Application for doctoral position

1. Curriculum: Educational Science 80338

2. Project title in English: Developing self-determination competence among upper secondary school students

3. Project title in Estonian: Gümnaasiumiõpilaste enesemääratluspädevuse arendamine

4. CERCS speciality: S270 Pedagogy and didactics

5. Doctoral candidate:

<table>
<thead>
<tr>
<th>First name</th>
<th>Surname</th>
<th>Current activity</th>
<th>E-mail:</th>
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When candidates are outside of LTOM or SVHI the assessment of his/her qualifications must be done (up to 400 characters with spaces).

6. Supervisors:

<table>
<thead>
<tr>
<th>First name</th>
<th>Surname</th>
<th>Affiliation</th>
<th>Position:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Åli</td>
<td>Leijen</td>
<td>Institute of Education</td>
<td>Professor of Teacher Education</td>
</tr>
<tr>
<td>Margus</td>
<td>Pedaste</td>
<td>Institute of Education</td>
<td>Professor of Educational Technology</td>
</tr>
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</table>

7. Research group where the doctoral thesis is being done:

<table>
<thead>
<tr>
<th>First name</th>
<th>Surname</th>
<th>Affiliation</th>
<th>Position:</th>
<th>PhD student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Åli</td>
<td>Leijen</td>
<td>Institute of Education, Centre of Teacher Education and Higher Education</td>
<td>Professor of Teacher Education</td>
<td>no</td>
</tr>
<tr>
<td>Margus</td>
<td>Pedaste</td>
<td>Institute of Education, Centre for Educational Technology</td>
<td>Professor of Educational Technology</td>
<td>no</td>
</tr>
<tr>
<td>Evelyn</td>
<td>Kiive</td>
<td>Institute of Education, Department of Special Education</td>
<td>Professor of Special Education</td>
<td>no</td>
</tr>
<tr>
<td>Katrin</td>
<td>Saks</td>
<td>Institute of Education, Centre of Teacher Education and Higher Education</td>
<td>Researcher of Teacher Education</td>
<td>no</td>
</tr>
<tr>
<td>Mario</td>
<td>Mäeots</td>
<td>Institute of Education</td>
<td>Research Fellow of no</td>
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8. Description of necessary available resources (equipment, finances):

The current doctoral research project will be conducted in the context of a larger research and developmental project funded by Estonian Ministry of Education and Research “Development of general competences in upper secondary school” (2016 - 2020). The larger project focuses on six generic competences, the current PhD project is limited to one of them. All research activities will be prepared in the context of the larger group of project investigators and financed by the project. Therefore, the doctoral student has a possibility to get valuable feedback for the doctoral thesis from the research group. Doctoral student will have a physical work-place with necessary resources and equipment in the Center of Teacher Education and Higher Education.

9. Doctoral thesis' innovativeness and importance for development of this scientific direction:

The current PhD study focuses on conceptualizing, supporting and assessing one of the basic generic competences described in National curricula for upper secondary schools 2011 – self-determination. Although generic competences have received considerable attention in various policy documents in Estonia in recent years, systematic approach for defining, assessing and developing of such competences in upper secondary school is still missing.
The more specific theoretical background will be determined by the results of a systematic literature review. As one prerequisite of self-determination is the ability to acknowledge, describe and direct one’s feelings, thoughts and actions, the starting points of the first phase will be self-reflection (see also Kori et al, 2014; Pedaste et al, 2012; Leijen et al, 2012) and self-determination theory (Deci et al, 2001; Deci ja Ryan, 2000). Deci and Ryan (2000) operationalize self-determination via fulfillment of basic psychological needs which in turn are related to a person’s optimal development, motivation, self-efficacy, quality of life and well-being as shown by several studies (see e.g. Nota et al, 2011; Liu et al, 2014). In order to enhance self-determination focus on the following components of teaching has been proposed: making decision; making choices; problem solving; independent living (risk taking and safety skills); setting and achieving goals; self-observation and -assessment; providing feedback to oneself; self-guidance; self-understanding; self-advocacy and self-directedness; self-efficacy and positive expectations; intrinsic locus of control; self-awareness (Wehmeyer et al, 1998; cited in Browder et al, 2001). It is also important to pay attention to the environment: it has been found that giving responsibility to students for what happens in school and in lessons as well as the opportunity to guide their own study process together with positive experiences helps to enhance students’ self-determination (Browder et al, 2001).

Consequently, the main tasks of the current project are to develop a conceptual framework for measuring and developing self-determination competence in upper-secondary school, to test an intervention aimed at developing self-determination competence in this age group, and to compile a teacher guide that introduces the theoretical foundations of this generic competence, provides information on its developmental characteristics, related factors, and guidelines and concrete instructions for developing and assessing self-determination competence in upper-secondary school.

10. Doctoral thesis project (up to 4000 characters with spaces):

1. Literature review in order to find a relevant and fitting theoretical frame and potential assessment instruments for researching and developing self-determination competence. Autumn 2017.
3. Conducting the first phase of the study, validation and development of the instrument and the methodology for its use. Autumn 2017.
4. Data analysis based on the first phase of the study and improvement of the instrument based on the results. Writing an article. Designing the intervention and its instructional materials for teachers. Teacher training and consultation. Spring 2018.
5. Conducting the second phase of the study, i.e. the first pre-testing and intervention. Spring 2018.
6. The first post-intervention testing, data collection and analysis, enhancement of measurement instruments. Autumn 2018.
7. Improvement of the intervention based on the results of data analysis. Writing an article. Conducting the second pre-testing and intervention. Spring 2019.

11. **Summary in Estonian**
   
   **Title:** Gümnaasiumiõpilaste enesemääratluspädevuse arendamine
   **Supervisors:** Äli Leijen (PhD); Margus Pedaste (PhD)
   **Annotation:**


12. **Summary in English:**
   
   **Title:** Developing self-determination competence among upper secondary school students
   **Supervisors:** Äli Leijen (PhD); Margus Pedaste (PhD)
   **Annotation:**

   The focus of this doctoral thesis is to develop a conceptual framework and appropriate measures for the evaluation of upper secondary school students’ self-determination, as well as methods to promote students’ self-determination in school context. For this purpose, first, a literature review is conducted to find the potential factors (contextual as well as personal) influencing self-determination in late adolescence and young adulthood. In addition, methods for the evaluation and promotion of self-efficacy in Estonia and elsewhere are collected and assessed. After that, longitudinal research is carried out on a
representative sample to describe the development of self-determination in three secondary school grade levels. Additionally, interventions to promote upper secondary school students’ self-determination are designed and their efficacy is pilot-tested with appropriate instruments. Based on the research, instructional materials are compiled for teachers to help clarify the theoretical underpinnings and evaluation as well as the development of students’ self-determination. Together with an understanding of this generic competence the instructional materials will include an overview of factors (enhancing or counteracting) influencing self-determination and guiding instructions to support its enhancement among upper secondary school students.