated and included in the proposed contract if the Knowledge Foundation approves the application for funds.

HEI involvement

The HEI must participate by financing 25 % of the direct costs of the project.

Business sector involvement

The business sector must participate in choosing the course modules for internet-based development. The business sector may also participate in

developing current course modules through expertise and experience in dealing with practical problems or, e.g. through participating in testing during the development stage.

Formal requirements

An application must meet the following requirements before the Knowledge Foundation will consider it for evaluation. Applications that fail to meet the following formal requirements will be rejected.

- Applications must come from current or past KK calls Research Profiles, Profiles +, Knowledge Foundation Centers, or Industrial Graduate Schools.
- The project must be in line with the overall purpose and objective of the call for proposals.
- The applying HEI must be certified to grant degrees at second-cycle courses (master's level), and at the doctoral level for PhD courses, in the subject area addressed by the application.
- The application must address course modules that are part of on-going or planned second-cycle courses (master's level) or doctoral programmes.
- The application must address course modules that offer at least 15 credits in total.
- It must be possible to license the results of financed projects in accordance with Creative Commons.
- The application must include letters of support from one or more of the business partners who are co-producing research with the applicant HEI.
- The earliest starting date for the project is 1st of May 2015, and the latest starting date is 1st of July 2015.
- The project should run for 2 years.
- Any conflict of interest concerning financial or personal ties between involved companies, between companies and HEIs, or between companies and individual researchers must be declared in the application form. Specify, e.g. ownership of shares, governing board positions, or employment/consultancy and agreements concerning intellectual property rights (IPR) irrespective of scope.
- The vice-chancellor must sign the application.

Evaluation

Funding decisions are made by the general manager of the Knowledge Foundation, based on recommendations from the external evaluation panel. The panel evaluates the application based on the following criteria:

Evaluation criteria

Scientific quality

- How is the internet-based course module motivated from the HEI's long-term and strategic perspectives?
- How is the course content linked to current research at the HEI?

Benefits for business partners

- How has collaboration with business partners influenced course content and design?

Expected results and effects

- How has the use of IT improved the pedagogic quality of the course module?
- How does the course module take advantage of leading national or international expertise in the subject area?
- Is the proposed IT solution sustainable after the project end?

Implementation

- To what extent does the course module in question use OER?
- Is intended implementation, modularisation and progression adapted to different needs?

The evaluation process does not allow for additional material to be submitted.

Application

The Knowledge Foundation uses an electronic (online) application process. Applicants must log in to the Knowledge Foundation's website, www.kks.se fill in the application forms, including appendices, and submit the application online to the Knowledge Foundation.

Applicants must create a user account to submit an application. A user account enables applicants to log in to the application service. Applicants may use a pre-existing account with the Knowledge Foundation if they have one.

Application documents consist of electronic forms and appendices that can be uploaded online. Special forms must be used for some appendices. The forms can be downloaded from the Knowledge Foundation's website, www.kks.se, or from the application portal.

Applications may be written in Swedish or English.

Applications must include 4 appendices.

Special formats or forms must be used for several of the appendices (see below). The appendices must be organised and titled as followed:

Appendix 1

- A)** Describe the connection between current research at the HEI and the course module's strategy and content (max. 2 pages)
- B)** Describe the planned use of IT in course modules and the use of existing OER. (max. 4 pages)
- C)** Describe how the use of IT will increase the pedagogic quality of course modules. (max. 2 pages)
- D)** Describe possible international collaboration in the development of courses and course content. (max. 2 pages)
- E)** Describe how business partners are involved in choosing course modules and in designing or testing course modules. (max. 2 pages)

Appendix 2 Project budget (appendix form)

Appendix 3 Letters of support from one or more companies

Appendix 4 Signatures (appendix form)

Support for applicants

The Knowledge Foundation is offering support for applicants during the autumn of 2014. This support consists of meeting with experienced developers and takes the form of a dialogue, or "sounding board" concerning the planned use of IT and the pedagogic design of the project plan/application. Those interested should contact Ulf Olsson at the Knowledge Foundation.

Timetable and decisions

- The Knowledge Foundation must receive your application no later than 3 p.m. (15:00) on 31 January 2015.
- During February 2015, all applications will be reviewed for compliance with the formal requirements.
- The general manager of the Knowledge Foundation will render a decision on financing after recommendations from the external evaluation panel, March 2015.