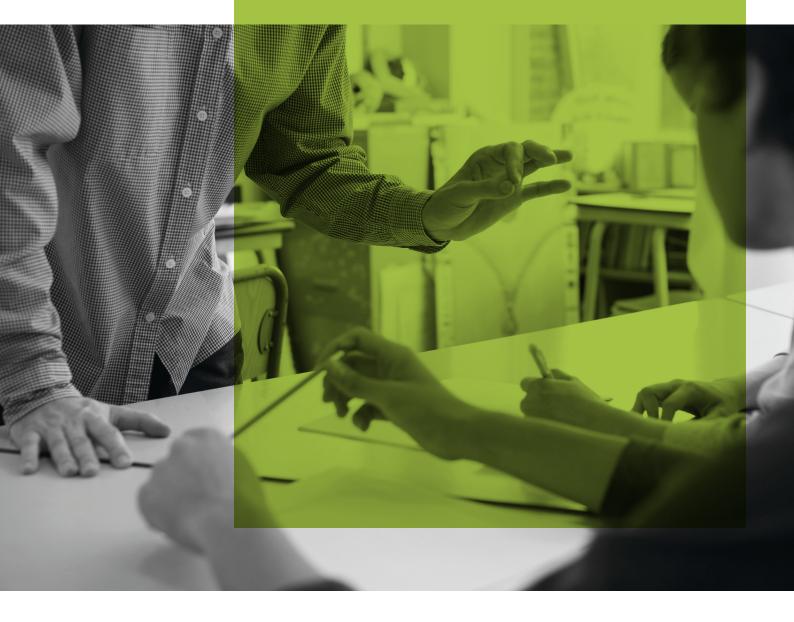
Centre of Excellence in Higher Education (SFU)

MIDTERM SELF-EVALUATION PROTED 2015





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The report for the self-evaluation related to the mid-term evaluation of ProTed answers to the template for self-evaluation assigned by NOKUT. Thus, it should not be read as a presentation of the centre but as an attempt to address the questions posted in the template. The Template is organized in five sections, including all 12 questions and sub-questions. None of the responses exceed the 400 word limit.

Introduction

Status as a Centre of Excellence in Higher Education (SFU) is awarded for a period of five years, with a possible extension of another five years.

In the first three years, ProTed, Centre for Professional Learning in Teacher Education, has established itself as an important actor in the field of teacher education. The common denominator through all our projects and activities is the integration of and research basis for the many components that in sum constitutes excellent teacher education programs. Based on the self-evaluation below, the accompanying matrix that makes our efforts as transparent as possible, and numerous statements by scholars at home and abroad we venture the claim that ProTed is emerging as an *avant garde* community in Norwegian teacher education on these issues, and with a lot of potential for developing this position into broad and lasting impact in the sector.

For analytical reasons, ProTed's work has been divided into five separate work packages (also the basis for the matrix structure). However, with time we have seen how the boundaries between the work packages have waned and that activities involve and intersect the packages. This is currently giving rise to a debate on a slight re-structuring of the centre's prioritized areas. For example, we see a need to go deeper into the roles of the students and their relationships with mentors in schools and supervisors from higher education, and we see a definite potential in collaborating internationally with prominent teacher education communities. Also, we believe our goal is to instigate action and not just collect and mull over the many good intentions found across the sector. The recently developed collaboration with the Norwegian Knowledge Centre for Education on Knowledge Parliaments (see below) is such an initiative.

I. The goals of the SFU program

1) Please reflect on how effective your centre has been in contributing to the objectives set out for SFUs:

Provide excellent R&D-based education

At both universities, ProTed's networked and clustered structure (cf. question 8) has made it possible to involve research projects and communities that previously operated more isolated from teacher education. The result is more researched-based study programs; linking research communities and the practice field. This is in line with the original application and the observations from the evaluation committee which emphasized the combination of strong research communities and close collaboration with the practice field. Examples are Political Science at UiT (translating research and development across contexts), the Horizon project at UiO (how law students, engineering students,

and student teachers are encultured into epistemic communities), and the CATE project which is an international comparative study of teacher education programs. Through ProTed, these research efforts feed directly into design of education programs offered at our institutions.

Program level: At UiT, ProTed has been a driving force in the development of the new research-based five year master's degree programs for teachers grades 1-7 and 5-10 through the project "Pilot up North", which has developed the program from a lower to a higher degree program including BA-theses based on students' action-learning-projects, and MA-theses related to school development and professional teaching. At UiO, research-based integrated teacher education for grades 8-13 has involved research in a complex inter-departmental and faculty structure.

Projects level: The work packages all contribute to the common goal of developing research-based and practice-relevant teacher education and many of the projects involve both university staff, teachers from practice schools and student teachers. Examples of this kind of multi-participant collaboration can be found in projects like "RELEKVANT" and "Innovative Methods in Mathematics Teacher Education", both awarded with prizes for their efforts. ProTed is now mid-way in the first period as an SFU, taking stock of the centre's many projects. We are currently synthesizing reports and lessons learned including how to cultivate R&D dimennions in our study programs.

Many of the projects in ProTed have been instigated or supported to make the distance from piloting to implementation as clearly defined and short as possible. The development of case-based tasks in digital exams and dialogue seminars involving both academic staff and school practitioners are examples of projects that are very closely linked to the research-based core practices in the study programs. In addition, they provide examples of the interconnections between the two partner universities and the complementarity of knowledge emerging from work with their different study programs.

Develop innovative ways of working with R&D-based education

Examples of student-active, R&D-based teacher education in ProTed are provided <u>in a report</u> <u>commissioned by NOKUT in June 2013.</u> But also through the various projects we see e.g. new ways of teaching at the host institutions such as oral presentations and use of drama in mathematics, and new ways of interaction and knowledge sharing between academia and schools such as dialogue seminars and structured procedures for cooperation. Digital technologies and video are used in campus exams and in student practicum in order to link practice to a research base. Teaching and supervision are re-organized to enhance the integration of knowledge and facilitate development of students' R&D competence.

At UiT different R&D-components function as integrating elements through the five-year program, as illustrated in Figure 1. During the first year, the students are introduced to empirical inquiry as a method in education, at the same time put into use both in courses at campus and as guidelines for observation during the first practice placement. The R&D-components progressively evolve in complexity toward the fifth year integrated across teaching, student work and practice placements.

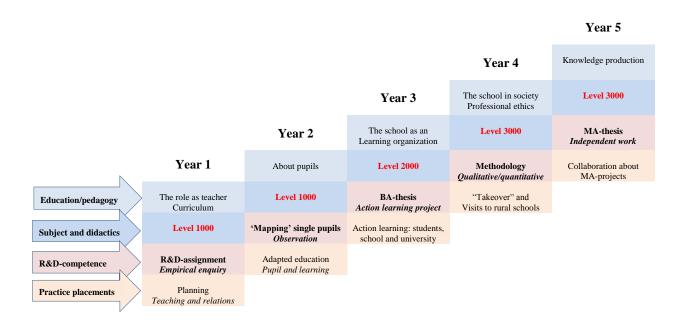


Figure 1. R&D-components integrated with subject, pedagogic and practice placements

At UiO, there is a growing coordination between subject disciplines and the professional components to ensure progression in research-method-based assignments and tasks and across the different research disciplines the students are introduced to. This progression will be further developed in the design of the master's course in the new study program where the subject discipline faculties will include a practice component in the master's degree course in the 9th semester.

The research component is considered an integrating component throughout the program, and a lot of work is done to improve integration horizontally and vertically. This is necessary due to the different methodologies the students are exposed to in their scientific disciplines and the professional subjects.

There is a clear research base for the courses offered at UiO, both in the subject disciplines, in subject didactics and in pedagogy. Research-based education is interpreted as promoting more student-active teaching and learning methods that integrate knowledge that emerges through practice and research. In our developmental work and the new study model, tasks, assignments and exams include different research components, from systematic observation in the first field practice period to writing a research-based essay based on cases from the practice field in the 4th and 5th semester.

Contribute to the development and dissemination of knowledge about educational methods that are conducive to learning (see also IV)

As for the contribution to the development of knowledge we refer to responses to the previous questions and responses to questions in section III. As for the dissemination of this knowledge, we first quote the committee that awarded us the centre:

«The Universities have altogether (...) good opportunities for disseminating knowledge and experiences of importance for the development of teacher education on a national basis." (p. 6, our translation).

This is an ambitious statement. We believe we have met the challenge by documenting the following:

Presentations

Presentations at conferences, seminars, invitations to policymakers and a diversity of actors in the educational sector:

2012: 12 presentations2013: 36 presentations2014: 49 presentations

This brings the total number up to 97 (conservative estimate). The numbers indicate the increased impact of ProTed's work over the three years, but also that this activity has become extremely resource consuming. For details on the various contexts, see the reports to NOKUT for the years 2012 – 2014. However, one evident trend is increasing presence on policy levels.

Publications

Based on the above reports, we find that people connected to ProTed have published or been involved in the publishing of 16 scientific papers (articles in peer reviewed journals and book chapters), 4 reports, 3 video productions, as well as examples of newspaper features, leaflets etc.

The profile of this output shows that it is thematically related to R&D dimensions in students' learning, renewal of didactics and in particular with regard to the use of ICT, developing professional digital competence for student teachers, and renewing practice approaches and mentoring. In sum, our publications have centred on issues of integration in diverse forms, and how new partnerships between universities and schools can be further developed. More publications including an anthology are in process.

Taken together, presentations and publications indicate impact on output level. How this has been perceived and appropriated is difficult to assess after a short time. However, the increasing number of invitations suggests increasing impact.

Finally, we consider our strong alliances with e.g. The Knowledge Centre for Education and the National Centre for ICT in Education to be conducive to dissemination. Collaboration with others has brought about conferences and the recent initiative "Knowledge Parliaments" involving all teacher education institutions in Norway in order to identify consensus on as well as innovative practices that make up excellent teacher education.

2) What key lessons has the Centre learnt about being an SFU that can be passed on to other SFUs?

Key lessons can be summarized as follows (for more organizational features – which are also of importance in this section – see section III):

Developmental unit

The centre has been defined and run as a "developmental unit" at the two institutions, i.e. facilitating development towards coherence, innovation and staff commitment. This has been crucial in bringing about change and instigating innovative. Also, this sets an SFU apart from an SFF – an important distinction. As a consequence, it has been possible to increasingly involve a number of colleagues and leadership at all levels. Anchoring the centre in this way is a crucial factor. Of particular importance is forging links between academic and administrative staff. Important development of e.g. the university school project depends on such cooperation. However, one must realize that this exceeds what would normally be expected in terms of the institutions' contribution.

Strong involvement of the Head of studies/teaching

Another crucial factor has been the strong involvement of the Head of studies/teaching. The lesson learned here is that this is a key function for going from experiments and projects to implementing these (when successful) in the programs and courses offered at the two institutions.

Forming alliances

In order to carry out some of the more demanding tasks such as large conferences, constructing innovative and research-based knowledge, and taking on national responsibilities, an SFU should form alliances wherever possible. ProTed has done so primarily with The Knowledge Centre and The National ICT Centre, but also other teacher education institutions and, of course, a series of university schools.

ProTed – an events manager or a developmental unit?

There are some dangers to be aware of. The expectations and responsibilities of an SFU do not match the funding. In particular, this pertains to national responsibilities, effective dissemination and promotion, and responding to the massive demand for appearing at conferences, meetings, seminars, and other related activities. There is a definite danger of taking on so much that the centre becomes an events manager (dissemination responsibilities) more than a developmental unit and falls into an "activity trap". Such activities cannot be met by a system of "top financing" but needs to be reconsidered as a particularly resource demanding activity (see also Carlsten & Aamodt, 2013 for an analysis of the mismatch between ambitions and resources made available). A reconsideration and clarification on priorities between development end dissemination is needed.

Leadership support

At both UiO and UiT, ProTed has been promoted extensively as a "Flagship". The links to the university leadership levels have proved immensely valuable.

3) What important messages do you want to convey about the experience of being part of a wider SFU arrangement (and network of centres of excellence)?

Although ProTed operated as the only centre of excellence from its start in 2012 until 2013, we quickly learned to appreciate how the mutual interests of all centres converged on certain themes (the research base, involving students, and dissemination issues). However, there are some

substantial differences between the three other SFUs and ProTed: the other three have fairly focused subject domains to concentrate on (music, math, biology) while ProTed, in fact, caters to all school subjects taught at the universities as well as the professional disciplines (pedagogy and subject didactics) and – not least – the knowledge domain that develops from professional practice.

We have experienced some concrete benefits from being part of the SFU network:

- An increased interest in the education sector for SFUs as a new type of instrument for quality assurance and innovative initiatives.
- A recognized mutual interest among the SFUs in certain domains. In particular, we have met
 with representatives from matRIC on several occasions. Since ProTed is involved in a series of
 math projects, this has proved to be a fruitful collaboration, on subject specific issues as well
 as arrangements.
- With CEMPE, we recognized (during a seminar at the Board of Universities and Colleges) on R&D that we shared an interest in how we theoretically can conceptualize excellence in the form of transcending or going beyond existing practices.
- Together with UiT and NOKUT, ProTed February 2015 arranged a conference with the theme: Leading quality development in study programs. One of the other SFUs, bioCEED, was one of the contributors.
- There is also important collaboration between SFUs on more administrative tasks such as reporting, publishing the SFU magazine and discussions on funding.

II. The goals that the Centre put forward in the application

4) What have been the greatest achievements of the Centre to date?

Overall level:

- From all the invitations, appearances, visits, receptions of guests and how our work is noticed, we experience that **ProTed is recognized as an expert unit on integrated designs for teacher education**. This is perhaps our greatest achievement to date.
- Two teacher education communities with very different histories, cultures, and study
 programs have managed to add complementary competences to the effect that the result
 exceeds the sum of the parts. This is evidenced by how innovative ideas, measures, projects
 and implementation have travelled between the two institutions and been adapted locally
 (dialogue seminars, digital exams, R&D-based assignments).
- We have succeeded in contributing to an international perspective on teacher education.
 The network structure (see Section III) has afforded a broad interface with leading international communities which have made it evident that we are concerned with the same issues.

Project level:

- A series of projects that examine and seek to bridge the distance between the scientific
 disciplines and school subjects as well as to redesign the school subjects for a new master
 degree program through innovative approaches have culminated in a synergy seminar, book
 chapters with new insights and two prizes (cf 1a).
- The University Schools concept has been adopted at many institutions, also abroad (through consulting ProTed). A highlight was the first ever conference (2014) with university schools and new partnerships as a theme. Through this, as well as in a survey, university schools say they now consider themselves teacher educators, not just recipients of student teachers. This is a considerable achievement. Also, the success has increased the number of university schools to a number of 28 that are now linked to ProTed.
- A definite impact on the use of ICT and developing professional digital competence in teacher education. This is evidenced by a number of scientific articles/book chapters and the "School for the future" conference where ProTed was responsible for teacher education having its own track with these themes. Finally, our bold, integrative "digital exam" has become a trade mark, attracting attention from the practice field as well as from research.
- ProTed has also developed a conceptual framework rooted in action research and culturalhistorical activity theory. This is to theoretically validate our work and our perspectives on transformation and development, and not merely produce a series of examples.

5) What did you expect to achieve that has not been achieved? What prevented the Centre from reaching these goals?

The original application documents a complex landscape of goals and aims, again reflecting the horizontal topography of teacher education with its many components. Although we have not achieved all goals on a detailed level or terminated some projects before achieving certain goals (cf. the matrix with certain cells with light blue background) we argue that our main goals have been more than achieved. We do not find any goals or projects that can be categorized as "glorious failures".

However, we had hoped, but realistically not expected, to make better use of the media in order to keep a permanent "push" – both institutionally and beyond (newspaper, trade journals). This work is very time consuming and came in conflict with the very high activity level and "events manager" syndrome. Consequently we adopted a strategy involving extensive presentations and appearances, publications in books and peer-reviewed journals, and an anthology reflecting a state-of-the-art picture of teacher education the way it has been developed by ProTed.

In retrospect, we should have identified the tension between branding and dissemination on the one hand and what it takes to instigate and follow up on so many projects. We would have needed systematic and massive professional communicative assistance in this, but under-estimated the need (cf. question 12). When we acknowledged this fact, such support proved very difficult to get. A separate funding of such activities should have been planned in the application but also been acknowledged by the funding bodies as a consequence of this mandate. While we argue that we

have met, and possibly exceeded, ambitions on organizational and project levels, the communication level has emerged as an Achilles heel.

6) How has the work of the Centre made a difference for students within the host institution(s)? How has the work of the Centre made a difference for students across Norway?

Exams of higher quality, seminars, and practice periods at the university schools

Regarding the first question, the centre has made a difference. Hundreds of students have met new, integrative measures in the form of R&D-based, integrated, and digital exams, dialogue seminars, and practice periods at our university schools. Students are involved in developmental work such as accreditation of new university schools, reference groups for the digital exam, and they are involved in several research-based projects (Relekvant, Drama in math, R&D in the tuition of Norwegian, disseminating the discipline of History through newspaper features, also see ProTed's report on R&D). We also refer to the report to NOKUT for 2014 for further details.

Systematically involvement of students

With less volume, ProTed has involved students systematically on an organizational level. They are members of the board, members of reference groups, asked to respond on certain topics and to share their "inside" experience of integration in the programs, representing ProTed in conferences and seminars. Students from other institutions and students' organizations have also been represented at ProTed's national arrangement (ICT conference, university school conference). ProTed has, at both universities, developed strong links with the students' organizations and been invited to their arrangements.

The Students Innovation Seminar

ProTed has also, together with students, developed *The Students Innovation Seminar*. At these student driven seminars, the students articulate and propose needs and ideas according to a chosen topic, in order to supplement the R&D-based integrated teacher education program. The arrangement covers students, university teachers and practicum mentors in the teacher education programs.

Enthusiastic students

Our students engage actively in the national discourse on teacher education and school development, and we have examples of how students participate by writing in local and national newspapers. Quite often our students are invited to present results from their student work (BA- and MA-thesis) at conferences and seminars where they also participate in discussions related to school development and teacher education designs.

Influence beyond UiO and UiT

Regarding the second question, we take it that this does not propose a possible one-factor causal relationship between establishing a centre and after a short time identifying effects on a national scale. Inside the host institutions the way for piloting to implementing is short, but the way is longer on the national level. However, the fact that so many institutions adopt our concept of university schools and our extensive dissemination activities (cf. 1.c and 11.c) indicate that we exercise quite some influence on developing teacher education beyond our two institutions. This will be pursued in the years to come.

7) Please set out the aims and objectives specific to your centre at the start of the period; and for each one reflect on the degree to which these have been achieved. Please add any objectives that emerged as the centre developed, and reflect on these and the degree to which they have been achieved. (400 words maximum per aim or objective) In order to respond to this request in a systematic and transcendent way we have constructed the attached matrix. Due to the many and diverse measures instigated in order to achieve the aims in the application (and with some added along the way), the sheer volume of separate reflections on each would inflate the volume of this report.

The structure of the matrix rests on four columns labelled:

- Plans and intentions in application
- Measures
- Documentation and dissemination
- Results and impact

The first column re-visits the original application to become an SFU with the plans and intentions that were outlined in this document. The second column gives an overview of the measures that have been taken in order to operationalize plans and intentions. The numbering in the original application is referred to (in brackets). Note that there are quite a few measures that have been added along the way, marked in green. A few have been terminated for various reasons (identified by light blue background). The third column lists documentation and dissemination efforts, and the fourth column identifies results and impact.

The first part of the matrix seeks to capture the overarching level of the centre's work. This is followed by a systematic breakdown of what has happened in the various work packages. The work packages constitute the girders of the centre, and although they are analytically kept apart they are reciprocally constitutive of building the research-based, integrated master's programs ProTed is involved in (see Figure 2). The matrix is complementary to this self-evaluation in the sense that it can be consulted in order to substantiate claims and assertions in the present text. It is intended to make our complex work as transparent as possible. However, the form is not functional if trying to take it as a point of departure for understanding the overall character of ProTed's work. The matrix should be consulted with this in mind.

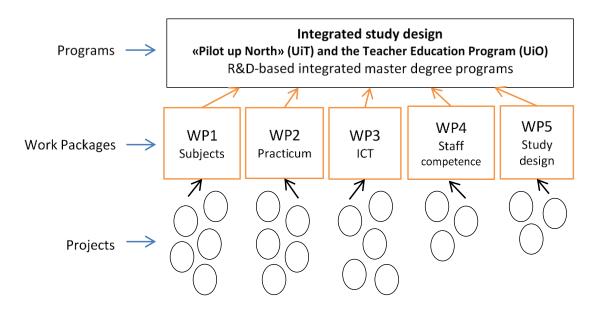


Figure 2. ProTed and master degree programs; projects and work packages 2010-2016

III. Organization of the Centre

8) Describe the place of the Centre within the host institution(s) and outline its impact within the institution(s) overall (i.e. beyond the host department(s)).

The centre is not considered an organisational unit itself, but functions at a network or "moving mosaic" clustering efforts to improve teacher education together with a great number of colleagues at the two institutions.

The overarching goal for the centre is to promote integrated teacher education, and this also provides a mandate to move across institutional and organisational boundaries to join efforts.

In close collaboration with the leadership at the departments on both partner universities, the centre systematically involves strategic partners and research groups in our work. Both departments (ILS/UiO and ILP/UiT) consider ProTed a developmental unit within the organisation, promoting developmental work inside the departments and beyond. Thus, the centre's organization model reflects the horizontal landscape of teacher education with its many components, and provides more opportunities for impact beyond the host institutions than a less networked model would offer (cf Figure 3, below).

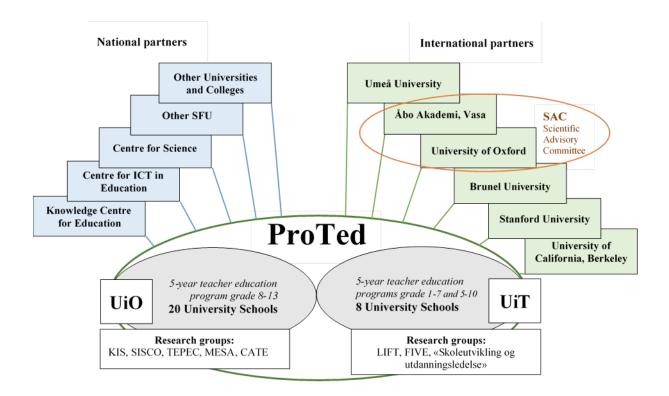


Figure 3. ProTed's network of partners; in host institutions, national and international. Note that collaborating departments and faculties at the two institutions have been omitted but are subsumed under the two universities.

The ProTed landscape as a cluster or network that links various actors in the teacher education field and connects them to research efforts. The landscape is not complete, but should be detailed enough to offer a representative image of the how activities are positioned.

It is important to note that the two teacher education departments involved have systematically allocated human resources to the centre. For example, new employees (PhDs as well as administrative and scientific staff) will often have ProTed related work written into their work plans. Furthermore, at ILS a new position as Associate Professor in professional subjects directly linked to ProTed has been announced. A similar position will be announced during spring 2015. This also emphasizes the centre's perforated interface with the host institutions, and emphasizes how ProTed's work with integrated study designs also impact on recruitment.

9) How is the Centre functioning as one unit (related to the organizational model at the institution[s])?

How does the organizational model affect, or have the possibility of affecting, other departments at the institution(s)?

Teacher education is a multidisciplinary program. This means that all of the faculties and most of the departments are affected by teacher education. At both universities, the teacher education, as the only concrete program, is mentioned in the main strategy, which indicates that the institutions prioritize the teacher education programs highly.

At the University of Oslo, all of the faculties and most of the departments are providers of teacher education. ProTed as a centre of excellence enforces the opportunity to instigate developmental work in collaboration with departments at other faculties. When asked to choose one measure to improve teaching and learning methods for teacher students (WP1), the departments have instigated pilot projects that have the potential to improve teaching and learning methods for all of the students in the subject disciplines, such as learning methods involving more oral activities (both language and science subjects). In this sense, ProTed and the other faculties have established common interests.

At UiT, the Department of Education is the main provider of teacher education programs 1-7 and 5-10, an innovation on a national scale as well as locally. The department also hosts a variety of teacher education programs (from Kindergarten to grade 13), as well as several relevant master degree programs (Pedagogy, Didactics, Special Needs Education etc.). ProTed has nevertheless had an important impact on the university as a whole, in the institutional effort to increase status of teaching and learning to the same level as research. The centre has contributed in strategic discussions with deans and pro-rector of education, and has also given advice to other groups on campus which are working with plans for new centres of excellence in education. UiT is also a provider of teacher education program for 8-13, and plans to involve the program in ProTed in the immediate future.

How have the deans, or equivalent, from the other faculties given input to the centre/development/potential dissemination?

All levels at both universities are represented in the board of ProTed. Because the teacher education at UiO involves all the faculties directly, the board also includes a representative from the subject discipline faculties, currently from the Faculty of Mathematics and Natural sciences.

In 2012 the organisation of the teacher education program at UiO was re-structured. The department of teacher education was given "ownership" of the integrated master's program, thus being responsible for coordinating all the activities between involved faculties and departments. A coordinating committee (STYLE) was established to ensure input, collaboration and participation from all faculties.

UiO has commissioned financial support to reinforce the development of the teacher education program. This has allowed the subject discipline faculties to establish new positions to support collaborative efforts. The faculties/subject discipline departments are involved through participation projects in WP1, but also in strategic priorities and initiatives related to the program as a whole, instigated via STYLE.

Overall, the collaborating faculties have taken a whole new interest in and ownership of teacher education in the course of the last few years. This is confirmed by available statements made by all of the faculty deans and representatives from management and support units at the central level at UiO. Rector at UiO, Ole Petter Ottersen, sums up UiO's position: "Teacher education is the mother of all education".

Relevant activities at UiT: i) the conference "Leading quality development in study programs" arranged in Tromsø, used input from deans at other faculties in Tromsø. ii) The Faculty of Health Sciences at UiT has established a centre for development of quality in teaching and education (HelPed) and there is an ongoing dialogue between the leader of ProTed in Tromsø and the leader of

HelPed. iii) The rector at UiT has initiated a committee for quality in education involving all the deans for education. ProTed has taken part in the committee's meetings.

In September 2013 UiT merged with the University College of Finmark, an additional teacher education campus in Alta. A new flexible MA program level 1-7 started up at the campus in Alta fall 2014. Each of the students in Finmark cooperates with a mentoring team, with one teacher from the university and one from school. Two new university schools are currently established in Alta, which will give ProTed the possibility to try out tools such as the dialogue conference under new circumstances.

How will the work and achievements of your SFU continue after this five-year period (possibly also if the funding ends)?

In Norway, the teacher education landscape is currently re-designed. Partially, this has to do with the recent decision to make five-year master programs the backbone of teacher education. This has brought about a discussion on how many teacher education institutions that can meet the demands from such programs (supervision at master's level, research-based education etc.). The content and components of such programs will continue to be fiercely debated.

With funding:

With its extensive work and experience with master's programs, ProTed will be in a position to influence and guide such efforts and mediate the joining of forces and knowledge in teacher education nationally.

Other scenarios that emerge: A new R&D based role of teachers also indicates a change in the role of students. ProTed is ready to explore and develop the students' more active role in teacher education. When most of the schools' teachers are educated on a master's level, we expect to activate student teachers to greater extent. ProTed will be in front in this new situation, and see the possibilities in research efforts, collaboration with alumni and developmental projects in schools.

In collaboration with Stanford and universities in Sweden, Chile and Brazil, ProTed's five work packages will form the backbone of international collaboration on teacher education, mediated by the virtual world, ViCoTed, developed at Stanford. As the other partners in ViCoTed identified with our five themes (WPs) in teacher education, we see exciting possibilities including internationalization of teacher education.

ProTed is currently written into large-scale research efforts, one on building an infrastructure for collecting meta-data on learning and instruction and to be used by student teachers as well as university schools, and one leading up to a proposal to establish a centre for learning analytics (CELA). Collaboration on a European level will continue and expand through an application to ERASMUS+ strategic partnership for design and innovation in teacher education programs.

Without funding:

The work and achievements will continue to influence long-time objectives and development at the host institutions, but the centre as a bi-directional unit will cease to function. Development of integrated teacher education programs will return to be the individual institution's concerns and

responsibilities. Integrated programs will not be able to draw on results from complementarity and reciprocity. On a broader scale, the continued national impact and the ambitions and visions we present in response to section V, will have to be abandoned.

For centres based on collaborating institutions: How effective has the collaboration been? What worked and what did not? Were there tensions because of different priorities at the two institutions?

The collaboration between the two partner universities is formally regulated in a consortium agreement. The organizational model below illustrates how the centre is organized and managed to secure the continuous coordination of all the ongoing activities.

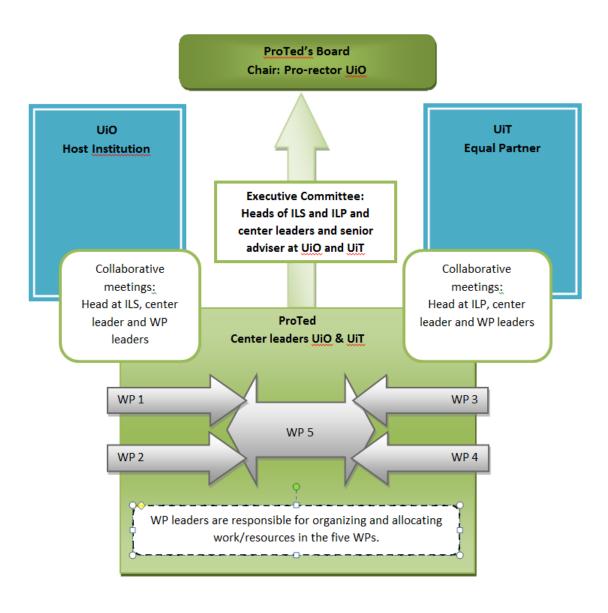


Figure 4. ProTed's organizational model

The experiences in ProTed have demonstrated that close cooperation between two institutions requires deep knowledge of each other's culture, teacher education programs and organization.

These processes take time, but are necessary in a project where we translate different measures between the two different teacher educations and learn from each other. Among the most effective mediators of collaboration is the use of Skype meetings, often several times a week. The activities in the centre are also closely coordinated with the department heads (Executive committee) and the heads of studies at the two collaborating departments.

The cross-institutional collaboration has turned out to be less of a challenge than might be presumed due to the common overarching goal of integration. In several cases, the two institutions have been directly influenced by each other, and have adopted and assimilated models developed within the partner institution. Examples of this are digital, case-based exams and dialogue seminars, practices that have travelled between the education programs. To draw on each other's network has been another positive influence of this collaboration. The consortium is still very young, and the potential for joint efforts in the future is growing.

The complexity and diversity of the centre, with the range of ongoing activities, is both a strength and a challenge. A challenge because it can be difficult to disseminate and communicate the connections between the many projects, but also a strength because in sum the work executed by the centre provides experiences relevant to all teacher education programs in Norway. The continuous exchange of experiences derived from the developmental work gives continuous, valuable relevance and further development of these activities.

More prevalent challenges than cultural differences and differences in program design are practical difficulties related to the fact that two different systems for accounting and communication (e.g. web) do not necessarily merge seamlessly. These challenges take time to solve, but the centre continuously works to solve these practical obstacles. However, with two institutions involved the number of obligatory passage points increase considerably. This requires a flexible and adaptable approach to the numerous issues and challenges that appear on a daily basis.

IV. The impact of the Centre

10) What impact has the Centre had?

- at the host institution(s)?

(See also questions 8 and 9). Both the host universities have emphasized teacher education in strategic documents. The following quotes from the universities can be seen as empirical carriers of ProTed's impact:

UiT The Arctic University of Norway

The establishment of ProTed happened (...) [when] we had just implemented our 5-year integrated Master in Education (...). This long term project needs a continuous focus on innovation and development, and ProTed (...) has strengthened this focus and helped the development of the new teacher education.

ProTed is important both for the department of education and the faculty hosting the centre. This can be exemplified in that it is given priority in strategic documents at both levels (...). It is also important for the faculty that extra funding is secured, and that the centre is given Ph.D.-positions to increase the research and development activities.

ProTed has also had an important impact on the university as a whole, in our effort to increase status of teaching and learning to the same level as research. The centre has contributed in strategic discussions with deans and pro-rector of education, and has also given advice to other groups on campus working with plans for new centres of excellence in education (...).

Sonni Olsen
Dean, Faculty of Humanities, Social
Sciences and Education

Wenche Jakobsen
Pro-Rector for Education

University of Oslo

(...) ProTed has contributed to the University of Oslo's increased focus on its role as a teacher educator. The localization of ProTed under The Faculty of Education and The Department of Teacher Education and School Research has resulted in the department's strengthened internal position and increased weight to the department's responsibility for the five-year master's program through its leading role in the Program Board.(...). In addition, they [the faculties] have developed new and clear procedures for continued work with the program, which has resulted in the fact that we today have a creative and inclusive leadership of teacher education at the university.

The collaborating faculties have an increased focus on teacher education in their disciplinary portfolios. For example, The Faculty of Mathematics and natural Sciences strengthened their collaboration on teacher education with an added coordinator for the math and science components in the teacher education program. At the Faculty of Humanities and the Faculty of Social Sciences they have employed external practice coordinators from the University schools.

Ragnhild Hennum Monica Bakken Lene Fosshaug

Pro-Rector Head of Department of Academic Senior Adviser, Education and Research,

Administration Administration Office

- nationally?

As emphasized earlier in this report, we experience that impact on a national level is a result of our organizational model as well as the many alliances we have formed (cf. Figure 3). National impact cannot be directly measured along a unidirectional causal line from establishing a centre to national reform or development with all its variables along this line. However, we have clear indications from the following:

• The sharply increasing number of invitations (cf 1c), especially the number of invitations that pertain to policy levels. Central ProTed colleagues are appointed to national boards and working groups, thus extending ProTed's impact and influence in national contexts.

- A series of national conferences and workshops that have covered research on teacher education, ICT in teacher education, new partnerships and university schools, and developing national "Knowledge Parliaments" for teacher education. Events have involved collaboration with the first finalists to apply for the first SFU as well as NOKUT (learning outcomes, leadership in education).
- An increasing number of publications that disseminate both ProTed's activities in the various work packages as well as contributes to research in the teacher education filed. Of particular importance is the ProTed anthology currently being finalized and planned for publication late 2015.

As in 10a, we invoke external voices to corroborate our national impact:

Following the establishing of ProTed, the collaboration between NTNU and UiO has become strengthened. ProTed has exercised extrovert and inviting work which has contributed to increased dialogue and collaboration on excellent models for teacher education. In particular, NTNU has benefited from ProTed's experiences with University Schools (in Oslo and in Tromsø), and new types of collaboration between the research field and the practice field.

John Brumo

Professor, leader of NTNU's teacher education programs

A strategic alliance has been formed between the Knowledge Centre for Education (KSU) and ProTed. Both centres have a national responsibility for knowledge development in teacher education. In this collaboration, KSU contributes with research summaries and syntheses of themes that are vital in strengthening teacher education as a profession. When ProTed identifies a need, e.g. what characterizes good models for partnerships, KSU can gather and synthesize available research on this theme. Thus, KSU will also receive feedback as to what extent such research is perceived as meaningful by those who will use it.

Sølvi Lillejord

Professor, Director of Knowledge Centre for Education

- internationally?

- Internationally, we have exercised influence by collaborating with and visiting teacher education communities in Vaasa, Helsinki, Gothenburg, Karlstad, Oxford, London, York, and Stanford.
- Together with several of our European partners ProTed is applying for Erasmus+ Strategic Partnership, a project where six European teacher education institutions may explore design of education programs in depth focusing on operationalizing partnerships with schools and developing the R&D dimension at the intersection of schools and higher education.
- At Stanford, ProTed's five work packages will be used as the backbone for international collaboration in the ViCoTEd virtual world.

- In March 2015, a film crew from the European School Net documented ProTed's innovative use of tablets in mentoring and supervision and peer guidance at one of our university schools. This will be made available internationally.
- In May/June 2016 we are preparing for an international conference together with the CATE research project and the GLU (Lower secondary) research community.

Influential scholars in the field assess ProTed as follows:

ProTed is a superb example of the potential in the word partnership in teacher education, and is unmatched elsewhere. While there are examples of research-based collaborations which inform teacher education and school practices in Australia, the UK and US, they are much smaller in scale, in Oxford ours is city-based. They also fail to sustain ProTed's dynamic balance between high quality relevant research, the development of teacher education programmes and the improvement of school practices. Norway has much to be proud of in ProTed.

Anne Edwards Professor, University of Oxford

The ProTed research team is engaging in a rich variety of research projects that are intended to build knowledge about particularly critical questions in teaching and learning. Questions regarding how prospective teachers learn best; how students learn using the newest technology; and how what we learn about students' learning informs teachers' practices are at the heart of their research agenda. What makes their work especially promising is that they are not only investigating these central questions, but they are also doing so in relationship to international research studies and findings, and working closely in collaboration with international researchers. This kind of research design and collaboration helps drive their work so that it will ultimately contribute in substantive and fruitful ways to critical conversations and larger discussions at a global level.

Karen Hammerness, Director of Educational Research and Evaluation at the American Museum of Natural History, New York

11) How have you evaluated your results/impact?

Input (self-evaluation) from several agencies: external consultant, core team, advisory group, board, affiliated PhDs or postdocs, educational researchers etc.

ProTed receives important feedback from our network (cf. Figure 3). In fact, ProTed is constructed with input and feedback as an essential mechanism for our developmental work. The rationale has been to make sure that the direction for the centre is set in collaboration with the field of knowledge and practice that the centre relates to.

For example, ProTed arranged an international seminar with researchers within the field in March 2013, and a seminar in April 2013 with other teacher education institutions which had applied for SFU-status in 2011. These seminars gave us valuable research knowledge and the possibility to mirror ProTed's activities and plans with the work done by other institutions. Also, it has been extremely valuable for ProTed to present our work to our international partners. The cooperation has given

ProTed correctives and the opportunity to take part in an international discourse. ProTed's Board has followed ProTed closely, and has given important feedback on the foci and activities of the centre. The Board has also been active in this period of evaluation, and met on January 5th 2015 to summarize results and impact mid-way in the first period.

Our written output is also reviewed and critiqued by peers in the field, whether it is scholars reviewing for peer-reviewed journals or colleagues critiquing book chapters and reports. On an aggregated level this input is especially valuable as it comes from people with particularly relevant expertise. Together, these voices amount to a system of quality control.

Similarly, we invite researchers in the field to discuss contemporary issues and specific challenges in our work. For instance, we have consulted the EKVA unit for quantitative studies with regard to how to develop indicators for excellence and experts on translation theory in order to learn about how ideas move and take hold.

Our national partners such as the centre for ICT in Education and the National knowledge centre also provide valuable input on a regular basis.

Internationally, the input provided by the SAC will be expanded and enhanced through the plans put forward in the Erasmus+ proposal currently being written. We also consider ViCoTEd to be a potential source for persistent feedback, input and quality control in the near future.

At centre level: management, governance, advisory input, stakeholder conversations and interviews, reports

The centre is involved in a range of projects that have provided self-evaluations in the form of 33 structured reports (available for inspection). Interviews with staff members involved in selected projects have also been conducted. The synthesized material displays how the various projects contribute to integration and coherence in the MA programs.

Pedagogical aspects have been strengthened within subject disciplines by engaging students in feedback (reference groups) oral presentations, essay writing, dramatizations and use of digital resources. The R&D dimension of teacher education has been developed through engaging students in R&D projects related to their own teaching and through the use of means such as gradual qualification, structured supervision, presentation and dissemination of results.

The cooperation and dialogue between university campus and practice arenas has been strengthened through development of new arenas and structures for communication. New applications of technology have been introduced to promote integrated knowledge construction among students and supervisors, such as video case based exams and video based supervision of practice. Educational designs have been refined through the introduction of structural means of knowledge integration and supervision.

At centre level, a main effort has been to develop a consistent framework for interpreting and synthesizing the multitude of factors involved in the range of projects. As the two universities draw on different theoretical traditions in their approaches to educational development, considerable work has also been done to establish a common basis for understanding. The centre has developed a notion of educational design that includes perspectives from the theoretical traditions of the two

universities (cultural-historical activity theory and action research). Additionally, research has been conducted to develop understanding of concepts such as quality and knowledge integration and how these concepts relate to the developmental work taking place in the centre and the affiliated teacher educations.

Several efforts have been made to produce reports and articles to present key aspects of the developmental work of the centre. A broadly composed group of researchers at the two universities has contributed to a research based anthology affiliated with ProTed's five work packages going to be published late 2015.

At project level: appropriate data depend on context but include:

- Student demographics, completion and progression data.
- Student surveys, focus groups and structured interviews.

Our interpretation is that we are asked to provide a description of the kind of data we base our evaluations on, and what these data indicate. (Our responses do not separate i) and ii) in the questions above; i.e. allowing for max. 800 words).

At project level, the question is partly answered above (11 b). Pilot projects are generally evaluated more extensively, whereas more incremental developmental work is evaluated through existing quality development routines and procedures. The following will give an extract of available documentation at program level at both partner institutions.

At UiO, the multitude of developmental work conducted at program level has generated a need to reconfigure how program evaluations are conducted. This has resulted in a new template for self-evaluation based on seven quality areas, ranging from the intake of students to assessing the relevance of the program and our ability to manage the program adequately. The new template is designed to include most relevant sources of information about the quality of the programme, from material frame resources to student and staff assessments. The new procedures for program evaluation have been implemented for the first class starting the new teacher education program at UiO (Autumn 14). By the end of their journey, there will be an extensive (periodical) evaluation of all aspects of the program. A baseline assessment of the quality of the program was provided in the ProTed application in 2011. However, historical data are somewhat insufficient. They rely mainly on student surveys, making it difficult to assess improvements and process variables in a reliable and valid way.

ProTed has commissioned and received a number of reports documenting different quality aspects of the program. We have several indications that the efforts to improve coherence and integration along the way are successful. Students report increasing satisfaction with campus seminars, in particular that they provide opportunities to discuss relevant issues in the interface between pedagogical theory and practice. Staff report on increasing collaborative work to integrate different knowledge components in the programme. Reports from the subject discipline faculties, the university schools, and process evaluations of digital exams and integrated weeks confirm this picture. We have regular contact meetings with the students, and feedback (Questback, interviews)

indicate that they experience a high degree of satisfaction with the teacher education program in general. Admission grades and application rates are high for the integrated program, reflecting the attractiveness of the program.

At UiT the main challenge for the new master degree program has been to operationalize and implement the new curriculum. The collegium has designed and redesigned all aspects and dimensions of the education to ensure coherence and progression throughout the study program.

UiT used to offer three 4-years programs for teachers grade 1-10; 1) the ordinary 'on campus' program, 2) the flexible 'of campus' program and 3) the practical-aesthetical teacher-education program (music, arts&crafts, sports etc.). The new program launched in 2010 replaced all these. The result is an increased number of on-campus-students with 57 %, but it seems like the segment of students interested in flexible programs and practical-aesthetical programs are lost. The new student population is young (87 % < 25 years. The merger with Alta might mean some changes here). Older applicants tend to prefer flexible programs. There is some concern related to the reduction in students educated with competence in practical-aesthetical subjects; which raises the important question of whether we will educate enough teachers with these subjects to cover the need for Northern Norway.

The first group of students soon graduates, for student teachers grade 1-7, 90 % of those enrolled in 2010 is likely to complete. For grade 5-10 it will be approximately 77 %. These are good numbers but unfortunately it looks like the dropout rate increases for the next groups of students, especially for grades 1-7 which have a dropout rate up to 35 % in some groups.

The students have an active role in the new teacher education program. Throughout the program they are systematically involved in Dialogue Seminars, Learning Cafès, poster presentations etc. involved in discussions and giving feedback. The first group of students is referred to as "the pilot students" and has had an extended role related to development. In the fall of 2015 the students' representatives gave, in a written report, feedback from 13 courses. Such reports are of great value for the management. They show that there is variation in quality between the subjects/courses on several variables, and students' suggestions for improvements will be discussed.

All together, the centre bases its work on a multitude of data documenting the extensive developmental work, challenges in different aspects of the programs and the increasing quality of the two programs.

At centre-level and in all project assigned "critical friends"/Advisory Board

We also refer to 11a for response relevant to this question, especially with regard to the SAC and "critical friends". In this section we therefor focus on how evaluation is constantly at the fore at all levels in the centre and how this materializes across several meeting places.

At centre level, we continuously evaluate our progress and results. This happens as follows:

• Frequent meetings between the two leaders and senior advisers in ProTed. This includes face to face meetings, but increasing use of Skype meetings and/or video meetings. These meetings are extremely important in order to keep symmetry and a system of checks and

balances alive in the partnership. Here is also where the majority of continuous evaluations are made.

- Regular staff meetings at the host departments and where ProTed-related work is presented.
 These meetings are important in order to share, disseminate, and evaluate leadership level activity.
- Meetings between participants in ProTed at the two institutions in order to collectively anchor activities and discuss initiatives results and impact.
- Meetings and synergy seminars in and across work packages in order to cultivate profiles as well as see where they conflate in view of the overall aims.
- Meetings in the Executive committee (ProTed leaders, Senior Advisers, Heads of departments) in order to evaluate ProTed's work in light of the departments' overall strategies.
- Regular theoretical seminars in order to develop and cultivate a theoretically validated approach at the intersection of Action research and Cultural-Historical Activity Theory. This is also important in order to develop a common conceptual language.

ProTed also annually arranges a seminar in June for the all staff engaged in the centre. The seminars have been important to adjust the direction of the centre's work based on input and evaluation from participants, and to establish a common understanding among the different contributors about the centre's activity. In line with the development of the centre we have invited a key-note speaker with expert knowledge in a relevant field. This also serves as an important basis for our self-evaluation.

12) Describe which types of dissemination have been most successful and how you know this.

Dissemination is demanding in terms of time and human resources, cf our response to question 5. Also, we have to distinguish between two types of dissemination; the immediate, "breaking news" type that ideally should serve to keep interested parties up to date on our many activities, and the more patient, long-term dissemination that ideally should have more pervasive effects. As for the former, we realized that our web pages did not work well in a rapid fire kind of dissemination, although a section on current events has served to give updated and persistent information on our arrangements. We briefly considered placing our website outside of the University system (which, for many of the same reasons, another SFU has done), but this proved to break with local policies. We have instead opted for a FaceBook presence, and we believe this has been quite successful. The ProTed FB site currently has 631 subscribers, and carries news and information bits and pieces from all activities approx. 3 times a week on an average. This is the closest we get to mass exposure on a regular basis.

As for the more longitudinal dissemination, we will again draw attention to our increasingly persistent presence in fora that develop and/or discuss frameworks for integrated teacher education. We can identify several contributions to integrated teacher education such as integrated and ICT-supported exams, R&D-based tasks and assignments, and new partnerships between schools and universities involving dialogue seminars and integrated weeks. As this trend already (by March15, 2015) continues, we interpret this as important dissemination of our results. Together with our scholarly output (scientific articles, book chapters), the aggregated results point towards dissemination on several levels throughout the teacher education sector.

V. Any other comments

We would like to use this space to place ProTed in a broader and future-oriented perspective and outline a direction for further work. Broader in the sense that we place ProTed at the heart of current interest in teacher education and particularly new partnership models as arenas for transformation. Such transformation involves not only the student teacher but teachers, mentor and school leaders as well as supervisors and teachers at the universities, and it takes place at the interface of and in the relations between schools and universities. Also such transformation opens up for innovation and re-design of initial teacher education programs (El Kadri & Roth, 2015; König & Mulder, 2014). In the words of Ellis and McNicholl: «Around the world, ITE [=initial teacher education] continues to be in a state of almost continual reform, even crisis» (2015, p.6). When we add the challenges posed by increasing diversity and multicultural cohorts among pupils as well as the demands from a digitized and networked world, we see how ProTed operates where these trends mesh. In Norway, there is a need to examine such trends and relate them to coherent study programs (see also Hammernes, 2013, for the importance of researching coherence in Norwegian teacher education programs). We envisage ProTed as increasingly important and relevant in such a role, not least because our activities have generated a wealth of researchable data that is a trove for further research. However, this would, of course, require added funding.

We will continue to work with integration as our principal objective and use Bernstein's dual definition (1975):

- the various contents do not go their separate ways but stand in an open relation to each other
- the various contents are subordinate to some idea which reduces their isolation from each other

However, as we will continue to cultivate the dimensions found in our work packages, we also see the need to increase the international orientation of ProTed in order to scientifically cope with transformation and the trends outlined above. We do this in a number of collaborative ways as well as currently writing project proposals from Erasmus+ and the Norwegian FINNUT research initiative.

The bottom line is that over its first three years of existence ProTed has built a platform from which we believe we can make a substantial contribution to raising the standards of teacher education.

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