



**Centre for Professional Learning in Teacher Education**

**Annual report for 2015**

## 1. Abstract

2015 has produced some very significant results for ProTed. In short:

Firstly, we have been through an extensive evaluation from the international expert panel. The evaluation report was very positive and with clear recommendations for a new five-year project period as well as some recommendations for how to conduct our future activities. These recommendations are very similar to the way ProTed envisages future activities and priorities. Consequently, in the current report we draw on many observations, recommendations and conclusions from the expert panel. Despite most of the spring semester being devoted to work preparing reports and institutional visits from the expert panel, we have continued with our project portfolio as well as implementing more of our innovative and transformative work in the integrated teacher education programs. Currently, ProTed is in a phase where we summarize lessons learned and make these the basis of a renewed strategy for the next five years, including change of leadership (in accordance with established plans).

Secondly, our anthology was published on 21<sup>st</sup> December 2015, summarizing and discussing our work from the first three years of existence through 19 chapters written by ProTed academics and an epilogue by leader of the committee analyzing the school of the future, Sten Ludvigsen. This represents a major milestone of our work and synthesizes our results as well as gives detailed presentations of some of our most important projects, structured around our five areas of development.

Thirdly, we have experienced continuous and increased interest in our work from teacher education institutions as well as from policy levels. We have, together with the Norwegian Knowledge Centre arranged the first (September 22, 2015) of a series of Knowledge Parliaments where teacher education institutions gather in order to present and discuss what we are actually doing in order to build integrated teacher education programs and to see where there is consensus on important principles of integrated teacher education and where we can benefit from diversity. Throughout 2015 ProTed put high priority into participating in the national discourse on the teacher education reform related to the education for teachers level 1-7 and 5-10; from a lower four year degree program to a five year master's degree program. The Ministry of Education and Research acknowledged ProTed's work by 1) inviting ProTed to take part in the national committee for developing the new national framework for these programs, 2) the Ministry specifically asked the committee to look to ProTed's work and experiences in Tromsø and 3) the Minister of Education and Research visited the Master Degree Programs in Tromsø and Alta twice in 2015. Related to the completion of the project "Pilot up North 2010-2015" ProTed and the Department of Education at UiT have had several visits from representatives from the parliament; The Standing Committee on Education, as well as groups from several of the political parties (Høyre, Arbeiderpartiet, Venstre). ProTed's priorities related to this reform continue and will be strengthened in 2016. ProTed has also been part of a group initiated by NORAD with a view to using teacher education as an element in foreign aid. At the time of writing both ProTed leaders have recently appeared together with the Minister of education for a public discussion (UHR conference) on the merits and potential of ProTed, and the leader of the Committee for Education at the Norwegian Parliament has visited staff and students to explore experiences related to the project "Pilot up North" and the University School Concept twice and taken part in our arrangement in connection with the release of our anthology.

Fourthly, ProTed has continued its international collaboration. We are a partner in the ViCoTED project initiated by Stanford and with participants from Chile, Brazil, South Africa and Sweden in order to use a virtual world to exploit avatar-mediated sharing of results, discussion of common issues in teacher education, and using the virtual world as a repository of teacher education material (presentations, videos etc). Several participants from ProTed (both UiO and UiT) took part in a week long seminar at Stanford February 2 – 8 2015. In 2015, we have also (in collaboration with other

parties) started to prepare our international conference, “Bringing teacher education forward), to be arranged June 6 – 8, 2016. ProTed did, from the fall of 2015, strengthen our relations with some of our international partners through research staff mobility (Åbo Akademi/Finland and King's College/Great Britain). This will continue in 2016. Several ProTed academics have presented the work of ProTed at international research conferences (see appendix with list of publications/presentations).

## 2. Results compared to the application and plans

### Introduction

In the report from the international Expert Committee, it is stated that after thorough consideration of all the evidence it had available, the Expert Committee concluded that, in many areas, ProTed has made significant advances from the point at which it was awarded SFU status. This is seen most clearly in its development of the University School concept, which the Expert Committee regards as, currently, ‘the jewel in ProTed’s crown’. ProTed has also made major progress in the curriculum design and practice of research-informed integration in teacher education (with University Schools playing a crucial role in this). Also, ProTed has had a major impact in the two host institutions and is making a growing contribution nationally. Colleagues from ProTed have undertaken extensive dissemination activity to a wide range of audiences, including Government and policy makers as well as fellow academics. We quote from the conclusion from the committee: **The Expert Committee unanimously and unreservedly recommends to the NOKUT Board that ProTed’s status as an SFU be extended for a further five years.**

At the end of 2015, we conclude that Proted has reached nearly all the goals that were set out in the original application. In addition, new goals and achievements have been set out and reached. A few have been abandoned or changed. This is documented through the self-evaluation, the matrix showing detailed activity broken down into categories of Plans and Intentions, Measures, Documentation and dissemination, and Results and impact, and - not least - by the report from the Expert Committee. We refer to these documents for substantiation of our claims. In particular, we refer to the matrix for a very detailed and transparent presentation of our work.

### Teaching Subjects (Work Package 1)

#### Introduction

Overall, a large number of development projects have been instigated concerned with teaching subjects, and are still ongoing. In the initial four years of the centre, these projects have provided valuable insights into the various challenges associated with linking academic disciplines and school subjects, and also insights into how to design subjects and teaching activities in order to facilitate the student teachers professional and academic advancement from BA to MA level. Seed funding has proven to be successful to initiate experimentation in teaching and learning.

At UiO, the primary goal of these projects has been to enhance the experience of teacher education for levels 8-13 while student teachers study with discipline specific faculties. At UiT, the focus is more on adapting the entire subject dimension in the teacher education program to the more demanding master's level requirements.

Throughout 2015, a lot of effort has been invested in summarizing and synthesizing experiences derived from the diverse project portfolio in WP1, both by finishing the ProTed-anthology and by presenting our work to the evaluation committee. In the anthology, the projects that were selected are exemplary in the sense that they unpack how different knowledge cultures can interact in ways that

acknowledge diversities and avoid hegemony. There are some common traits in many of the projects in the ProTed portfolio that have proven to be most sustainable; engagement of multiple stakeholders, developing and reflecting upon communicative aspects of the academic disciplines, and student active learning methods.

### Overall reflections

The Expert Committee concluded that for the remainder of the initial five-year SFU period, it will be important for ProTed to identify a small number (around the 'five' mentioned in the original proposal) of good practices and then determine how to investigate, evaluate, improve and integrate these in ways that will be sustainable. This is currently being done.

Through the voluminous project portfolio in this area we have identified and made visible a number of teaching activities and practices that are innovative, creative, and that make subject matter more understandable for young learners. Furthermore, we have identified some practices that are crucial in supporting the student's professional and academic advancement /trajectories (er dette et godt begrep for progresjon?) These insights will be put to work in a trimmed down portfolio where we go more in depth.

## Work Package 2

### Introduction

Our work together with our University schools were highlighted by the Expert Committee as "The Jewel in ProTed's Crown". Historically, the relationship between universities and schools has been equal partnership in the sense that schools have functioned as recipients of student teachers. University schools now report that they see themselves as student teacher educators. The model has proved so successful that it has been taken up and adapted by other universities (Bergen, NTNU, Agder). UiT and HiOA is also adapting the concept to kindergartens for the BA in Early childhood education and care (barnehagelærerutdanning).

A major and persistent problem has been to develop understandings among all parties involved that academic and experiential knowledge are mutually constitutive of professional development. In 2015, we have continued to address this problem and are currently engaging in numerous projects where diverse knowledge types and logics are involved. One such example is the seed money allocated to research partnerships between university schools and UiO. In 2015, nine such projects were initiated, partly by the schools and partly by the university but with the shared goal of developing student teacher professionalism. Some other examples are how we systematically have build a new dialogue system bridging students, university schools and university stronger together (Dialogue Seminars, Practicum Teams, Rector Forum, Joint Competence Building Weeks, etc.) and continued to redesign the students' practicum content and assignments (Action Learning Assignments (BA-thesis), Field Work (MA-thesis), "Punktpraksis", "Overtakelsespraksis" etc.).

Although the university school project is one of cornerstones in the synergies between our universities, we here take the opportunity to briefly describe the focus of the university school projects at the to institutions.

### UiT The Arctic University of Norway

The University School Project has developed models and strategies for organization, content and communication related to the practicum dimension in the master degree programs at UiT. Furthermore, the goals are to promote R&D related to University Schools, to build networks and share and disseminate the insights from the projects, and finally to developing competence at the University Schools.

The main new initiatives in 2015 has been on designing models for practicum placements that support the professional development of the student teachers throughout the five year MA program. This innovative work is supported both by revising the study plan for practicum placement, but also to (re)design the practicum models ('introduction week for first year students', 'punktpraksis', rural practicum placement, 'international practicum placement'). The study plan and also the models are developed in close relationship with the University schools and the academic staff on campus.

Through 2015 the university schools and the university have identified a shared wish for strengthening the R&D-dimension of the partnership, and the project Ipad in supervision (Nettbrett i praksisveiledning<sup>1</sup>) has been successful in collaboratively developing supervision during practicum placement. Also, there has been initiative to design new models for R&D-collaboration, for instance through part-time positions shared by school and university.

In 2015 two new schools were appointed status as university schools, and these schools are connected to the UiT campus in Alta where Master in teacher education 1-7 is delivered in a flexible model (the first students were enrolled in 2014). As the university school project is new in Alta, the main goal in this first face is to facilitate the practicum placement and develop a common ground for the partnership. It is however promising that there are already signs of a more equal partnership between schools and university University School Project in Tromsø, website:

[https://uit.no/prosjekter/prosjekt?p\\_document\\_id=288271](https://uit.no/prosjekter/prosjekt?p_document_id=288271)

#### University of Oslo

The university school concept has grown both qualitatively and quantitatively throughout 2015. Qualitatively, this is reflected in student active and student centered practices such as the video mediated supervision and assessment project<sup>2</sup>. This project showed how student teachers become producers of their own data and material for a research based approach to their professional development. The project is analyzed in a scientific paper currently being written.

Another innovative approach is the use of teachers from university schools as so-called "Practice teacher 2's". Together with academic staff they co-develop the course Prof1015, where teachers bring school perspectives into the academic course and schools are the hosts for student groups during an intensive practice week. This builds on boundary crossing perspectives currently being examined and advocated in research on teacher education. Linked to such practices is also an R&D based exam assignment where methods such as observation and interviews are integrated.

A third effort is the establishing of seed money for joint research efforts initiated either by the university schools or the department/ProTed. Nine schools have received seed money for projects, and will supported and accompanied by experts from the department.

There are regularly seminars, lectures, and arrangements involving university schools. The number of university schools has been expanded to 20 (from 13) based on the success of the partnership.

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<sup>1</sup> <http://www.praksisveiledning.no/prosjekter/nettbrett-i-praksisveiledning>

<sup>2</sup> See <http://www.uv.uio.no/proted/utviklingsomrader/digitale-leringsomgivelser/Videobasert%20vurdering%20for%201%C3%A6ring%20av%201%C3%A6rerstudenter> for details and video production

## Overall reflections

The university school partnership is perhaps the, so far, most enduring and promising project in ProTed. The more experience we gain, the more opportunities for development and refinement we see. The opportunities center upon making experience based knowledge visible and articulated in a way that, in turn, makes it possible to make connections across academic and experience based knowledge that boost students' insights (forthcoming paper) and professional development. University schools, thus, function as arenas for professional qualification.

## Work Package 3

### Introduction

A national challenge evidenced by numerous reports as well as in "Lærerløftet" is the weak or non-existent preparation of student teachers for a technology rich society and matching educational practices. In 2014, and at both UiO and UiT, professional digital competence (PDC) has been a prioritized area. Both institutions have experts in the field as well as having established labs devoted to ICT and digital video production. We have published and presented extensively on what PDC entails, and are currently operationalizing these insights into our programs.

### University of Oslo

The projects listed below have as a common denominator that they seek to develop and implement student active learning approaches. Such approaches often lend themselves to networked information and communication technologies as these suspend constraints in time and space. Also, such technologies offer a series of representations (text, sound, images, animation, simulations...) that makes it necessary for student teachers to engage in designs of learning environments and learning trajectories.

**Professional digital competence** as a concept has been thoroughly developed (see publications) and is currently being implemented in the five-years master's programs in the form of a combination of lectures and workshops for students. **Digital exam** is a new style exam which has attracted a lot of interest nationally and is one of our main innovations. Project leader Ketil Matiassen now has a central function at UiO and at the faculty of education in particular. He also participates in the working group connected with Norgesuniversitetets work in this area. **iPad-project:** A pilot with students has been carried out spring and autumn 2015, and will be further developed on the basis of these experiences. The effort has attracted interest nationally as well as internationally. This project is also detailed under WP2 (above) and with na link to the video production). In the next phase the pilot will be developed by a stronger connection to the students' school subjects and by involving mentors in schools and subject didactic experts at the department (ILS). The aim is to have ca 10-12 students in each school subject. At the same time there will be an increased focus on developing a more systematic knowledge base in this area. The project was reported to NSD and with an application for involving more people. The project is expected to make visible new dimensions of collaboration between campus and schools. **SPOC for developing professional digital competence in practice:** Throughout 2014 and spring 2015 we developed the first module for Professional digital competence for students in the five-year master's program. 2-3 additional modules are currently being designed. A SPOC (Small private online course, FutureLearn as application) is used for this purpose. This module constituted a mandatory component in the in the recently developed course PROF1015, Professional identity , learning and teaching, which is part of the third semester in the five-year master's program. An evaluation is currently in progress. The next phase will consist of two efforts: evaluation and revision of the first module, and development of modules 2 and 3 which will be integrated in semesters 6 and 7 in the program. The common denominator is how ICT is used in specific school subjects (representations, activities, tasks, assessment issues etc). **The project «Flipped classroom»:** All available learning resources in pedagogy and subject didactics (so far English and History), are placed in Canvas. A number of digital resources have been developed as well as interviews, introductory video clips etc.

This affords a learning and teaching approach that frees time for discussion and student involvement as more uni-directional delivery of course material is available regardless of space and time. Evaluation is currently ongoing. The project is carried out in close collaboration with UiO's IT section (USIT).

#### UiT The Arctic University of Norway

ProTed Tromsø continued the positive development regarding digital technology in 2015. Several project's was explored further. Based on the ideas at UiO we have carried out a new style **digital exam**. Furthermore, at UiT ProTed together with Department of Education launched a **Digital Year** to raise the awareness of digital learning environments, for instance through seminars. In addition, ProTed together with UiT has established a **FutureLab** at the Department of Education, where students together with researchers arrange series of seminars. In 2015 ProTed has also worked on a project to map students professional knowledge. Also, there have also been some new initiatives. ProTed has become member of Tromsø EdTech, a network bringing together institutions who in different ways work with educational technology. Finally, in August 2015 a PhD-candidate started her project on students' professional digital competence.

#### Overall reflections

ProTed's work on professional digital competence (PDC) is published and presented in numerous ways and made an impact in the field. From this robust and research based foundation a principled integration of PDC in the programs have started and will be combined with student teachers development of designs for technology rich environments and trajectories.

#### Work Package 4

##### Introduction

Educational leadership and staff competence development is in the context of our universities sometimes understood as separate processes, where educational leadership is restricted to a task of the head of program while staff competence development first of all is understood as the single staff member's efforts to enhance his own career. In addition, leadership is often focused on organizing and managing programs while responsibility for the content dimension is distributed to the academic staff. This is also a national challenge. In WP4 ProTed is focusing on educational leadership and staff competence through building cultures for sharing and analyzing teaching in integrated, researched based teacher education and where structural and content related dimensions are aligned. A common lesson at both universities is the need to forge stronger links between ProTed leadership and institute leadership at several levels. This is a priority in 2016.

#### UiT The Arctic University of Norway

At UiT the main goal for 2015 in UO4 has been to develop the staff's competence in supervision of the students' MA theses. The first phase of the project (2014-2015) was concerned with the first students to complete the five-year master programs for 1-7 and 5-10, and the main measures were staff seminars for sharing knowledge and experience. The second phase (2015-2016) is in addition focused on evaluating the first experiences with the MA-thesis processes, and also on developing a common infrastructure between the programs and across the supervisors and subjects.

In 2015 there was also a staff workshop on the subject teacher's role in the students' practicum.

#### University of Oslo

At the University of Oslo, UO4 has still been concerned with implementing the study model amongst our staff. During the last few years, after the introduction of the new study model ("PUPILS"), there has been an increasing number of newly employed staff coming to our institution, and these need to be

introduced to the nuts and bolts of our study model and how ProTed works with developing integrated teacher education as well as the thinking behind it. Both 'old' and new staff are systematically allocated ProTed tasks and with allocated time resources. This has resulted in the following activities within the UO4 in Oslo:

- Completion of four thematic workshops for our staff concerning different aspects of our study model:
  - What is a high quality digital case for our exams?
  - Dialogue seminars
  - Micro teaching
  - Common evaluation of different types of student exams
- Completion of a two-day seminar for our staff concerning quality in the practicum component of our study model
- Initiation of a number of working groups focusing on the further development of the practicum component of our teacher education program: assessment criteria, practicum reports etc.
- Initiation of a group working to get a coherent composition of the different courses of methodology within our teacher education program
- Completion of two courses for parts of our staff:
  - An outline of the development of the new study model for newly employed staff
  - Core-practices
- Continued work with documentation of the new study model, hopefully to be published in an article in 2016

### Overall reflections

We see the need to forge stronger links between WP4 and leadership at department level at both universities, in particular with heads of studies/teaching. At both institutions steps have been taken and will continue to be taken in order to strengthen this connection. The reason is that as ProTed continuously has gained insights and experience from piloting and experimenting we are now in a phase where implementation in programs can be done without unnecessary risks. With a focus on fewer but more substantial projects in WP1 and WP3? this will continue (as is also recommended by the expert committee). These insights will also be brought into the Knowledge Parliament series planned.

### Work Package 5

#### Introduction

Apart from the evaluation process the work in WP5 has focused on design and quality for the purpose of developing a comprehensive framework for analyzing existing teacher educations as well as facilitating a focused further development of these educations. The framework development is based on theory development in the past years, empirical studies that have been published and an aggregated synthesis of reports from 33 development projects from WP1-4 at both universities.

As a part of this work a seminar on design was held in Tromsø 16.11.2015 with participants from the WPs, the centre leaders and student representatives. The seminar approved WP5's emphasis on integration, development and participation as central design elements, but also suggested that more attention should be paid to the program level of design and how this level interacts with the level of teaching and learning that has so far been given most attention.

As was noted by the expert committee, ProTed has published extensively. Quite a few of the scientific publications draw on the theoretical validation and quality descriptor developed in WP5, in particular work on how we can examine and carry out transformation and develop and sustain transformative agency among students and staff (some in print 2016).

Also to be mentioned is the participation of WP5 in the development of research proposals (INTPART-RECITE, FINNUT) and a proposal for Erasmus+ Strategic Partnership, participation at teacher education conferences and workshops for centres of excellence in education (SFUer) and participation in the international virtual network cooperation ViCoTed under the leadership of Stanford University.

### University of Oslo

The introduction WP5 is also a fair representation of work done at UiO. Our work focusing on a theoretical validation of ProTed projects and initiatives has proved to yield substantial result in terms of impact - both academically (where scientific rigor is a requirement) and when increasingly addressing non-experts since this gives us a principled approach to developmental work. The long list of presentations testifies to this. At this stage we can say that the strategic effort connected to theoretical validation is starting pay off to great extent. There is a very close connection between ProTed leaders and head of WP5 at UiO.

### UiT The Arctic University of Norway

In 2015 the main activity in WP5 has been linked to the evaluation of the first five years of our new master degree program. In Tromsø the main focus in 2015 is to evaluate Pilot i Nord, to synthesize experiences and reflections related to the implementation of the five year program. The process is threefolded; 1) participate and respond to the national discourse (new master degree programs 2017), 2) to facilitate for and prepare documentation for two external expert committees to evaluate our study programs, and 3) to facilitate for reflective discourses in the departments academic staff related to the quality of our programs. The main goals are to disseminate knowledge about our innovation and to redesign and strengthen our programs further.

ProTed have initiated several research projects that are in process: Examples; University School schools and the project RELEMAST (Newly qualified teachers' expected outcomes for their professional competence – follow the first students with a master degree in elementary and lower secondary school during their first years as teachers in Norwegian Schools).

### Overall reflections

In WP5 the synergies between the many ProTed projects is analysed through relevant theoretical lenses. The main strategies forward is to validate and develop theories on integration, design and quality on basis of empirical data from different models of integrated study designs (1-7, 5-10, and 8-13). With the implementation of master of education as the national standards for primary teacher education (1-7 and 5-10) the relevance of this contribution to the knowledge base is evident.

### Overall assessment

Teacher education at both UiO and UiT involve large and diverse communities of expertise. We are aware that many academics nurture perspectives and fundamental assumptions about learning and teaching that do not adhere to the principles cultivated by ProTed. Thus, both UiO and UiT realize we will have to constantly anchor our work with and involve colleagues in our work. This calls for a rethinking of connections between WPs 4 and 5. This realignment is currently in process and will

shape our work in the next years. Our publication record is a powerful resource in this respect, and so are the many opportunities we have at both institutions to present the work of ProTed at staff meetings, personnel seminars etc. In essence, this situation has yielded insights into how development, transformation and implementation are met, picked up, and - when successfully so - appropriated at institutional level. We believe these are important lessons learned that should be shared by other institutions, not least when integrated teacher education at master's level is about to become the norm.

### Dissemination

The enclosed list of publications and presentations reflect how ProTed has addressed all levels and is also a representation of impact.

The Evaluation Committee recommend that ProTed develop a “more diversified dissemination plan that will encompass all three aspects of dissemination (for awareness, understanding and action) in a more strategic manner”. ProTed will follow this advice and develop such a plan in 2016.

### Content and Messages

The expert committee, while recognizing and acknowledging our publication record, also draws our attention three levels of dissemination: dissemination for awareness, dissemination for understanding, and dissemination for action. Our publication record shows that dissemination for understanding dominates. We see that dissemination for awareness and action leaves more to be desired. We are in the process of developing a publication strategy for these categories. Awareness has so far been left to a website that has proved difficult and resource consuming to maintain, and a Facebook presence that is active and quite successful but somewhat limited to brief notifications. Dissemination for action is even more demanding, as this involves active and transformation-oriented parties at the receiving end of the communication. We believe our joint work with the Norwegian Knowledge center for education on a series of Knowledge Parliaments (also commended by the expert committee) is a targeted effort. However, we also realize that dissemination for action is such a huge undertaking that it is worth discussing with NOKUT what are realistic and feasible goals within the resources available.

### Student grants

At UiO, two master students have been awarded grants. One is concerned with education in Palestine and how in a zone of war, tension and animosity it is possible to teach citizenship under occupation (funded by NOKUT). This is of particular interest to the social sciences and subject didactics in this field, but with obvious relevance for education in multi-cultural societies and an increasingly global world. The other grant (funded by ProTed, UiO), was given to a student doing her master thesis on multi-disciplinarity approaches to education at one of our university schools (see also section 4, below).

At UiT, one master student (program 5-10) has been awarded a grant funded by NOKUT. The project is concerned with professional development through further education with a particular focus on Mathematics MOOC. The project is of particular interest for WP3, digital learning environments.

## 3. R&D-based education and integrated models

Student active learning has throughout 2015 emerged as one of the center's prioritized areas, often in connection with the use of digital technologies and digital video recording (see details under the

various work packages). This topic will most likely also be one of our prioritized areas in the next five-year period for the center. The rationale for this effort is the fact that the knowledge base in scientific disciplines is totally renewed in as little as 8 - 15 years, and that counts as valid knowledge and competence has a rapid turnover rate. A research based teacher education implies that we need to educate teachers who can relate to, understand, and make use of research in and on education. Previously, we have in a report to NOKUT<sup>3</sup> analyzed and described the role of R&D in teacher education and with five case studies. Through our work with university schools and with our focus on R&D trajectories from basic to MA level, R&D components become integrated in the programs and linked to the diverse knowledge types at play. The master thesis at UiT is highlighting all the previous steps towards the students' R&D competence. Also, a direct consequence of this priority is the establishing of a proprietary methodology course for student teachers at UiO (previously, they attended the same courses as other students). These examples represent major efforts and acknowledgment of the R&D dimension in integrated teacher education.

### University of Oslo

Our evidence is gleaned from the analysis of student teachers' exam papers in connection with a new style exam. This type of exam aims for ecological validity in the sense that is intended to mirror a teacher's approach to opportunities and challenges in the classroom<sup>4</sup>. In order to respond to the exam task and the situation in the digital video, student teachers need to integrated knowledge from scientific disciplines, pedagogy, subject didactics and their practice experiences. An analysis shows that student teachers do, in fact, manage to produce integrated and insightful exam papers, but that they take different points of departure. Interviews substantiate this analysis by reflecting students' perceptions of the new exam format. Results have been published in our anthology as well as in other publications and several presentations. They have also been theorized in light of current international interest in how to foster transformative agency (see publication list).

If outcomes are associated with higher grades, this would entail a longitudinal effort and a research approach handling a multitude of variables constituting trajectories of causality. The student teachers who commenced their studies at the start of ProTed's work (fall 2012, after one semester establishing the organization) would now be in their 7th semester. Most of the time before this has been spent at disciplinary faculties, while they now constitute the first cohort to engage in more intensive teacher education components such as pedagogy, subject didactics and extended practice. This means that is possible to look for quantitative data on learning outcomes before long. However, the first student cohort will not have received their master's degree before late fall 2017.

### UiT The Arctic University of Norway

One of the major outcomes at UiT is the fulfilment of the first five years of Master in education 1-7 and 5-10. In order to reflect and discuss the integrated study design UiT has developed the Tromsø stairs as a model to describe and analyse integration, learning trajectories in subjects, practicum, and interdisciplinary topics like R&D competence. Step by step the students make professional and academic advancements, and in 2015 the first cohort of Master students level 1-7 and 5-10 completed the five year program with great success. 61 out of 66 students submitted their theses to external evaluation, and on June 1-2 the first five years of Master in Education was celebrated with a master conference with five parallel student presentation over two days, and with Torbjørn Røe Isaksen, the Minister of Education and Research, as one of the invited guests.

The profile of the master theses clearly reflect a integration of R&D and the practice field, which is an indication of the students' development of R&D competence in close relation the schools' knowledge systems. As such this is evidence of integration of different knowledge systems. This is further analysed in one of the WP5 projects at UiT.

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<sup>3</sup> <http://www.uv.uio.no/proted/aktuelt/publikasjoner/artikler/fou-basert-utdanning.html>

<sup>4</sup> For a detailed description, see: <http://www.uv.uio.no/ils/om/aktuelt/aktuelle-saker/2013/digital-eksamen.html>

#### 4. Plans for 2016

Entering 2016, a lot of effort is put into strategic planning of the prolonged status as Centre of excellence (SFU). The evaluation has given a lot of valuable input that is taken into account when the years preceding 2016 are planned. This involves assessing the project portfolio, the profile of the work packages, and the potential impacts of the centre`s work. A new strategy for the centre will be prepared during the spring of 2016. This involves a lot of dialogue within partner institutions, between partner institutions, in the board of ProTed and with various stakeholders and collaborative partners. The evaluation committee has given input about many aspects of our work, and this provides us opportunities to

Alongside this shift, the activity level in the centre remains high. Some of our R&D-activities are in the process of implementation or reconfiguration, while new are emerging, drawing upon previous experiences.

Among dissemination activities in 2016 are the anthology of ProTed, an international research conference in June, a new Knowledge parliament in September and a second University school conference in November.

Both partner institutions are making systematic efforts to strengthen the centre by increasingly channeling personnel dispositions toward our activities.

## Annual Cycle 2016

|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|----|----|----|
| <b>Management Meetings</b>                                    |   |   |   |   |   |   |   |   |   |    |    |    |
| Board Meeting   |   | x |   |   | x |   |   |   |   | x  |    |    |
| Executive Committee   |   |   |   |   |   |   |   |   |   |    |    |    |
| Management Team (MT)  | x | x | x | x | x | x |   | x | x | x  | x  | X  |
| MT and WP-Leaders   |   | X |   |   |   |   |   |   | X |    |    |    |
| <b>Common Initiatives</b>                                     |   |   |   |   |   |   |   |   |   |    |    |    |
| Field Trip to Denmark (WP3)                                   |   |   | X |   |   |   |   |   |   |    |    |    |
| Internasjonal conference «Bringing Teacher Education Forward» |   |   |   |   |   | X |   |   |   |    |    |    |
| Knowledge Parliament  |   |   |   |   |   |   |   |   | x |    |    |    |
| National University School Conference (WP2)                   |   |   |   |   |   |   |   |   |   |    | X  |    |

\*Twice a month the leadership in ProTed Tromsø will have local meetings involving WP-leaders.

## 5. Attachments

- 1) ProTed Personnel and Management 2015
- 2) Publications
- 3) Financial accounts

## Attachment 1

### ProTed Personnel and Management 2015

ProTed is a collaborative partnership between UiT The Arctic University of Norway and The University of Oslo. A common center management is responsible for academic leadership. The two universities are represented at all levels of academic management. UiO is the financially responsible host institution.

#### Board Members

- Pro-Rector Ragnhild Helene Hennum (UiO) Chair
- Pro-Rector Wenche Jakobsen (UiT)
- Dean Sonni Olsen (UiT)
- Dean of studies Eli Ottesen (UiO)
- Head of Department Odd Arne Thunberg (UiT)
- Head of Department Rita Hvistendahl (UiO)
- Head of Naturfagsenteret Doris Jorde
- Student Marianne Siksjø Brevig (UiO)
- Student Vegard Dørum to July 31<sup>st</sup> and Hilde Aders from August 1<sup>st</sup> (UiT)

The Management Team participates in board meetings. The secretary for the board is Senior Adviser Lene Fosshaug from the Education and Research Administration Office at UiO.

#### Executive Committee

- Head of Department Rita Hvistendahl (UiO)
- Head of Department Odd Arne Thunberg (UiT)
- Head of ProTed/Professor Andreas Lund (UiO)
- Head of ProTed/Associate Professor Rachel Jakhelln to July 31<sup>st</sup> and Professor Hilde Sollid (UiT) from April 1<sup>st</sup>
- Senior Adviser Tone Malmstedt Eriksen (UiO)
- Senior Adviser Gørill Warvik Vedeler (UiT)

#### Management Team

- Head of ProTed/Professor Andreas Lund (UiO)
- Head of ProTed/Associate Professor Rachel Jakhelln to July 31<sup>st</sup> and Professor Hilde Sollid from April 1<sup>st</sup> (UiT)
- Senior Adviser Tone Malmstedt Eriksen (UiO)
- Senior Adviser Gørill Warvik Vedeler (UiT)

#### Work Package Leaders (status 31.12.2015)

- WP1 UiO Associate Professor Kari Anne Rødnes  
UiT Head of Program 1-7/Lecturer Henning Marius Sollid
- WP2 UiT Project Leader Universityschools/Senior Adviser Kristin Skaalvik  
UiO Adviser Tove Seiness Hunskaar
- WP3 UiO Head of Program 8-13/Lecturer Kirsti Lyngvær Engelién  
UiT Senior Lecturer Lisbet Rønningsbakk
- WP4 UiT Lecturer Kari-Anne Sæther  
UiO PhD Candidate Inga Staal Jensen
- WP5 UiO Associate Professor Jon Magne Vestøl  
UiT Head of Program 5-10/Associate Professor Ove Drageset

#### Other Personnel

ProTed involve administrative and academic personnel (app. 150) at both host institutions, both in R&D-projects and events.

## Attachment 2 Publications and Presentations

### Publications:

- Engelien, K. & Hunskaar, T.S. (2015). Video-based Assessment for Learning in Teacher Education. In Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015 (pp. 581-585). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- Rasmussen, I., & Lund, A. (2015). Læringsressurser og lærerrollen – et partnerskap i endring? *Acta Didactica Norge*, 9(1), 1-20.
- Rindal, U., Lund, A., & Jakhelln, R. (Eds.). (2015). *Veier til fremragende lærerutdanning. [Roads to excellence in teacher education]*. Oslo: Universitetsforlaget.
- Skarpaas, K. G. Wiese, E. F.; Engelien, K. L. (2015). Utilizing MOOC technology in a campus based Teacher Education Programme. In Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015 (pp. 664-669). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).
- ILP/ProTed (2015). BA-heftet 2015-2016. Bacheloroppgave i profesjonsfaget. UiT Norges arktiske universitet. (New version Information Brochure, 17 pages.)
- ILP/ProTed (2015). Veiviser til praksis 2015-2016. UiT Norges arktiske universitet. (New version Information Brochure, 72 pages.)
- ILP/ProTed (2015). Innføring til praksis. Innføring til praksis for studentene ved integrert master i lærerutdanning 1.-7. og 5.-10. trinn. Studieåret 2015-2016. UiT Norges arktiske universitet. (New Information Brochure, 9 pages.)
- ILP/ProTed (2015). Praksisopplæring. Informasjon til studenter på integrert master i lærerutdanning 1.-7. og 5.-1. trinn. Studieåret 2015-2016. UiT Norges arktiske universitet. (New Information Brochure, 31 pages.)
- ILP/ProTed (2015). Overtakelsespraksis. Innføring til praksis for studentene ved integrert master i lærerutdanning 1.-7. og 5.-10. trinn, 4. studieår. Studieåret 2015-2016. UiT Norges arktiske universitet. (New Information Brochure, 9 pages.)
- Jakhelln, R., Bjørndal, K. & Stølen, Gerd (2016). *Masteroppgaven – relevant for grunnskolen?* Publisert i et spesialnummer av *Acta Didactica: Lærerutdanning i det 21. århundre: tradisjoner, utfordringer, endringer*.
- Jakhelln, R., Bjørndal, K. & Stølen, Gerd (2016) Abstract sent to ECERs (European educational research association) conferanse in Dublin 23-26 August. Title: *Newly qualified teachers' expected outcomes of the master's thesis for their professional competence*.
- Olufsen, M., Karlsen, S., Andreassen, M. & Sortland, A. (2015). Norske masterutdanninger i naturfag for grunnskolelærere – store variasjoner i omfang på masteroppgaver og fagsammensetning. *Nordic Studies of Science Education*.  
<https://www.journals.uio.no/index.php/nordina/article/view/948>
- Skaalvik, K. (2015). Universitetsskoleprosjektet i Tromsø. Rapport 2014-2015. UiT Norges arktiske universitet. (Annual report, 12 pages.)
- Skaalvik, K., Frenning, I. & Danielsen, K. (2015). Sammen gjør vi punktpraksis god. UiT Norges arktiske universitet. (New Information Brochure, 14 pages.)
- Sæther, K.A. & Sollid, H. (2015). Integrasjon og progresjon i norskfaget i integrert master i lærerutdanning 5.-10. trinn, UiT. Unpublished report. UiT Norges arktiske universitet.

## **Presentations:**

- Drageset, O., Sollid, H. M. Sollid, H. & Vedeler, G. W. Evaluering av integrert master i lærerutdanning 1-7 og 5-10, presentasjon på fagdag på ILP, UiT Norges arktiske universitet, august 2015.
- Engeliën, K.: Presentation Kick off seminar for University schools (27.1)
- Engeliën, K.: Presenting ProTeds work at Stanford, School of Education (2-6 feb.)
- Engeliën, K.: Innovation in teaching and learning for the Student Parliament at UiO (27.2)
- Engeliën, K.: Practice as an integrated component in Teacher Education for staff and faculty at ILS, UiO (2-3.3)
- Engeliën, K.: Presentation of work with integrated study design and practice at The National conference for Curriculum guidelines (NRLU) (12-13.3)
- Engeliën, K.: Presentation of ProTed and UiOs Integrated study design for faculty at MN, UiO (25.3)
- Engeliën, K.: Presentation of ProTed projects for students at the Faculty of Social Sciences (16.4)
- Engeliën, K.: Participate and present ProTeds work at "Assessing the effects of ICT on learning outcomes" arranged by Senter for ICT (21-22.4)
- Engeliën, K.: Presentation of work with integrated study design and practice for representatives from UiOs University schools (27-28.5)
- Engeliën, K.: Teacher Education – University of Oslo: Strengths & challenges, an online presentation of UiOs Integrated study design for colleagues from Stanford, Chile, Brasil, Göteborg and Karlstad in VicoTed-project (3.6)
- Engeliën, K.: Presentation of ProTeds work and integrated study design for HiOA and UDE (4.6.)
- Engeliën, K.: Teacher Education at UiO – the students. Presentation for teachers attending UDE seminar for supervisors (1.9)
- Engeliën, K.: The organizational model for UiOs 5-year integrated programme, for representatives for the different Teacher Education programmes that was included in the merging process with NTNU (25.8)
- Engeliën, K.: Models for five-year integrated programmes in Norway – study design as a never ending story (8-9.10)
- Engeliën, K.: Teacher Education at University of Oslo – study design, presentation at Göteborg universitet Brobyggerkonferansen (13.11)
- Engeliën, K. & Eriksen, T.M.: Research and Teacher Education, presentation at Göteborg universitet Brobyggerkonferansen (13.11)
- Engeliën, K.: Presentation of work with automatic feedback on grading/exams, for STUV at UV (7.12.)
- Eriksen, T.M.: Presentation of ProTed for the Board of the Faculty of Education, UiO. Dec. 10, 2015.
- Frenning, I. & Danielsen, K. Presentation at Breakfast seminar at the Department of Education on "Punktpraksis", UiT Norges arktiske universitet.
- Frågåat, T. (Jessheim universitetsskole/Fysisk institutt UiO): Relevant-prosjektet. Retningslinjekonferansen, Fornebu 12 - 13 mars 2015
- Furberg, A.: Presentation of ProTeds work with Professional Digital competence "Seminar on the use of ICT in higher education) (3.6)
- Furberg, A.L; Lund, A. Professional digital competence in teacher education: A conceptual framework and design model. EARLI 2015; 2015-08-25 - 2015-08-29
- Henriksen, E.: Relevant, presentasjon på KiS-avslutningsseminaret 4 desember 2015 (presentasjon og poster)

- Hunskaar, T., & Engeliën, K.: «University Schools as a means to develop Teacher Education – a new form of Partnership». TEPE (Teacher Education Policy for Europe Network) 15/5- 15, Dundee, Skottland
- Hunskaar, T., Lund, A., & Engeliën, K.: A Partnership model: Teacher Education and university schools in collaboration staff and faculty from Gøteborgs universitet, 21.- 22. mai 2015
- Hunskaar, T., & Engeliën, K.: Om universitetsskoler for Karlstad universitet, juni 2015 på HiOA
- Hunskaar, T., & Engeliën, K.: Presentasjon av arbeid med iPadprosjektet i ProTed område 3, på E-learn-konferanse på Hawaii, oktober 2015
- Hunskaar, T., Engeliën, K., Eriksen, T., & Nordland, A. (Nesodden Universitetsskole): Bidrag om universitetsskoler på Brobygggar-konferansen i Gøteborg, November 2015
- Hvistendahl, R., & Vestøl, J.M.: Arven fra KIS og arvingen ProTed: Hvordan forvalte og videreutvikle en suksess? KIS avslutningsseminar 4.12.2015
- Hvistendahl, R., & Lund, A.: Strategic work with learning environments, Faculty seminar (8.11)
- Lund, A. Profesjonalisering av lærere. Skolen i digital utvikling; 2015-11-12 - 2015-11-13
- Lund, A. Profesjonsfaglig digital kompetanse: Hva er det, og hvordan kan vi utvikle det?. Skoleleder dagen 2015; 2015-09-21 - 2015-09-21
- Lund, A: Presentation of the University school concept for applicants for university school status at NTNU, Trondheim, February 10, 2015.
- Lund, A.: ProTed Presentation (NRLU) 12.3
- Lund, A.: Presentation of the University school concept for staff and faculty at NTNU, Trondheim, March 16, 2015.
- Lund, A.: Teacher education as design. Conference on ICT and teacher education. Umeå, Sweden, June 3- 5, 2015.
- Lund, A.: Virtual Teacher education. Researcher Grand Prix. Oslo, August 12, 2015.
- Lund, A.: Presentation of ProTed for Moscow delegation, September 10, 2015.
- Lund, A.: Presentation of ProTed for Athens representative (ERSAMUS+), September 14, 2015.
- Lund, A.; Vestøl, J.M.; Rasmussen, I.: Double stimulation as a design principle: Transforming exams in teacher education. EARLI 2015; 2015-08-25 - 2015-08-29
- Lund, A., Hunskaar, T. & Vestøl, J.M: Presentasjon av ProTed på fagsosial kveld for lektorstudenter ved UiO
- Lund, A: ProTed Presentation – Kunnskapsparlamentet (22.9)
- Olsen, E. H.: Jessheim vgs som universitetsskole. Retningslinjekonferansen, Fornebu 12 - 13 mars 2015.
- Rindal, U. & Sollid, H.: Språkideologier i norsk og engelsk – sosiolingvistikk inn i lærerutdanningen. Presentation on the workshop *Språklæring og læring om språk. Skolen som lingvistisk arena*. MONS, University of Agder, November 2015.
- Schrum, L., Davis, N., Jacobsen, M.; Lund, A; Odabasi, H. F.; Voogt, J.; Way, J. A Global Perspective: Current Trends and Issues in ICT for 21st Century Education. AERA; 2015-04-16 - 2015-04-21
- Skarpaas, K.G., Wiese, E.F. & Engeliën, K.L. (2015). Utilizing MOOC technology in a campus based Teacher Education Programme. In Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2015 (pp. 664-669). Chesapeake, VA: Association for the Advancement of Computing in Education (AACE).

- Skaalvik, K. Presentation at the Peter F. Hjort-seminar, March 2015, UiT Norges arktiske universitet.
- Skaalvik, K. Presentation at Master degree conference, UiT Norges arktiske universitet, May 2015.
- Skaalvik, K. Olsen, S. & Drageset, O.: Lærerutdanning og universitetsskoler ved UiT. Presentasjon for delegasjon fra UC Syd. UiT Norges arktiske universitet, Oktober 2015.
- Skaalvik, K., Sollid, H. & Vedeler, G. W.: Presentasjon av universitetsskoleprosjektet for delegasjon fra NTNU. UiT Norges arktiske universitet.
- Sollid, H., & Lund, A.: Quality and Collaborative Knowledge Advancement: Interaction with society. SFU seminar, November 4, 2015.
- Sollid, H.: Lærerstuderens FoU-kompetanse i norsk som døråpner til profesjonskompetanse? Talk at the conference *Humaniora – tilbake til framtida*, UiT Norges arktiske universitet, May 2015.
- Sollid, H. Rollen som lærerutdanner. Foredrag på seminar om praksisoppfølging, ILP, UiT Norges arktiske universitet, september 2015.
- Sollid, H. Det er ikke likegyldig hvilke oppgaver vi gir studentene! Programseminar ILP, UiT Norges arktiske universitet, september 2015.
- Sollid, H.: Schools as language ideological combat grounds or quiet zones? Presentation on the workshop *Contextualizing linguistic diversity in institutional settings: Interpretations, methods and impact in ongoing research projects*, UiT Norges arktiske universitet, October 2015.
- Sollid, H. Vedeler, G. W. & Frenning, I.: Presentasjon av ProTed for delegasjon fra UC Syd. Oktober 2015. UiT Norges arktiske universitet.
- Sollid, H.: Mainstreaming Sámi in Norway. Talk at the conference *Language Education and Diversity*, University of Auckland, New Zealand, November 2015.
- Sollid, H.: Negotiating languages and languages use in Norwegian schools. Talk at Department of Language and Culture, Auckland University of Technology, December 2015.
- Sollid, H.M., Skaalvik, K. & Thunberg, O.A. Presentation of master teacher education and the university schools concept for Arbeiderpartiets education committee.
- Sollid, H.M., Skaalvik, K. & Thunberg, O.A. Presentation of master teacher education and the university schools concept for Vestfold University College.
- Vestøl, J.M., & Lund, A.: PROTED: Co-configuring Design Elements and Quality Aspects in Teacher Education: A Research Agenda? Helga Eng-dagen 6.11.2015

*In addition, a number of papers are currently in review or in writing.*

*Also, Associate Professor (US) Karen Hammerness (engaged by ILS) has also conducted interviews with representatives from the Ministry of Education as well as with ProTed staff in order to continue her studies on teacher education in Norway.*



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