Faculty peer tutoring in teaching and supervision – Innovating teacher collaboration practices in Norwegian higher education (PeTS)

Part 1 – Planned innovation

1. Underlying idea

Norway is currently meeting new demands for university educators across disciplines to collaborate and develop innovative teaching and training for future professionals (Norwegian Ministry of Education, 2017). The main purpose of this project is *to develop collaborative communities of practice in supervision and teaching in higher education*. This innovation is based on two main lines of thought: 1) research showing that productive development of teaching practices is strongly related to the sharing of experiences and collaboration in the local educational community (Meirink et al., 2009; Edwards and Downes, 2013), and 2) the political emphasis in the newly presented white paper, 'A Culture of Quality', identifying collaborative teaching practices and peer review as preferred approaches in the quality development of teaching in Norwegian higher education (Norwegian Ministry of Education, 2017). The last-mentioned ambition is to be achieved through faculty staff sharing their experiences, strategies and aspirations related to teaching practice (p. 17). Furthermore, it is underlined that the faculty-based disciplinary communities shall develop educational programs in collaboration and that peer assessment and peer review are expected to be integrated parts of the faculty's quality work (p. 24).

This project aims at innovating collaborative teaching practices at the University of Oslo (UiO). We will achieve this by engaging with specific educational communities, which are willing to invest in innovative efforts by using various collaborative strategies. The project will start with exploring changes in these practices by using methods of teacher collaboration that have proved to be effective in developing faculty-based peer review and tutoring (Lauvås & Handal, 2014; Lauvås, Lycke, & Handal, 2016). This exploration is primarily focusing on how the involved communities emerge and consolidate in the form of more collaborative teaching and supervision practices over time. We will also explore how these collaborative efforts can be supported by new digital tools in support of the innovative efforts.

Four teaching communities at the UiO have, based on their own initiative, been selected as cases in this innovation project; respectively, a) PhD supervision in a national research school at the Faculty of Medicine, b) master supervision at the Faculty of Humanities, c) teaching at a professional program in pharmacy and d) teaching at a professional program in theology. The collaborative approaches used for initiating the innovations are as follows:

1) *Peer review of supervision (PRS)*: This is a model structuring conversations related to experienced challenges in supervising students. The participants describe and submit case descriptions of problems they are facing, which are critically discussed and analysed within peer groups. The final step of the model consists of practical solutions and future strategies in handling the presented problems.

2) *Peer review of teaching (PRT)*: This is a model structuring conversations related to planning, observing and reviewing teaching by peers. The participants describe and submit detailed lesson plans, which are presented to and critically discussed within the peer groups. Based on observations of the enacted teaching sessions, the final step of the model consists of practical improvements and developing future strategies in teaching.

Variations of these PRT and PRS methods have been applied in a range of settings both nationally and in other Scandinavian countries for more than 30 years (Handal & Lauvås, 1982; Lauvås & Handal, 2014; Lauvås, Lycke, & Handal, 2016). To our knowledge, these methods have previously not been studied empirically on research-based premises in Norwegian higher education and have been minimally explored in order to achieve long-term changes at the institutional level. Given the political

effort to implement these strategies on a broad scale in Norwegian higher education, and in order to understand what happens when these collaborative communities develop, a systematic experimental innovation is called for. For this purpose, we employ the definition of innovation of practices proposed by Cox as 'a new and useful way of solving existing educational problems' (Cox, 2008, p. 204). This kind of innovation needs to closely consider the characteristics of the involved context and how these features influence the participants' interactions and reflective communication about teaching and supervision. To combine the level of innovation and the need for research, we approach this project based on Cultural-Historical Activity Theory (CHAT), which provides us with a conceptual perspective on the systematic experimental innovation of organisational practices (Engeström, 2005) (see Section 7).

The main objectives of this innovation project are to: *1) develop faculty-based collaborative communities in teaching and supervision, 2) explore how PRS and PRT can support this collaborative enhancement* and *3) together with case partners, develop PRS and PRT further in preparation for wider institutional and sector-oriented distribution and implementation.*

2. Level of innovation

According to the work program of 'Research and Innovation in the Educational Sector' (FINNUT) guidelines, the level of innovation in this project addresses the thematic priority area B: *Practice, professional practice and competence-development.* The development of competence is here specifically related to creating collaborative strategies in teaching and supervision while the realisation into professional practice refers to how these collaborative strategies can be institutionalised and disseminated within the organisation. This focus on collaboration between academics is explicitly referred to as a preferred approach at UiO in the institutional strategic plan (University of Oslo, 2009). While collaboration is extensively the case in research activities at this institution, it is also acknowledged as a challenge that collaboration between UiO teachers is limited (p. 16). We will approach this acknowledged challenge by experimenting with the above-mentioned PRS and PRT approaches in following four academic cases at the UiO:

Table 1: *Innovation with collaborative PRT and PRS in four Cases*

Peer review of supervision (PRS)	Peer review of teaching (PRT)
1. *MUNI-Health-CARE:* PhD supervision in national doctoral school in municipal health care research, hosted by The Faculty of Medicine, University of Oslo. 2. *Faculty program on master supervision*: Faculty of humanities, UiO.	3. *Teaching in introductory course in pharmacy education*: Faculty of Mathematics and Natural Sciences, UiO. 4. *Teaching in theology education:* Faculty of Theology, UiO.

MUNI-Health-CARE is a research school aiming at developing research on health care at the municipal level in Norway. The innovation project will here involve the establishing of collaborative teams in handling challenges in doctoral supervision. The project will involve scholars across a range of institutions in Norway. PRS will here be applied and developed as a working method in seminars arranged twice each semester during the project period.

The faculty program on master supervision is a five-year plan to educate all academic staff supervising master students at the Faculty of Humanities, UiO. The innovation project will here involve the establishing of collaborative teams across departments at the faculty in handling challenges related to master supervision. PRS will here be applied and developed as a working method in an introductory course arranged at the beginning of each semester, while the participants will meet on a monthly basis during the project period.

The introductory course in pharmacy education will involve establishing collaborative teacher teams with complementary disciplinary competencies. These teams will observe and critically discuss each other's lecturing and other teaching activities at the program. PRT will here be applied and

developed as a working method introduced in a seminar at the beginning of each semester, followed by observations and discussion meetings on a regular basis during the project period.

The professional program in theology education will involve establishing collaborative teacher teams across semesters with complementary thematic foci and disciplinary competencies. These teams will observe and critically discuss each other's lecturing and other teaching activities at various levels of the theology program. PRT will here be applied and developed as a working method introduced to the teacher teams at the beginning of the semester, followed by observations and discussion meetings on a regular basis during the project period.

During the project, we will test, remodel and refine the PRT and PRS methods towards improved collaborative teaching and supervision strategies in the four specific cases. We will also explore how and to what extent new tools for digital collaboration (e.g. Teams, Office365 or learning management systems) may further develop PRT and PRS, by helping supervisors and teachers collaborate and communicate across different departments and faculties. An additional new element of the planned innovation is a systematic and longitudinal development and research design following these developments. This last-mentioned aspect is to our knowledge currently missing in the field of educational development and research. As the results regarding these innovations will be of significant interest to other faculty communities and institutions, the ambition of the project is to create disseminating bridges. An additional ambition is also to further enhance the competencies of the faculty development unit at the Department of Education (IPED). This is considered as crucial in order to be able to support all faculty communities at the UiO regarding the wider implementation of collaborative strategies in teaching and supervision. We will do so by spreading these documented experiences on collaborative teaching and supervision throughout the academic communities of the UiO in particular and the national network on faculty development reaching across higher education in Norway as well as publishing our findings in international journals.

2. Potential for value creation

Teaching and supervision have traditionally been conceptualised and acted upon as individual responsibilities in higher education institutions (Biggs & Tang, 2010). Challenges related to such cultures are that the levels of awareness, attitudes and sharing of experiences become limited. This lack of collaboration among teachers represents a known challenge in general and higher education in particular (Edwards, 2010; Hargreaves, 2000; Thomas, Chie, Abraham, Raj, & Beh, 2014). Previous research has also documented positive outcomes related to activities engaging teachers in peer interactions in enhancing awareness about teaching and supervision (Thomas et al., 2014).

The potential value creation in the innovation project will be to provide research-based documentation of how the supportive methods for collaboration in teaching and supervision (PRT and PRS) can be implemented and further developed. We will also actively explore the potential in new digital tools (especially 'Teams' and 'Office365') in further developing distributed PRT and PRS. The variation of the cases in the project will also open opportunities for analysing deep features on collaboration in different disciplinary settings. This will in turn open opportunities for more systematic quality enhancement in various educational contexts and institutions, including collegial and individual aspects in the academic working environment. Other aspects of value creation are higher quality in student learning and positive developments in student retention rates, as well as enhancing competencies as academic developers in supporting faculty-based collaborative initiatives at UiO. This last point also involves developing more robust tools and methods for faculty peer review of teaching and supervision.

The knowledge developed in the project will also be of value for a wide range of higher education institutions, faculty and societal organisations in establishing and refining collaborative methods and measures. The project aims are also highly in line with the ambitions of the Ministry of Education in developing a culture of quality with peer review and peer assessment as an integrated part of faculty work.

3. Need for research

PRT and PRS methods have been widely implemented in various contexts of Norwegian basic and higher education (Høium, 2009; Syversen, Tømmerbakk, & Nordang, 2013). Practitioners have expressed great appreciation for experiences from using these approaches in different educational courses and programs. Participants have highlighted the value of feedback by trusted peers and the possibilities this provides in developing a critical awareness of one's own teaching and supervision practices (Fremstad, Enqvist-Jensen, & de Lange, 2014; Møystad, Barkvold, & Lycke, 2015; Wittek, 2015). Despite these benefits, there are two main shortcomings regarding our insight into these collaborative measures. Firstly, there is little knowledge about how these methods are established and integrated as enduring practices of an organisation. Secondly, there is limited insight into the detailed processes whereby these working methods create qualitative value for their participants. A main reason for these shortcomings is that the implementations of these tools have not been thoroughly researched in terms of developing collaborative practices from an organisational perspective in higher education.

Given these limiting circumstances, this project will conduct a systematic experimental innovation study of PRT and PRS approaches in the four described educational contexts (see Table 1). *Experimental innovation* refers to a specific developmental interventionist method drawing on CHAT. This is a theoretical perspective based on research whereby people work together in a cyclic way to develop new practices in their organisation (Virkkunen & Newnham, 2013). In this method, local participants collaborate closely with research interventionists to change practices in a step-wise manner (for further explanation, see Section 7).

4. Project organisation and cooperation

The project will be organised around four cases, two of which focus on PRS and two on PRT. The responsible actors in all these cases (see Table 5) will have research-performing roles in the innovation activities. In the cases of MUNI-Health-CARE and the Faculty of Humanities, the partners will engage actively as researchers with the focus on supervision practices. In the cases of theology and pharmacy education, the partners will be involved in researching the peer review of teaching in their respective communities. This cooperative involvement of the partners also continuously safeguards the adequate adjustments and documentation of the PRT and PRS methods in accordance with the needs of the involved partner communities.

Part 2 – Research and development activities

5. Objectives

The main objective with the innovation project is to implement and further develop collaborative strategies in peer-based supervision and quality enhancement of teaching. The overarching research question of the innovation is as follows:

> How can systematic collaborative approaches to quality enhancement of teaching and supervision be longitudinally implemented and further developed in higher education practices and what crucial factors can be identified for succeeding with these methods?

Table 2: *Research Questions Related to the Involved Innovation Cases*

MUNI-Health-CARE and Faculty of Humanities	Theology and Pharmacy education
a. What characterises supervision practices within these contexts, and what do the participants identify as challenging in this relation?	a. What characterises the teaching practices of theology and pharmacy education, and what do the participants identify as challenging in this relation?
b. How can peer review of supervision (PRS) be introduced as an effort to handle these challenges?	b. How can peer review of teaching (PRT) be introduced as an effort to handle these challenges?
c. How can the implementation of PRS be collaboratively developed to secure longitudinal implementation in the given academic community?	c. How can the implementation of PRT be collaboratively developed to secure longitudinal implementation in the participants' given academic community?

6. Research and developmental challenges and scientific methods

The innovation project is based on three important premises. Firstly, the intervention predominantly focuses on developing collective strategies and working methods. Secondly, the intervention presupposes a research-based analysis for identifying challenges but also requires participant involvement in implementing and refining the modelled solutions. Thirdly, the innovation has a longitudinal focus as it aims at identifying the long-term impacts of the modelled solutions.

Conceptually, the innovation project will be based on cultural-historical activity theory (CHAT). This conceptual approach aims at analysing and transforming social practices in a longitudinal perspective and provides an appropriate intake to our research (de Lange, 2011). This notion of social activity is generally illustrated in the following model:
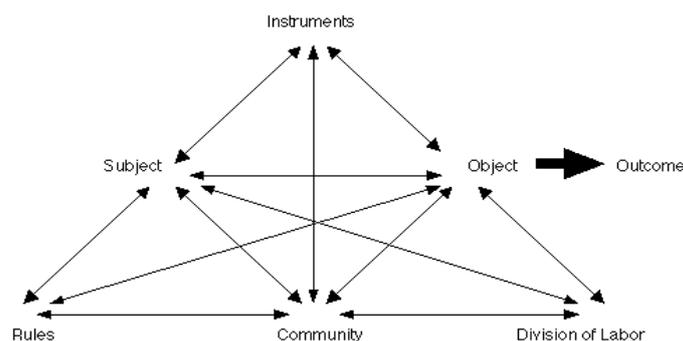

Figure 1. The systemic structure of activity (Engeström, 1999).

The model above displays how participants' actions (subjects) in an organisation are constantly influenced by structural expectations such as rules, division of labour, instruments and objectives of the social activity. Drawing on the notions in the activity model above, PRT and PRS will be defined as instruments, while the effects of the innovation will be studied in relation to community participation, division of labour and outcomes. With the focus on *how PRS and PRT can innovate collaborative strategies on an organisational level*, the analysis will emphasise how the participants interact when using these methods and how these methods are integrated as instruments of the activity on a longitudinal basis. Drawing on Figure 1, the focus in our analysis will follow empirically how the use and development of these instruments will have an influence on the other elements of the activity, such as changing norms and rules, changing roles in the division of labor or changing outcomes of the activity-work etc. These exploratory PRT and PRS innovations will follow a five-phase experimental cycle derived from activity-theoretical interventionist methodology (Engeström, 2005):

Table 3: *Phases of Intervention and Experimental Innovation*

Intervention Phases	Developmental innovation
Phase 1: Questioning activity	Focus: collaboratively identifying pre-defined conceptions and strategies on teaching/supervision and what is experienced as challenging related to these issues
Phase 2: Analysing activity	Focus: historically and institutionally analysing deeper challenges in established practices and routines of teaching/supervision in the involved partner practices
Phase 3: Planning intervention in activity	Focus: cooperatively identifying and discussing ways of implementing/adjusting PRS/PRT in handling identified challenges in supervision/teaching
Phase 4: Conducting intervention and empirical analysing activity	Focus: collaboratively implementing PRS/PRT methods based on collaboration in Phase 3; analysing experiences from implementation and re-modelling methods accordingly
Phase 5: Consolidating re-modelled methods in activity	Focus: reflecting on the whole process and analysing the longitudinal impacts of the re-modelled methods of PRS/PRT in the partners' wider activity; consolidating methods into new practices

The above experimental phases of the project are rooted in the conceptual framework of activity

theory (Ary, Jacobs, & Sorensen, 2010). This method aims at analysing challenges in existing social practices and emancipating the involved partners by modelling solutions to these challenges. This approach is thereby a method for deeply involving the case partners in innovating their own practices (Engeström, 2005; Engeström & Sannino, 2010). The five phases display the progress in the innovation process and how the changes gradually are embedded into practice. The following model shows how this process emerges in a cyclic manner:
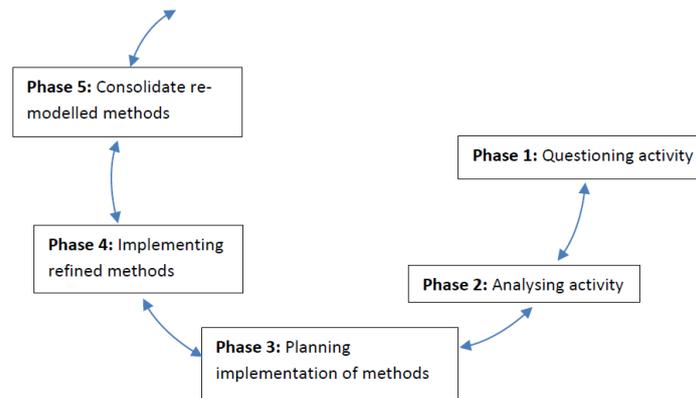

Figure 2. Cyclic innovation process of the involved activities.

Methodologically, the intervention project will be based on empirical data sets collected and analysed in the above-displayed phases. Phase 1 will mainly be based on meetings and conversations with cooperative partners to identify their self-initiated needs in changing or adjusting their practices. Data collection will here mainly focus on observing meetings and sharing field notes from planning sessions with the involved partners. This initial stage is followed by Phase 2, which involves document analysis of the given practices of the cooperative partners. The main data will here draw on curriculum documents, plans and course/program evaluations. Phase 3 involves collaborative development of the methods with the partners based on the analysis of the previous phases. This will emerge as a close collaboration between the case partners and the project leaders. The main data collected in this part will draw on interactions in developing the methods and observing the implementation process. Phase 3 is the most intensive empirical part of the project, involving both practical implementation and data collection based on video observations and interviews of participants applying PRT and PRS in practice. This phase will also provide the grounding for adjusting and refining the collaborative methods for further development. Phase 4 is also crucial in observing the re-implementation of the refined approaches and analysing the outcomes of these adjustments. The main data collected in this phase will draw on observations, evaluations and interviews from end users. Finally, Phase 5 involves the implementation of the refined PRT and PRS approaches on a wider scale, where the data collection mainly draws on questionnaire-based evaluations from the community population. Based on these data sets, we will engage in an overall analysis of all the cooperative practices to grasp the longitudinal effects of developing collaborative strategies in supervision and teaching.

7. Project plan

a. *Main activities (work packages) under the project*

The main activities in the project will be organised in two tracks, each representing the methods of PRS and PRT. Both of these tracks will again be divided into two thematic cases, amounting to a total of four cases in the project. These cases will be directly related to the four collaborative communities involved in the innovations. The following table describes in detail the focus in these cases and how they will progress in accordance with the project phases presented in the following table:

Table 4: Overview of the project cases related to project phases

	Track 1: Peer review of supervision (PRS)		Track 2: Peer-review of teaching (PRT)	
	Case 1: MUNI-Health-CARE	Case 2: Faculty of Humanities	Case 3: Theology education	Case 4: Pharmacy education
Phase 1: Questioning activity	• Identifying aims/purpose of the research school • Identifying strategies in PhD supervision in the research-school community • Identifying challenges with these strategies	• Identifying aims/purpose of the master supervision courses at the faculty • Ensuring awareness of master-supervision obligations of members in the organisation • Identifying challenges of members in handling obligations	• Identifying aims/purposes of the educational program • Identifying challenges with the participants' established teaching practices • Introducing collaboration with PRT to the program teachers	• Identifying aims/purposes of the educational program • Identifying challenges with the participants' established teaching practices • Introducing collaboration with PRT to the program teachers
Phase 2: Analysing activity	• Identifying preconceptions and strategies in PhD supervision • Analysing deeper challenges related to supervision in the research school	• Identifying pre-conceptions and strategies in master supervision • Analysing deeper challenges and contradictions related to supervision	• Identifying pre-conceptions and strategies in university teaching • Analysing deeper challenges and contradictions related to teaching in the participants' own organisations	• Identifying pre-conceptions and strategies in university teaching • Analysing deeper challenges and contradictions related to teaching in the participants' own organisations
Phase 3: Planning intervention in activity	• Collaboratively modelling solutions and interventions based on scripted procedures with problem-based supervision	• Collaboratively modelling solutions and innovations based on scripted procedure with problem-based supervision	• Collaboratively modelling/adapting PRT procedures into the educational program and exploring possibilities for longitudinal implementation in the faculty community	• Collaboratively modelling/adapting PRT procedures into the educational program and exploring possibilities for longitudinal implementation in the faculty community
Phase 4: Conducting intervention and empirical analysis of activity	• Implementing the model • Conducting video-based observations of three groups (4 x 5 participants) applying the modelled supervision procedure • Analysing video material of participants' interactions during supervision working procedure • Analysing participants' experiences based on interviews	• Implementing the model • Conducting video-based observations of selected groups (5 x 5 participants) applying the modelled supervision procedure • Analysing video material of participants' interactions during supervision working procedure • Analysing participants' experiences based on interviews	• Implementing the model at the faculty level • Conducting video-based observations of (3 x 4 participants) peer groups • Analysing video material of participants' interactions during the PRT sessions • Analysing participants' experiences based on interviews	• Implementing the model at the faculty level • Conducting video-based observations of (3 x 4 participants) peer groups • Analysing video material of participants' interactions during PRT sessions • Analysing participants' experiences based on interviews
Phase 5: Consolidating re-modelled methods in activity	• Adjusting PRS based on empirical analysis • Implementing the adjusted collaborative method in a wider practice of doctoral supervision in the research school	• Adjusting PRS based on empirical analysis • Implementing the adjusted collaborative method in a wider practice of supporting members in their master supervision	• Adjusting PRT based on empirical analysis • Implementing the adjusted collaborative method in selected participants' own organisations to establish a collaborative culture on teaching	• Adjusting PRT based on empirical analysis • Implementing the adjusted collaborative method in selected participants' own organisations to establish a collaborative culture on teaching

b. Important deliverables and milestones in the work packages:

2018: Initiate contact, identify challenges related to teaching and supervision and develop the PRS/PRT approach with partners. Observe implementation of PRS/PRT, analyse results from observed implementation

2019: Receive feedback from reference group on preliminary findings from analysis, workshop with partners to discuss empirical results from analysis, refine implemented methods based on empirical findings

2020: Implement refined tools, evaluate refined implementation in partner practices, gather feedback from reference group on findings from refined evaluations, report results from intervention based on refined evaluations

2021: Consolidate implemented methods in partner organisations, explore possibilities for wider implementation at UiO, complete book project, publish findings from the innovations, and

disseminate results in national networks and international journal publications (for more detailed milestones see application form)

8. Responsibilities and roles in performing the research and development activities

The follow table lists the involvement of the partners and their responsibilities:

Table 5: Overview of partners and their responsibilities

	Case	Involved unit	Responsible for main activity	Participating in the following main activities
T R A C K 1	Case 1: PhD supervision	MUNI-Health-CARE, Institute of Health and Society, Faculty of Medicine, UiO	Thomas de Lange in collaboration with Professor Marit Kirkevold	Identifying challenges and needs, adjusting PRS, refining the model based on experiences, analysing, conducting wider implementation in the research school and scientific publications
	Case 2: Master supervision	Faculty of Humanities, UiO	Thomas de Lange in collaboration with Associate Professor Arnt Maasø	Identifying challenges and needs, adjusting PRS, refining the collaborative model based on experiences, conducting wider implementation at the faculty
T R A C K 2	Case 3: Theology teaching	Faculty of Theology, UiO	Line Wittek in collaboration with Professor Marianne Bjelland Karzow	Identifying challenges and needs, adjusting PRT, refining the collaborative model based on experiences, conducting wider implementation at the faculty
	Case 4: Pharmacy teaching	Faculty of Mathematics and Natural sciences, UiO	Line Wittek in collaboration with Professor Hege Christensen	Identifying challenges and needs, adjusting PRT, refining the collaborative model based on experiences, conducting wider implementation at the faculty

The project owner will be Professor Ola Erstad, Head of Department of Education, Faculty of Educational Science, UiO. The project will be placed in the research group *Expert Cultures and Institutional Dynamics: Studies in Education and Work* of the Faculty of Education, UiO, in collaboration with Professor Marit Kirkevold in the Faculty of Medicine, UiO and international partners as described in Section 11. The leader of the whole project is Professor Anne Line Wittek together with Associate Professor Thomas de Lange. Line Wittek will lead Track 2 involving cases 3–4, while Thomas de Lange will lead Track 1 involving cases 1–2. In addition to these track leaders, each of the case partners will be involved as leaders in each of the cases. Professor Marit Kirkevold (leader of the research school) will be leading case 1, while Associate Professor Arnt Maasø will lead case 2, both in collaboration with de Lange. Additionally, Professor Marianne Bjelland Karzow at the theology program will lead case 3, while Professor Hege Christensen at the pharmacy program will lead case 4 in collaboration with Line Wittek. Wittek and de Lange have collaborated on several projects and courses given by the Unit of Academic Development. They have extensive experience with the practical implementation of peer collaboration methods in supervision and teaching. They are also experienced researchers in the field of teaching and learning in higher education and are currently both involved in the ongoing research project on the Quality of Norwegian Higher Education, funded by the Norwegian Research Council. Wittek has also been involved in several large projects focusing on teaching and learning in higher education as well as being the head of a PhD program in education.

10. Costs and funding for each research-performing finance partner

Information on costs and funding related to the involved partners in the project is described in detail in the application form.

11. Other forms of collaboration on research and development activities

Both Wittek and de Lange are secondary proposers for the EU COST action proposal Reducing Inequalities through Collaboration in Education (Proposal reference OC-2016-2-21468). This network will coordinate the understanding of research on collaboration to reduce educational inequalities at all levels of education and will be led by Professor Harry Daniels at the University of Oxford. A reference group will be established to provide input and feedback in the various phases with arranged meetings in spring 2018, fall 2019 and fall 2021. The following persons, all with relevant positions and competencies in the field of quality of teaching and learning in higher education, will be part of this reference group:

- Ivar Normo, Leader of the Norwegian Network of Academic Development
- Professor Emeritus Kirsten Hofgaard Lycke, Department of Education, University of Oslo
- Alf Rasmussen, Secretary General of The Norwegian Association of Higher education (UHR)
- University Lecturer Katarina Mårtensson, Division for Higher Education Development, University of Lund

Part 3: Realisation of the innovation and utilisation of results

12. Plan for realisation of the innovation

The purpose of the innovation will primarily be to introduce, develop and distribute collaborative teaching and supervision into the involved project partner practices on a permanent basis. The expectation of this innovation is that these collaborative measures will improve teaching and supervision and have the effect of improving the whole learning environment for the students. Further ambitions are to disseminate these methods on a wider scale at the UiO as well as to other higher education institutions in Norway, with the prospect of improving educational quality on a national scale.

13. Risk factors

There are few if any risk factors involved in the project. The only risk factor is a lack of willingness of faculty members to implement collaborative measures on a wider scale, as well as an unwillingness to invest sufficient time and resources on the institutional level. A major motivation for avoiding these risks is the expectation of developing collaborative practices as intended by Norwegian educational authorities (Norwegian Agency for Quality Assurance in Education – NOKUT).

14. Other socio-economic benefits

Successful project outcomes in the sense of enhanced student learning can create productive ripple effects into the society as well as into other parts of the educational system.

15. Dissemination and communication of results

During the project phases we will invite the management of UiO (i.e., the rector and deans of all faculties) to participate in workshops. The vice-dean at UiO, Gro Bjørnerud Mo, has also expressed her support to the project and will continuously be updated on findings and outcomes. The aim with these arrangements and relations is to inform the management about the project and facilitate discussions about the enactment and further development of the project as well as explore the possible implications at an organisational level. We will also take the opportunity to provide information about the project in relevant forums such as meetings between the Unit of Academic Development (FUP) and the Vice Deans for Studies at UiO. For the purpose of dissemination at a national level we will be in dialogue with the National Network for Academic Development in Norway during the whole project period. We will in this respect present the findings from the project in annual meetings of this national network.

The findings from the innovated practices in the partner organisations will be regularly reported on a project website in conjunction with the project partners. The results of the innovations will be

reported in a final book project with higher education leaders, teachers and academic developers as the main readership. Findings and analysed results from the innovations will also be presented at international educational conferences and published in international scientific journals.

Part 4: Other information

16. Environmental impact and ethical perspectives

The project has no direct influence on environmental issues. Ethical challenges in the project are especially related to getting close to the participants' emotional experiences in their own supervisory and teaching practices. Given these personal features in the project, the collected data during the innovation and intervention process will be handled with the utmost caution. Given this sensitivity, the project must report to the Norwegian Centre of Research Data (NSD).

17. Recruitment of women, gender balance and gender perspectives

A majority of the leading project partners are female scholars. The innovation also provides a gender balance in both project leadership and other involved partners and participants in the cases.

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