

Ministry of Education and Culture Teacher Education Forum

Projects to develop teacher education

In spring 2017, the Ministry of Education and Culture awarded nearly EUR 15 million in grants for projects to develop teacher education. The projects will initiate the implementation of the Teacher Education Development Programme and will promote the attainment of the programme's objectives. Grants were awarded to 11 coordinating universities, two of which are universities of applied sciences and nine universities. The development projects that received funding in the spring application round and that will be launched in autumn 2017 are presented below.

Activities and encounters – Strengthening inclusion and the human rights-based approach in vocational teacher education

The best way to prevent exclusion among young people is to nurture educational equality and to offer everyone the experience of being included. Teachers play a key role in this work — also in vocational education. The project will develop the preparedness of future vocational teachers to identify exclusionary factors in education and strengthen students' involvement, activating them to participate and develop their skills for acting in changing working life and society.

The project is implemented by the vocational teacher education units of the Haaga-Helia (project management and coordination), Häme, Jyväskylä, Oulu and Tampere Universities of Applied Sciences.

Inquiries: Principal Lecturer Liisa Vanhanen-Nuutinen, Haaga-Helia University of Applied Sciences, liisa.vanhanen-nuutinen (at) haaga-helia.fi

Arctic Reformative and Exploratory Teaching (ArkTOP)

The purpose of the ArkTOP project is to support the career-long development of teachers' professional competence and to create an operating model based on teachers' development plans in order to implement systematic, long-lasting and field-oriented continuing education. In addition, various pedagogical solutions for virtual teaching will be designed for providing high-quality teaching irrespective of geographical distances.

Inquiries: Project Manager Marja-Riitta Kotilainen, University of Lapland, marja-riitta.kotilainen (at) ulapaland.fi

Bothnia Learning Hub

Bothnia Learning Hub utilises the possibilities offered by digitalisation. The project will develop and spread best practices of digital learning environments and will experiment with new technologies and work methods. The focus will be on teacher education at Åbo Akademi University and on teachers in the field. This will take place through development work in the form of a co-creative process on three levels, which will lead to improved knowledge among all actors.

Website: www.bothnialearninghub.fi

Inquiries: Project Manager Yvonne Backholm, Åbo Akademi University in Vasa, yvonne.backholm (at) abo.fi

Building blocks for learning future art – Project to develop the teacher's professional competence

The project will develop subject teacher education, especially in art subjects, as well as cooperation between art and various subjects and fields. Pilots for the project will build approaches and working models, especially for developing creative skills and learning.

Inquiries: Project Manager Sirke Pekkilä, Uniarts Helsinki, sirke.pekkila (at) uniarts.fi

Building sustainable research-based teacher education and creative skills for teachers

Project website: https://www.helsinki.fi/fi/projektit/uudistuva-opettajankoulutus (in Finnish)

Subprojects:

Developing subject teachers' professional growth and subject didactic skills in the field of science

The subproject will develop subject teachers' Bachelor-level studies in the fields of biology and geography at the University of Helsinki by strengthening the teaching of subject didactics and by developing mentor teacher activities for students who study to be subject teachers. In addition, a MOOC-based continuing education package will be built for subject teachers, and high-quality research will be conducted on the project and its impacts.

Inquiries: Professor Kurt Fagerstedt, University of Helsinki, kurt.fagerstedt (at) helsinki.fi

Digital tools for pedagogical development in Swedish-language teacher education programmes at the University of Helsinki

Digital competence and multiliteracy are key competences that both teachers and students are expected to have and master. The aim of this project is to develop and reinforce the digital competences of both teacher educators and students. Digital tools and learning environments are integrated into research, teaching, studies and practice.

Inquiries: Professor Gunilla Holm, University of Helsinki, gunilla.holm (at) helsinki.fi

HowUTeach – Development of a digital self-assessment tool supporting the development of teacher educators as teachers

The project will develop HowUTeach, a self-assessment tool that supports the development of teacher educators' teaching and professional competence. Teachers respond to claims based on university pedagogical research. These apply, for instance, to teaching practices, capability beliefs and coping with work. On the basis of the responses, teachers receive counter-feedback to support the development of their own teaching.

Inquiries: University Lecturer, Project Director Anna Parpala, University of Helsinki, anna.parpala (at) helsinki.fi

Informal learning and teacher education

A network combining informal learning and formal teaching will be implemented in teacher education. Exhibitions, museums, science centres, national parks and cultural institutions are excellent open learning environments in teacher education as well. They give teachers the opportunity to create their own teaching models. This makes use of the existing e-teaching and information technology while applying methods already tested in informal learning.

Inquiries: Professor Hannu Salmi, University of Helsinki, hannu.salmi (at) helsinki.fi

Developing intercultural and inter-worldview sensitivity in teaching and guidance – KuKaS

Applying research-based initial and continuing education, the project will reinforce intercultural and interworldview sensitivity in educational institutions. Sensitivity means the ability to reflect on one's own worldview and idea of man, enabling also a flexible approach to culture and worldview based factors influencing a student's thinking. The primary target group consists of religion and ethics teachers and student counsellors.

Inquiries: Postdoctoral Researcher Anuleena Kimanen, University of Helsinki, anuleena.kimanen (at) helsinki.fi

Teacher in a virtual classroom – Development of teachers' pedagogical skills and the Digital Classroom model

The project will develop the practices of virtual classroom teaching and the pedagogical skills of teachers and students who will be teachers, for virtual working. The Digital Classroom offers courses not provided by every upper secondary school; digital technology gives students tools for distance learning under the teacher's guidance. The first courses to be developed are foreign languages. Other subjects will be included later.

Inquiries: University Researcher Liisa Ilomäki, University of Helsinki, liisa.ilomaki (at) helsinki.fi

Programme to develop the teacher's comprehensive interaction skills

The aim of the pilot project is to develop and investigate an educational entity suited to teachers' basic education, orientation period and continuing education. The goal of this entity is to support the development of teachers' professional interaction skills. The education includes practising professional interaction skills by means of creative and experiential methods based on theatre. Particular attention will be paid to the following key interaction situations in teachers' work: 1) Classroom interaction 2) Participation in multiprofessional cooperation, 3) Cooperation between home and school, 4) Digital interaction, and 5) Encountering culturally and linguistically different children and their families. Piloting, the analysis of its results, and further development of the educational entity will be carried out in 2017–2019. A digital operating environment will be created to support the project. The school authorities of the cities of Espoo and Kuopio, Tampere University of Technology, and Stockholm University of Sweden have initially agreed to serve as cooperation bodies.

Inquiries: Docent Tapio Toivanen, University of Helsinki, tapio.toivanen (at) helsinki.fi

Development of pedagogical studies for teachers

The aim of this project is to develop the competence base of teachers, especially as a part of subject teacher education and the reform of the Master's programmes at the University of Helsinki. The project is done in cooperation with the Department of Education, subject faculties, training and field schools and cooperation universities. The aim of the project is to develop well-functioning cooperation models for the pedagogical studies for teachers. The outcomes of the project will be shared on a digital website and will be accessible by any interested parties and/or universities.

Cooperation partners: Faculties providing Teacher Education at the University of Helsinki, Aalto University, the University of the Arts Helsinki, the training schools and the field schools (Helsinki, Vantaa).

Inquiries: Docent Inkeri Ruokonen, University of Helsinki, inkeri.ruokonen (at) helsinki.fi

Inclusive pedagogical leadership in educational institutions

The aim of the project is to prepare teacher students and teachers so that they are ready to assume responsibility and participate in the leadership processes of educational institutions. Owing to the project, teachers and those studying to be teachers will be better prepared to act according to the principles of shared leadership: teachers play an active role in developing the educational institution. Through continuing education, the project will offer participants visions and opportunities to build new kind of leadership.

Inquiries: Professor Arto Kallioniemi, University of Helsinki, arto.j.kallioniemi (at) helsinki.fi

Professional development of teacher educators as part of research-oriented teacher education

Through action research, the project will create a structured model – From Novice to Master – for the professional development of teacher educators. The objective is to create a dialogue between more experienced teacher educators and those at the start of their teacher educator's career, especially as concerns the combination of theory and practice. Another objective is to improve teacher education's knowledge of the media world of students and pupils. Cooperation with the field school network and training schools will be utilised.

Inquiries: Docent Heikki Kynäslahti, University of Helsinki, heikki.kynaslahti (at) helsinki.fi

Project to develop the teaching of oral language skills

Covering a wide range of languages, the project will develop research-based education models for domestic and international education fields. The focus will be on interaction and pronunciation as the key elements of oral language skills. The target group for education consists of students studying to become teachers, graduated teachers, and teachers already working in the field, at all levels of education. The end product of the project will be an educational entity, which can be used as such or as appropriate for working on oral language skills in any educational context.

Inquiries: Professor Sanna-Kaisa Tanskanen, University of Helsinki, sanna-kaisa.tanskanen (at) helsinki.fi

Progressive teacher education – engaging learning environments

Engaging learning environments combine physical spaces, digital and mobile solutions and modern pedagogical theories as well as theories of motivation and interest. In this project, we are developing study modules that help future and present teachers to learn not only how to utilise new learning environments, but also how to build these environments themselves. The objective is to follow the Engaging Learning Model (Lonka, 2012) for creating a hybrid learning environment that will make use of the latest technology and research. The first step is to develop a prototype of a course (5 credits), where students learn to steer phenomenon-based projects and foster the transversal competencies introduced in national Finnish curricula in 2016 (21st Century competencies).

Inquiries: Professor Kirsti Lonka, University of Helsinki, kirsti.lonka (at) helsinki.fi

Collective leap of competence – Pedagogical skills through new cooperation between education and working life for kindergarten teachers

The aim of the project is to develop the professional skills of future and present kindergarten teachers in a cost-effective manner. Teachers will have good command of high-quality interaction and action models supporting the child's development. They will base their activities on increasingly diverse work community skills, such as inclusive team leadership, collaborative learning, and reformative, research-based expertise.

Inquiries: Professor of Early Education Maarit Silvén, University of Turku, Department of Teacher Education, maarit.silven (at) utu.fi

Community-based and research-based learning environments in teacher education in the LUMA ecosystem

The project will train future and present teachers from early childhood education and care to the secondary level to develop and implement multidisciplinary project-type education and utilise modern LUMA learning environments. The project will promote the professional development, community-based approach and reciprocal learning of teacher educators in the subject departments of universities, in the departments of teacher education and in training schools.

Inquiries: Professor Maija Aksela, University of Helsinki, maija.aksela (at) helsinki.fi

Creative expertise – building bridges in teachers' basic education and continuing education (ULA)

Grounded in systemic thinking and research-based knowledge, the project will develop operating models for teacher education. Phenomenon-based and life-long learning will be supported in collaboration between universities and schools, while utilising hybrid learning environments and expertise from various disciplines. The focus is on cross-cutting themes in learning and teaching, such as multiliteracy and language awareness, the equal school, a research-minded approach to working, student motivation, and cross-curricular cooperation.

Inquiries: Professor Mirja Tarnanen, Research Director, University of Jyväskylä, mirja.tarnanen (at) jyu.fi

Developing contents for teacher education in Finland related to gender equality planning and equality work (SetSTOP)

This nationwide project will produce and test educational materials and tools that can be used to integrate the themes of gender equality, non-discrimination and alleviating segregation into the curricula of Finnish teacher education (education of class teachers, subject teachers, vocational teachers, teachers for early childhood education and care and for special education) and student counsellor education.

Project website: https://setstop.wordpress.com/ (inFinnish)

Inquiries: University Lecturer Vappu Sunnari, University of Oulu, Vappu.Sunnari (at) oulu.fi

Developing health science and social service teachers' professional competence and continuing education - TerOpe

The project will renew the education of health science and social service teachers on a national scale and will develop a continuing education model, based on future competence requirements, for teachers in this sector. The project will pilot a study on a digital learning module for the basic higher education and continuing education of teachers. The project will be carried out with six teacher education units in health sciences and the School of Vocational Teacher Education at Tampere University of Applied Sciences in 2017–2019.

Project website: http://www.oulu.fi/healthsciences/node/48742

Inquiries: University Teacher Kristina Mikkonen, Postdoctoral Researcher, University of Oulu, kristina.mikkonen (at) oulu.fi

Entering the world of mathematics

The objective of the project 'Entering the world of mathematics' is to create teaching contents and models for the education of kindergarten teachers, class teachers and special education teachers as well as for continuing education. These will give research-based means for supporting the development of children's mathematical skills in early childhood education and care and in the lower classes of comprehensive school.

Participating in the project are the universities of Turku, Helsinki and Jyväskylä, Åbo Akademi University, and Niilo Mäki Institute.

Inquiries: Associate Professor Minna Hannula-Sormunen, University of Turku, Department of Teacher Education, Minna. Hannula-Sormunen (at) utu.fi

INNOKOMP – Innovation competences: co-creation, digital modelling and multimateriality as factors renewing crafts teaching

The INNOKOMP project – Innovation competences: co-creation, digital modelling and multimateriality as factors renewing craft, design and technology teaching – will develop pedagogical operating models that renew crafts teaching and learning, take different learners into account and promote equality. These models are designed for both basic education and teacher education. A continuing education model of a new type will be created at the same time. It will support the basic education teacher in the reform of teaching at school level in practice.

Inquiries: Project Manager Marja-Leena Rönkkö, University of Turku, Department of Teacher Education, Rauma Unit, malepe (at) utu.fi

Linguistically responsive and culturally sustaining pedagogy

The project will promote linguistically responsive and culturally sustaining teaching and teacher education. Within the project, education and teacher's professional development will be developed in collaboration with teachers at schools, and existing pedagogical practices will be collected. New models will be developed in dialogue between research, education and practice. Freely available digital educational materials will be shared on the project website for developing linguistically responsive and culturally sustaining pedagogy.

The project is implemented by the University of Turku, University of Lapland, University of Oulu, Åbo Akademi University/Vasa, University of Tampere, Häme University of Applied Sciences and Diaconia University of Applied Sciences.

Project website: www.dived.fi (in Finnish)

Inquiries: Project Coordinator Tarja-Riitta Hurme, PhD, University of Turku, tarja-riitta.hurme (at) utu.fi

Mentoring and learning partnerships in early childhood education and care

In cooperation between education and working life, the project will develop a mentoring model supporting the various phases of professional development. The education of mentors will target both on-the-job learning for students of early childhood education and care and the induction of kindergarten teachers and directors for early childhood education and care. Cooperation is based on the partnership network of over 60 daycare centres in the region.

Inquiries: University Lecturer Päivi Kupila, University of Tampere, Faculty of Education, paivi.kupila (at) uta.fi

Nationwide DigiErko network

The project will develop a network of digital learning and teaching, which will support the development of teachers' digital expertise and the sharing of skills. The activities are based on DigiErko training events in progress in the universities of Turku, Helsinki and Eastern Finland and on networking among expert teachers active in these universities. The operations will increase in stages to form a nationwide network of teachers and teacher educators.

Project website: https://digierko.fi/ (in Finnish)

Inquiries: Sini Kontkanen, University of Eastern Finland, sini.kontkanen (at) uef.fi

OPEKE – Reform of vocational teacher education

The OPEKE project will reform the entire continuum of vocational teacher education: the selection process, learning and supervision, and contacts with working life. It is also ensured that teacher educators' skills are up-to-date. Development pilots will be used to build models for the development of career-long skills among vocational teachers and adult education teachers. Teachers are also supported in implementing the vocational education reform.

Project website: http://www.hamk.fi/verkostot/opeke/in-english/Sivut/default.aspx

Inquiries: Project Manager Anu Raudasoja, Häme University of Applied Sciences, anu.raudasoja (at) hamk.fi

OpenDigi – Teachers in developer communities for learning skills and digital pedagogy

The OpenDigi project brings together research-based expertise from five teacher education institutions, as well as developer communities where teacher educators, teacher students and school teachers collaborate. The objective is to strengthen teachers' competence in digital pedagogy and to support pupils' learning skills. Working will be supported by a digital workspace and the models of strategic learning from the PREP21 project.

Project website: https://opendigi.fi/ (in Finnish)

Inquiries: Project manager Heikki Kontturi, University of Oulu, heikki kontturi (at) oulu.fi

Student Selection to Teacher Education in Finland – Anticipatory Work for Future

The objective of the project is the research-based development of a selection process for teacher education. This is achieved through an extensive cooperation network. Participants in the project include, among others, all teacher education units in Finland as well as the VAKAVA network. In selections for teacher education, the project will focus especially on ways to develop the assessment of the applicant's aptitude so that the process aligns with relevant research findings and becomes more uniform across teacher education units. In addition, the project will define key competences of a teacher and develop systematic evaluation of the effectiveness of teacher education. The project consists of three sub-projects.

Project website: http://www.utu.fi/fi/sivustot/ovet/english/Sivut/home.aspx

Inquiries: Project Leader Anu Warinowski, University of Turku, anu.warinowski (at) utu.fi and Project Manager Mirva Heikkilä, University of Turku, mirva.heikkila (at) utu.fi

Supporting together! Multidisciplinary and digital cooperation to support learning

The project will develop the contents of education for special education teachers, in particular, in collaboration between six universities, networks of experts and schools. The focus will be on how to develop team teaching, the pedagogical consultation of special education teachers, strengths-based education, and interaction in educational continuums. In addition, the project will develop, produce and pilot interactive web-based materials.

Project website: http://www.oulu.fi/ktk/tuetaan

Project on Facebook: https://www.facebook.com/tuetaanyhdessa/

Inquiries: Professor of Special Education Marjatta Takala, University of Oulu, marjatta.takala (at) oulu.fi

Verme 2 – The Finnish Network for Peer-group Mentoring

The project name Verme 2 comes from the Finnish equivalent for peer-group mentoring, shortened to verme. The aim of the project is to train mentors and support previously trained mentors who lead verme groups. At the same time, new work methods based on peer learning are piloted in early childhood education and care, in teaching immigrants, in liberal adult education, in multiprofessional cooperation, in university pedagogy and in educational leadership. Joint groups are also organised for teachers and those studying to be teachers.

Project website: www.verme.fi

Inquiries: Professor Hannu L. T. Heikkinen, University of Jyväskylä, hannu.l.t.heikkinen (at) jyu.fi