

WGLN III K-12 Faculty Grants Program 2009
Request for Proposals
www.wallenberg.com/kaw/wgln www.wgln.org/2009

Theme: The Future of Learning: ICT in schools

RFP due date: April 30, 2009

Application: Online at <https://eansokan.wallenberg.com/frameset.asp?loc=subv>, please download instructions.

ANNOUNCEMENT

The Knut and Alice Wallenberg Foundation and Stanford University are pleased to announce the second year of the Information and Communications Technology (ICT) in K-12 education initiative called **WGLN III**. The goal of this initiative is to promote collaborations between K-12 schools and academic units in Sweden on the one hand and Stanford University and K-12 schools in the United States on the other, to implement and evaluate ICT solutions for specific K-12 educational challenges.

The creative use of ICT – computers, the Internet, educational games, social networks, interactive whiteboards, etc. - holds the promise of improving education at all levels and across all realms of knowledge. Yet, the promise is largely unfulfilled for many reasons. Teachers are frequently less familiar ICT than are their students. Strategies and innovative materials that seamlessly integrate ICT into the curriculum are scarce. Most classrooms do not take advantage of the fact that students in their everyday lives are immersed in an information-rich environment driven by ICT. This same ICT can be used to improve classroom instruction and motivate young people.

The goal of WGLN III is to **facilitate the adaptation and implementation of materials that incorporate ICT into the learning experiences of students**. To achieve this, we will have to make use of the kind of ICT which children and adolescents are enjoying outside school for the purpose of enhancing learner-based education. We also have to enhance the capabilities of teachers to use ICT. The result should enable teachers to be creative in using technologies already familiar to students to design effective and motivating learning experiences.

ICT-enhanced materials vary greatly in their pedagogical design and quality, making it hard to incorporate into a teacher's existing teaching methods. Evidence for the effectiveness of technology driven education is usually sparse and even successful materials are frequently poorly implemented and disseminated. WGLN III invites applications to provide innovative and creative solutions which will overcome these limitations and put new, effective, and sustainable educational tools into the hands of teachers and students within two to three years.

The main part of each project should be an **implementation in real K-12 school environments** (preferable K-9) (including support to teachers) accompanied by **evaluation** procedures of the implementation. The projects should aim at answering the following key questions:

- How will learning improve through the usage of ICT?
- How can education and learning be integrated with today's technologies and rapidly developing communication environment?
- What other kinds of support (e.g., teacher training and materials) are needed for ICT to be effective in improving student learning on a large scale?

- How do we keep up with the rapid development in Information and Communication Technology, that is, how can we modify/refine tools and methods so that they are flexible and easy to adapt to future developments?

FOCUS AREAS

Focused content areas for the project applications are Science, Mathematics, and Language Learning. We encourage learning methods and technologies which adopt an experimental (trial and error) approach facilitating critical and creative thinking. In Science and Mathematics, it is important that basic concepts are connected with everyday life. The theme of language learning is seen as an auxiliary theme to mathematics and natural science. For example, how can teaching and training a foreign or second language interact with teaching and training mathematics and natural science to enhance the ability in the students to present and communicate concepts, problems and solutions in their foreign or second language?

Priority is given to projects that will use previously developed learning/teaching tools to create new educational opportunities rather than to projects that propose new tool development.

PROJECT FUNDING: Projects can be funded up to 3 years with a yearly review. Only direct costs allowed.

APPLICATION CONTENT

- **Project rationale.** Proposals must indicate how the research builds upon on the current knowledge base and pedagogy of teaching and learning. Assessment must demonstrate how learning can be changed as a result of the project.
- **Proof of concept.** Applications should summarize any prior work that demonstrates the potential effectiveness of the proposed project.
- **Collaboration.** Projects must involve partnership between at least one K-12 school in Sweden and at least one in the United States and faculty at both Stanford University and a Swedish university, university college or academy.
- **Work and implementation plan.** The proposal must provide a timeline with benchmarks and an implementation plan to scale-up beyond the end of the project. Implementation must occur across more than one classroom and should have an experimental design. Evaluation measures should be able to document learning effectiveness, benefits to the student and teacher, and an analysis of the implementation process itself.

PROJECT DELIVERABLES NEED TO BE:

- Easy for students to use and easy for teachers to adopt
- Modular and customizable for local contexts
- Disseminated: Able to scale-up and demonstrate broader impact
- Sustainable after the project is completed – link to online publishing, professional societies, etc.
- Based on existing technical platforms (open source preferred)

REVIEW PROCESS

The applications will be reviewed by an independent panel of reviewers.